



Open Source Used In Appdynamics_Webserver_Agent 23.6.0

Cisco Systems, Inc.

www.cisco.com

Cisco has more than 200 offices worldwide.
Addresses, phone numbers, and fax numbers
are listed on the Cisco website at
www.cisco.com/go/offices.

Text Part Number: 78EE117C99-1699198393

This document contains licenses and notices for open source software used in this product. With respect to the free/open source software listed in this document, if you have any questions or wish to receive a copy of any source code to which you may be entitled under the applicable free/open source license(s) (such as the GNU Lesser/General Public License), please submit this [form](#).

In your requests please include the following reference number 78EE117C99-1699198393

Contents

1.1 listenablefuture 9999.0-empty-to-avoid-conflict-with-guava

1.2 jctools-core 4.0.1

1.2.1 Available under license

1.3 error_prone_annotations 2.3.4

1.3.1 Available under license

1.4 opentelemetry-semconv 1.19.0-alpha

1.4.1 Available under license

1.5 commons-codec 1.14

1.5.1 Available under license

1.6 servlet-api 3.0.1

1.6.1 Available under license

1.7 jackson-databind 2.14.2

1.7.1 Available under license

1.8 guava 30.1-jre

1.8.1 Available under license

1.9 httpcomponents-core 4.4.13

1.9.1 Available under license

1.10 slf4j 1.6.6

1.10.1 Available under license

1.11 jackson-annotations 2.14.2

1.11.1 Available under license

1.12 zt 1.14

1.12.1 Available under license

1.13 xerces-j 2.12.2

1.13.1 Available under license

1.14 j2objc-annotations 1.3

- 1.14.1 Available under license
- 1.15 disruptor 2.11.2.3**
 - 1.15.1 Available under license
- 1.16 openjdk-jre 11.0.19u7**
 - 1.16.1 Available under license
- 1.17 dagger 2.4**
 - 1.17.1 Available under license
- 1.18 okhttp 4.10.0**
 - 1.18.1 Available under license
- 1.19 jackson 2.14.2**
 - 1.19.1 Available under license
- 1.20 httpcore-nio 4.4.13**
 - 1.20.1 Available under license
- 1.21 httpclient-cache 4.5.13**
 - 1.21.1 Available under license
- 1.22 zeromq 4.3.4**
 - 1.22.1 Available under license
- 1.23 guava 31.0.1-android**
 - 1.23.1 Available under license
- 1.24 commons-fileupload 1.5**
 - 1.24.1 Available under license
- 1.25 log4j-jcl 2.17.1**
 - 1.25.1 Available under license
- 1.26 boost 1.75.0**
 - 1.26.1 Available under license
- 1.27 okio 2.9.0**
 - 1.27.1 Available under license
- 1.28 namespace 1.4.01**
 - 1.28.1 Available under license
- 1.29 apr 1.7.2**
 - 1.29.1 Available under license
- 1.30 error_prone_annotations 2.10.0**
 - 1.30.1 Available under license
- 1.31 commons-math 2.1**
 - 1.31.1 Available under license
- 1.32 protobuf-java-format 1.2**
 - 1.32.1 Available under license
- 1.33 expat 2.5.0**
 - 1.33.1 Available under license

1.34 perfmark-api 0.17.0

1.34.1 Available under license

1.35 log4j-api 2.17.1

1.35.1 Available under license

1.36 jackson-dataformat-yaml 2.14.2

1.36.1 Available under license

1.37 error_prone_annotations 2.3.3

1.37.1 Available under license

1.38 javax-inject 1

1.38.1 Available under license

1.39 annotations 13.0

1.40 libpng 1.6.38

1.40.1 Available under license

1.41 kotlin 1.6.0

1.41.1 Available under license

1.42 opentelemetry-sdk-extension-autoconfigure-spi 1.19.0

1.42.1 Available under license

1.43 xml-apis 1.4.01

1.43.1 Available under license

1.44 httpcomponents-mime 4.5.12

1.44.1 Available under license

1.45 asm 5.0.1

1.45.1 Available under license

1.46 annotations 4.1.1.4

1.46.1 Available under license

1.47 opentelemetry-sdk 1.19.0

1.47.1 Available under license

1.48 httpcomponents-client 4.5.13

1.48.1 Available under license

1.49 failureaccess 1.0.1

1.50 jsr305 3.0.2

1.50.1 Available under license

1.51 log4cxx 0.11.0

1.51.1 Available under license

1.52 libjpeg 6b

1.52.1 Notifications

1.52.2 Available under license

1.53 gson 2.8.9

1.53.1 Available under license

1.54 dom 1.0

1.54.1 Available under license

1.55 protobuf-java 3.19.6

1.55.1 Available under license

1.56 animal-sniffer-annotation 1.19

1.56.1 Available under license

1.57 commons-logging 1.2

1.57.1 Available under license

1.58 opentelemetry-proto 0.11.0

1.58.1 Available under license

1.59 protobuf 22.2

1.59.1 Available under license

1.60 commons-io 2.8.0

1.60.1 Available under license

1.61 commons-codec 1.15

1.61.1 Available under license

1.62 apache-log4j 2.17.1

1.62.1 Available under license

1.63 openjdk 11.0.19

1.63.1 Available under license

1.1 listenablefuture 9999.0-empty-to-avoid-conflict-with-guava

1.2 jctools-core 4.0.1

1.2.1 Available under license :

No license file was found, but licenses were detected in source scan.

Manifest-Version: 1.0

Bnd-LastModified: 1662622707903

Build-Jdk-Spec: 11

Bundle-Description: Java Concurrency Tools Core Library

Bundle-License: <http://www.apache.org/licenses/LICENSE-2.0.txt>

Bundle-ManifestVersion: 2

Bundle-Name: Java Concurrency Tools Core Library

Bundle-SymbolicName: org.jctools.core

Bundle-Version: 4.0.1

Created-By: Apache Maven Bundle Plugin 5.1.6

Export-Package: org.jctools.maps;version="4.0.1",org.jctools.util;uses
:="sun.misc";version="4.0.1",org.jctools.queues;version="4.0.1",org.j
ctools.queues.atomic;uses="org.jctools.queues";version="4.0.1",org.j
ctools.queues.unpadded;uses="org.jctools.queues";version="4.0.1",org
.jctools.counters;version="4.0.1"
Import-Package: sun.misc;resolution:=optional
Require-Capability: osgi.ee;filter:="(&(osgi.ee=JavaSE)(version=1.6))"
Tool: Bnd-6.2.0.202202251641

Found in path(s):

* /opt/cola/permits/1500645298_1670406227.9308958/0/jctools-core-4-0-1-jar/META-INF/MANIFEST.MF

No license file was found, but licenses were detected in source scan.

<name>Apache License, Version 2.0</name>

<url><http://www.apache.org/licenses/LICENSE-2.0.txt></url>

Found in path(s):

* /opt/cola/permits/1500645298_1670406227.9308958/0/jctools-core-4-0-1-jar/META-
INF/maven/org.jctools/jctools-core/pom.xml

1.3 error_prone_annotations 2.3.4

1.3.1 Available under license :

No license file was found, but licenses were detected in source scan.

/*

* Copyright 2016 The Error Prone Authors.

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

* /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-
jar/com/google/errorprone/annotations/FormatString.java

* /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-
jar/com/google/errorprone/annotations/DoNotMock.java

* /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-

jar/com/google/errorprone/annotations/CompatibleWith.java
* /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-
jar/com/google/errorprone/annotations/RestrictedApi.java
* /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-
jar/com/google/errorprone/annotations/MustBeClosed.java
* /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-
jar/com/google/errorprone/annotations/FormatMethod.java
No license file was found, but licenses were detected in source scan.

```
/*  
* Copyright 2017 The Error Prone Authors.  
*  
* Licensed under the Apache License, Version 2.0 (the "License");  
* you may not use this file except in compliance with the License.  
* You may obtain a copy of the License at  
*  
* http://www.apache.org/licenses/LICENSE-2.0  
*  
* Unless required by applicable law or agreed to in writing, software  
* distributed under the License is distributed on an "AS IS" BASIS,  
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
* See the License for the specific language governing permissions and  
* limitations under the License.  
*/
```

Found in path(s):

* /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-
jar/com/google/errorprone/annotations/DoNotCall.java
* /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-
jar/com/google/errorprone/annotations/concurrent/GuardedBy.java
* /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-
jar/com/google/errorprone/annotations/OverridingMethodsMustInvokeSuper.java
* /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-
jar/com/google/errorprone/annotations/CheckReturnValue.java
No license file was found, but licenses were detected in source scan.

```
/*  
* Copyright 2015 The Error Prone Authors.  
*  
* Licensed under the Apache License, Version 2.0 (the "License");  
* you may not use this file except in compliance with the License.  
* You may obtain a copy of the License at  
*  
* http://www.apache.org/licenses/LICENSE-2.0  
*  
* Unless required by applicable law or agreed to in writing, software  
* distributed under the License is distributed on an "AS IS" BASIS,  
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
```


- * See the License for the specific language governing permissions and
- * limitations under the License.
- */

Found in path(s):

- * /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-jar/com/google/errorprone/annotations/Immutable.java
- * /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-jar/com/google/errorprone/annotations/ForOverride.java
- * /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-jar/com/google/errorprone/annotations/Var.java
- * /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-jar/com/google/errorprone/annotations/SuppressPackageLocation.java
- * /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-jar/com/google/errorprone/annotations/IncompatibleModifiers.java
- * /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-jar/com/google/errorprone/annotations/CanIgnoreReturnValue.java
- * /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-jar/com/google/errorprone/annotations/CompileTimeConstant.java
- * /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-jar/com/google/errorprone/annotations/concurrent/LazyInit.java
- * /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-jar/com/google/errorprone/annotations/RequiredModifiers.java

No license file was found, but licenses were detected in source scan.

/*

- * Copyright 2014 The Error Prone Authors.
- *
- * Licensed under the Apache License, Version 2.0 (the "License");
- * you may not use this file except in compliance with the License.
- * You may obtain a copy of the License at
- *
- * <http://www.apache.org/licenses/LICENSE-2.0>
- *
- * Unless required by applicable law or agreed to in writing, software
- * distributed under the License is distributed on an "AS IS" BASIS,
- * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
- * See the License for the specific language governing permissions and
- * limitations under the License.
- */

Found in path(s):

- * /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-jar/com/google/errorprone/annotations/concurrent/UnlockMethod.java
- * /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-jar/com/google/errorprone/annotations/NoAllocation.java
- * /opt/ws_local/PERMITS_SQL/1059106420_1592475238.99/0/error-prone-annotations-2-3-4-sources-1-jar/com/google/errorprone/annotations/concurrent/LockMethod.java

1.4 opentelemetry-semconv 1.19.0-alpha

1.4.1 Available under license :

Apache-2.0

1.5 commons-codec 1.14

1.5.1 Available under license :

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a

copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct

or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of

this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.
7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.
8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.
9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following

boilerplate notice, with the fields enclosed by brackets "[]"
replaced with your own identifying information. (Don't include
the brackets!) The text should be enclosed in the appropriate
comment syntax for the file format. We also recommend that a
file or class name and description of purpose be included on the
same "printed page" as the copyright notice for easier
identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software
distributed under the License is distributed on an "AS IS" BASIS,
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
See the License for the specific language governing permissions and
limitations under the License.

Apache Commons Codec

Copyright 2002-2019 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<https://www.apache.org/>).

src/test/org/apache/commons/codec/language/DoubleMetaphoneTest.java
contains test data from <http://aspell.net/test/orig/batch0.tab>.
Copyright (C) 2002 Kevin Atkinson (kevina@gnu.org)

=====

The content of package org.apache.commons.codec.language.bm has been translated
from the original php source code available at <http://stevemorse.org/phoneticinfo.htm>
with permission from the original authors.

Original source copyright:

Copyright (c) 2008 Alexander Beider & Stephen P. Morse.

1.6 servlet-api 3.0.1

1.6.1 Available under license :

COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL) Version 1.0

1. Definitions.

1.1. Contributor. means each individual or entity that creates or contributes to the creation of Modifications.

1.2. Contributor Version. means the combination of the Original Software, prior Modifications used by a Contributor (if any), and the Modifications made by that particular Contributor.

1.3. Covered Software. means (a) the Original Software, or (b) Modifications, or (c) the combination of files containing Original Software with files containing Modifications, in each case including portions thereof.

1.4. Executable. means the Covered Software in any form other than Source Code.

1.5. Initial Developer. means the individual or entity that first makes Original Software available under this License.

1.6. Larger Work. means a work which combines Covered Software or portions thereof with code not governed by the terms of this License.

1.7. License. means this document.

1.8. Licensable. means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently acquired, any and all of the rights conveyed herein.

1.9. Modifications. means the Source Code and Executable form of any of the following:

A. Any file that results from an addition to, deletion from or modification of the contents of a file containing Original Software or previous Modifications;

B. Any new file that contains any part of the Original Software or previous Modification; or

C. Any new file that is contributed or otherwise made available under the terms of this License.

1.10. Original Software. means the Source Code and Executable form of computer software code that is originally released under this License.

1.11. Patent Claims. means any patent claim(s), now owned or hereafter acquired, including without limitation, method, process, and apparatus claims, in any patent Licensable by grantor.

1.12. Source Code. means (a) the common form of computer software code in which modifications are made and (b) associated documentation included in or with such code.

1.13. You. (or .Your.) means an individual or a legal entity exercising rights under, and complying with all of the terms of, this License. For legal entities, .You. includes any entity which controls, is controlled by, or is under common control with You. For purposes of this definition, .control. means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity.

2. License Grants.

2.1. The Initial Developer Grant.

Conditioned upon Your compliance with Section 3.1 below and subject to third party intellectual property claims, the Initial Developer hereby grants You a world-wide, royalty-free, non-exclusive license:

(a) under intellectual property rights (other than patent or trademark) Licensable by Initial Developer, to use, reproduce, modify, display, perform, sublicense and distribute the Original Software (or portions thereof), with or without Modifications, and/or as part of a Larger Work; and

(b) under Patent Claims infringed by the making, using or selling of Original Software, to make, have made, use, practice, sell, and offer for sale, and/or otherwise dispose of the Original Software (or portions thereof).

(c) The licenses granted in Sections 2.1(a) and (b) are effective on the date Initial Developer first distributes or otherwise makes the Original Software available to a third party under the terms of this License.

(d) Notwithstanding Section 2.1(b) above, no patent license is granted: (1) for code that You delete from the Original Software, or (2) for infringements caused by: (i) the modification of the Original Software, or (ii) the combination of the Original Software with other software or devices.

2.2. Contributor Grant.

Conditioned upon Your compliance with Section 3.1 below and subject to third party intellectual property claims, each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license:

(a) under intellectual property rights (other than patent or trademark) Licensable by Contributor to use, reproduce, modify, display, perform, sublicense and distribute the Modifications created by such Contributor (or portions thereof), either on an unmodified basis, with other Modifications, as Covered Software and/or as part of a Larger Work; and

(b) under Patent Claims infringed by the making, using, or selling of Modifications made by that Contributor either alone and/or in combination with its Contributor Version (or portions of such combination), to make, use, sell, offer for sale, have made, and/or otherwise dispose of: (1) Modifications made by that Contributor (or portions thereof); and (2) the combination of Modifications made by that Contributor with its Contributor Version (or portions of such combination).

(c) The licenses granted in Sections 2.2(a) and 2.2(b) are effective on the date Contributor first distributes or otherwise makes the Modifications available to a third party.

(d) Notwithstanding Section 2.2(b) above, no patent license is granted: (1) for any code that Contributor has deleted from the Contributor Version; (2) for infringements caused by: (i) third party modifications of Contributor Version, or (ii) the combination of Modifications made by that Contributor with other software (except as part of the Contributor Version) or other devices; or (3) under Patent Claims infringed by Covered Software in the absence of Modifications made by that Contributor.

3. Distribution Obligations.

3.1. Availability of Source Code.

Any Covered Software that You distribute or otherwise make available in Executable form must also be made available in Source Code form and that Source Code form must be distributed only under the terms of this License. You must include a copy of this License with every copy of the Source Code form of the Covered Software You

distribute or otherwise make available. You must inform recipients of any such Covered Software in Executable form as to how they can obtain such Covered Software in Source Code form in a reasonable manner on or through a medium customarily used for software exchange.

3.2. Modifications.

The Modifications that You create or to which You contribute are governed by the terms of this License. You represent that You believe Your Modifications are Your original creation(s) and/or You have sufficient rights to grant the rights conveyed by this License.

3.3. Required Notices.

You must include a notice in each of Your Modifications that identifies You as the Contributor of the Modification. You may not remove or alter any copyright, patent or trademark notices contained within the Covered Software, or any notices of licensing or any descriptive text giving attribution to any Contributor or the Initial Developer.

3.4. Application of Additional Terms.

You may not offer or impose any terms on any Covered Software in Source Code form that alters or restricts the applicable version of this License or the recipients' rights hereunder. You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Software. However, you may do so only on Your own behalf, and not on behalf of the Initial Developer or any Contributor. You must make it absolutely clear that any such warranty, support, indemnity or liability obligation is offered by You alone, and You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of warranty, support, indemnity or liability terms You offer.

3.5. Distribution of Executable Versions.

You may distribute the Executable form of the Covered Software under the terms of this License or under the terms of a license of Your choice, which may contain terms different from this License, provided that You are in compliance with the terms of this License and that the license for the Executable form does not attempt to limit or alter the recipient's rights in the Source Code form from the rights set forth in this License. If You distribute the Covered Software in Executable form under a different license, You must make it absolutely clear that any terms which differ from this License are offered by You alone, not by the Initial Developer or Contributor. You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of any such terms You offer.

3.6. Larger Works.

You may create a Larger Work by combining Covered Software with other code not governed by the terms of this License and distribute the Larger Work as a single product. In such a case, You must make sure the requirements of this License are fulfilled for the Covered Software.

4. Versions of the License.

4.1. New Versions.

Sun Microsystems, Inc. is the initial license steward and may publish revised and/or new versions of this License from time to time. Each version will be given a distinguishing version number. Except as provided in Section 4.3, no one other than the license steward has the right to modify this License.

4.2. Effect of New Versions.

You may always continue to use, distribute or otherwise make the Covered Software available under the terms of

the version of the License under which You originally received the Covered Software. If the Initial Developer includes a notice in the Original Software prohibiting it from being distributed or otherwise made available under any subsequent version of the License, You must distribute and make the Covered Software available under the terms of the version of the License under which You originally received the Covered Software. Otherwise, You may also choose to use, distribute or otherwise make the Covered Software available under the terms of any subsequent version of the License published by the license steward.

4.3. Modified Versions.

When You are an Initial Developer and You want to create a new license for Your Original Software, You may create and use a modified version of this License if You: (a) rename the license and remove any references to the name of the license steward (except to note that the license differs from this License); and (b) otherwise make it clear that the license contains terms which differ from this License.

5. DISCLAIMER OF WARRANTY.

COVERED SOFTWARE IS PROVIDED UNDER THIS LICENSE ON AN .AS IS. BASIS, WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES THAT THE COVERED SOFTWARE IS FREE OF DEFECTS, MERCHANTABLE, FIT FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE COVERED SOFTWARE IS WITH YOU. SHOULD ANY COVERED SOFTWARE PROVE DEFECTIVE IN ANY RESPECT, YOU (NOT THE INITIAL DEVELOPER OR ANY OTHER CONTRIBUTOR) ASSUME THE COST OF ANY NECESSARY SERVICING, REPAIR OR CORRECTION. THIS DISCLAIMER OF WARRANTY CONSTITUTES AN ESSENTIAL PART OF THIS LICENSE. NO USE OF ANY COVERED SOFTWARE IS AUTHORIZED HEREUNDER EXCEPT UNDER THIS DISCLAIMER.

6. TERMINATION.

6.1. This License and the rights granted hereunder will terminate automatically if You fail to comply with terms herein and fail to cure such breach within 30 days of becoming aware of the breach. Provisions which, by their nature, must remain in effect beyond the termination of this License shall survive.

6.2. If You assert a patent infringement claim (excluding declaratory judgment actions) against Initial Developer or a Contributor (the Initial Developer or Contributor against whom You assert such claim is referred to as .Participant.) alleging that the Participant Software (meaning the Contributor Version where the Participant is a Contributor or the Original Software where the Participant is the Initial Developer) directly or indirectly infringes any patent, then any and all rights granted directly or indirectly to You by such Participant, the Initial Developer (if the Initial Developer is not the Participant) and all Contributors under Sections 2.1 and/or 2.2 of this License shall, upon 60 days notice from Participant terminate prospectively and automatically at the expiration of such 60 day notice period, unless if within such 60 day period You withdraw Your claim with respect to the Participant Software against such Participant either unilaterally or pursuant to a written agreement with Participant.

6.3. In the event of termination under Sections 6.1 or 6.2 above, all end user licenses that have been validly granted by You or any distributor hereunder prior to termination (excluding licenses granted to You by any distributor) shall survive termination.

7. LIMITATION OF LIABILITY.

UNDER NO CIRCUMSTANCES AND UNDER NO LEGAL THEORY, WHETHER TORT (INCLUDING

NEGLIGENCE), CONTRACT, OR OTHERWISE, SHALL YOU, THE INITIAL DEVELOPER, ANY OTHER CONTRIBUTOR, OR ANY DISTRIBUTOR OF COVERED SOFTWARE, OR ANY SUPPLIER OF ANY OF SUCH PARTIES, BE LIABLE TO ANY PERSON FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY CHARACTER INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOST PROFITS, LOSS OF GOODWILL, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, OR ANY AND ALL OTHER COMMERCIAL DAMAGES OR LOSSES, EVEN IF SUCH PARTY SHALL HAVE BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. THIS LIMITATION OF LIABILITY SHALL NOT APPLY TO LIABILITY FOR DEATH OR PERSONAL INJURY RESULTING FROM SUCH PARTY'S NEGLIGENCE TO THE EXTENT APPLICABLE LAW PROHIBITS SUCH LIMITATION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THIS EXCLUSION AND LIMITATION MAY NOT APPLY TO YOU.

8. U.S. GOVERNMENT END USERS.

The Covered Software is a .commercial item., as that term is defined in 48 C.F.R. 2.101 (Oct. 1995), consisting of .commercial computer software. (as that term is defined at 48 C.F.R. ? 252.227-7014(a)(1)) and .commercial computer software documentation. as such terms are used in 48 C.F.R. 12.212 (Sept. 1995). Consistent with 48 C.F.R. 12.212 and 48 C.F.R. 227.7202-1 through 227.7202-4 (June 1995), all U.S. Government End Users acquire Covered Software with only those rights set forth herein. This U.S. Government Rights clause is in lieu of, and supersedes, any other FAR, DFAR, or other clause or provision that addresses Government rights in computer software under this License.

9. MISCELLANEOUS.

This License represents the complete agreement concerning subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. This License shall be governed by the law of the jurisdiction specified in a notice contained within the Original Software (except to the extent applicable law, if any, provides otherwise), excluding such jurisdiction's conflict-of-law provisions. Any litigation relating to this License shall be subject to the jurisdiction of the courts located in the jurisdiction and venue specified in a notice contained within the Original Software, with the losing party responsible for costs, including, without limitation, court costs and reasonable attorneys' fees and expenses. The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not apply to this License. You agree that You alone are responsible for compliance with the United States export administration regulations (and the export control laws and regulation of any other countries) when You use, distribute or otherwise make available any Covered Software.

10. RESPONSIBILITY FOR CLAIMS.

As between Initial Developer and the Contributors, each party is responsible for claims and damages arising, directly or indirectly, out of its utilization of rights under this License and You agree to work with Initial Developer and Contributors to distribute such responsibility on an equitable basis. Nothing herein is intended or shall be deemed to constitute any admission of liability.

NOTICE PURSUANT TO SECTION 9 OF THE COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL)

The code released under the CDDL shall be governed by the laws of the State of California (excluding conflict-of-law provisions). Any litigation relating to this License shall be subject to the jurisdiction of the Federal Courts of the Northern District of California and the state courts of the State of California, with venue lying in Santa Clara County, California.

The GNU General Public License (GPL) Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc. 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and

every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions.

You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE

STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

One line to give the program's name and a brief idea of what it does.

Copyright (C)

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author

Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'. This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program `Gnomovision' (which makes passes at compilers) written by James Hacker.

signature of Ty Coon, 1 April 1989
Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

"CLASSPATH" EXCEPTION TO THE GPL VERSION 2

Certain source files distributed by Sun Microsystems, Inc. are subject to the following clarification and special exception to the GPL Version 2, but only where Sun has expressly included in the particular source file's header the words

"Sun designates this particular file as subject to the "Classpath" exception as provided by Sun in the License file that accompanied this code."

Linking this library statically or dynamically with other modules is making a combined work based on this library. Thus, the terms and conditions of the GNU General Public License Version 2 cover the whole combination.

As a special exception, the copyright holders of this library give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent modules, and to copy and distribute the resulting executable under terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module.? An independent module is a module which is not derived from or based on this library.? If you modify this library, you may extend this exception to your version of the library, but you are not obligated to do so.? If you do not wish to do so, delete this exception statement from your version.

1.7 jackson-databind 2.14.2

1.7.1 Available under license :

FasterXML, LLC

Software Grant and Corporate Contributor License Agreement ("Agreement")

(v1)

Thank you for your interest in FasterXML, LLC ("FasterXML"). In order to clarify the intellectual property license granted with Contributions from any person or entity, FasterXML must have a Contributor License Agreement (CLA) on file that has been signed by each Contributor, indicating agreement to the license terms below. This license is for your protection as a Contributor as well as the protection of FasterXML and its users; it does not change your rights to use your own Contributions for any other purpose.

This version of the Agreement allows an entity (the "Corporation") to submit Contributions to the FasterXML, to authorize Contributions submitted by its designated employees to FasterXML, and to grant copyright and patent licenses thereto.

If you have not already done so, please complete and sign, then scan and email a pdf file of this Agreement to clas@fasterxml.com. If necessary, send an original signed Agreement to FasterXML, LLC, 600 N 36th Ave, Suite 409, Seattle, WA 98103.

Please read this document carefully before signing and keep a copy for your records.

Corporation name: _____

Corporation address: _____

Point of Contact: _____

E-Mail: _____

Telephone: _____ Fax: _____

You accept and agree to the following terms and conditions for Your present and future Contributions submitted to FasterXML. Except for the license granted herein to FasterXML and recipients of software distributed by FasterXML, You reserve all right, title, and interest in and to Your Contributions.

1. Definitions.

"You" (or "Your") shall mean the copyright owner or legal entity authorized by the copyright owner that is making this Agreement with FasterXML. For legal entities, the entity making a Contribution and all other entities that control, are controlled by, or are under common control with that entity are considered to be a single Contributor. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"Contribution" shall mean the code, documentation or other original works of authorship expressly identified in Schedule B, as well as any original work of authorship, including any modifications or additions to an existing work, that is intentionally submitted by You to FasterXML for inclusion in, or documentation of, any of the products owned or managed by FasterXML (the "Work"). For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to FasterXML or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, FasterXML for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by You as "Not a Contribution."

2. Grant of Copyright License. Subject to the terms and conditions of this Agreement, You hereby grant to FasterXML and to recipients of software distributed by FasterXML a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare derivative works of, publicly display, publicly perform, sublicense, and distribute Your Contributions and such derivative works.

3. Grant of Patent License. Subject to the terms and conditions of this Agreement, You hereby grant to FasterXML and to recipients of software distributed by FasterXML a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by You that are necessarily infringed by Your Contribution(s) alone or by combination of Your Contribution(s) with the Work to which such Contribution(s) were submitted. If any entity institutes

patent litigation against You or any other entity (including a cross-claim or counterclaim in a lawsuit) alleging that your Contribution, or the Work to which you have contributed, constitutes direct or contributory patent infringement, then any patent licenses granted to that entity under this Agreement for that Contribution or Work shall terminate as of the date such litigation is filed.

4. You represent that You are legally entitled to grant the above license. You represent further that each employee of the Corporation designated on Schedule A below (or in a subsequent written modification to that Schedule) is authorized to submit Contributions on behalf of the Corporation.
5. You represent that each of Your Contributions is Your original creation (see section 7 for submissions on behalf of others).
6. You are not expected to provide support for Your Contributions, except to the extent You desire to provide support. You may provide support for free, for a fee, or not at all. Unless required by applicable law or agreed to in writing, You provide Your Contributions on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE.
7. Should You wish to submit work that is not Your original creation, You may submit it to FasterXML separately from any Contribution, identifying the complete details of its source and of any license or other restriction (including, but not limited to, related patents, trademarks, and license agreements) of which you are personally aware, and conspicuously marking the work as "Submitted on behalf of a third-party: [named here]".
8. It is your responsibility to notify FasterXML when any change is required to the list of designated employees authorized to submit Contributions on behalf of the Corporation, or to the Corporation's Point of Contact with FasterXML.

Please sign: _____ Date: _____

Title: _____

Corporation: _____

Schedule A

[Initial list of designated employees. NB: authorization is not tied to particular Contributions.]

Schedule B

[Identification of optional concurrent software grant. Would be left blank or omitted if there is no concurrent software grant.]

1.8 guava 30.1-jre

1.8.1 Available under license :

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2010 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License

* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express

* or implied. See the License for the specific language governing permissions and limitations under

* the License.

*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ContiguousSet.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/Monitor.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/net/package-info.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/SortedLists.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/ForwardingBlockingQueue.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/Ascii.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/Strings.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/annotations/package-info.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/primitives/package-info.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/Atomics.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/Equivalence.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/annotations/Beta.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/ThreadFactoryBuilder.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/ListeningExecutorService.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/UncaughtExceptionHandler.java
No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2016 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/PatternCompiler.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/CommonMatcher.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/CommonPattern.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/JdkPattern.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2011 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/GwtTransient.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/AtomicLongMap.java
No license file was found, but licenses were detected in source scan.

/*
* Copyright (C) 2016 The Guava Authors
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/MutableValueGraph.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/AbstractGraph.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/AbstractUndirectedNetworkConnections.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/MoreCollectors.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/ImmutableValueGraph.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/ElementOrder.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/ValueGraphBuilder.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/HashMultimapGwtSerializationDependencies.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/NetworkConnections.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/Comparators.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/GraphConstants.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/ForwardingGraph.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/AbstractNetwork.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/EdgesConnecting.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/GraphBuilder.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/UndirectedMultiNetworkConnections.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/EndpointPairIterator.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/ForwardingValueGraph.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/AbstractValueGraph.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/EndpointPair.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/DirectedNetworkConnections.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ImmutableMultisetGwtSerializationDependencies.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/StandardMutableNetwork.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/UndirectedNetworkConnections.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/ValueGraph.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/StandardMutableValueGraph.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/UndirectedGraphConnections.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/ForwardingNetwork.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/MultiEdgesConnecting.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/RangeGwtSerializationDependencies.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/LinkedHashMapMultimapGwtSerializationDependencies.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ArrayListMultimapGwtSerializationDependencies.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/StandardValueGraph.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/DirectedGraphConnections.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/StandardNetwork.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/CollectCollectors.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/MapRetrievalCache.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/DirectedMultiNetworkConnections.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/GraphConnections.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/AbstractGraphBuilder.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/NetworkBuilder.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/MapIteratorCache.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/AbstractDirectedNetworkConnections.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/StandardMutableGraph.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2020 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except

* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License

* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under

* the License.

*/

/**

* Holder for web specializations of methods of { @code Doubles }. Intended to be empty for regular

* version.

*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/primitives/DoublesMethodsForWeb.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2020 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

/**

* Holder for web specializations of methods of { @code Ints }. Intended to be empty for regular
* version.

*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/primitives/IntsMethodsForWeb.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2009 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the
* License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND,
either

* express or implied. See the License for the specific language governing permissions and
* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ImmutableSortedAsList.java

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2015 The Guava Authors
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

```
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/CollectSpliterators.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/ImmutableBiMapFauxverideShim.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/graph/package-info.java
```

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2007 The Guava Authors
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

```
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/ImmutableSet.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/AbstractMultiset.java
```

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingMapEntry.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/AbstractIterator.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/Sets.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingMultiset.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/Multimaps.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/BiMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/Multisets.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingQueue.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingConcurrentMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ReverseNaturalOrdering.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/SortedSetMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/NullsFirstOrdering.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/SingletonImmutableSet.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/EnumHashBiMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/Multiset.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingListIterator.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/Ordering.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/TreeMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/LinkedListMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/AbstractSortedSetMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ConcurrentHashMultiset.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/HashMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/AbstractSetMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ImmutableList.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/NullsLastOrdering.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/AbstractBiMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/AbstractListMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/Multimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/Iterators.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/Interner.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/Synchronized.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ComparatorOrdering.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/CompoundOrdering.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingSet.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/AbstractMapBasedMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingIterator.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingSortedMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/package-info.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/MutableClassToInstanceMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/AbstractMapBasedMultiset.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/UsingToStringOrdering.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/Iterables.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/TreeMultiset.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/NaturalOrdering.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/Lists.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ExplicitOrdering.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/RegularImmutableSet.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/LinkedHashMultiset.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ArrayListMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingList.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ByFunctionOrdering.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ListMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ReverseOrdering.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/SetMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/AbstractMapEntry.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/LexicographicalOrdering.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/LinkedHashMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/HashMultiset.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingCollection.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ClassToInstanceMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/Maps.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingSortedSet.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingObject.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/MapDifference.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/EnumBiMap.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2007 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except

* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/io/Resources.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/Predicates.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/Function.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/Throwables.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/eventbus/AsyncEventBus.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/primitives/Primitives.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/FinalizableWeakReference.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/ExecutionList.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/eventbus/DeadEvent.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/io/Files.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/eventbus/package-info.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/package-info.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/io/LineReader.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/AbstractFuture.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/Predicate.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/package-info.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/Preconditions.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/FinalizableSoftReference.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/FinalizableReferenceQueue.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/Objects.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-

jar/com/google/common/base/Charsets.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/eventbus/Subscribe.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/io/MultiInputStream.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/io/Flushables.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/base/Supplier.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/base/FinalizableReference.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/Interners.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/io/Closeables.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/eventbus/EventBus.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/base/FinalizablePhantomReference.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/io/LineBuffer.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/base/Suppliers.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/io/package-
info.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/util/concurrent/DirectExecutor.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/EnumMultiset.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/HashBiMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/eventbus/AllowConcurrentEvents.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/io/LittleEndianDataInputStream.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/base/Defaults.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/io/CountingOutputStream.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/util/concurrent/ListenableFuture.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/base/AbstractIterator.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/base/Functions.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/io/CountingInputStream.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-

jar/com/google/common/io/LittleEndianDataOutputStream.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/io/CharStreams.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/io/ByteStreams.java
No license file was found, but licenses were detected in source scan.

```
/*  
* Copyright (C) 2017 The Guava Authors  
*  
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except  
* in compliance with the License. You may obtain a copy of the License at  
*  
* http://www.apache.org/licenses/LICENSE-2.0  
*  
* Unless required by applicable law or agreed to in writing, software distributed under the License  
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either  
express  
* or implied. See the License for the specific language governing permissions and limitations under  
* the License.  
*/
```

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/primitives/ImmutableDoubleArray.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/primitives/ImmutableIntArray.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/util/concurrent/ForwardingLock.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/hash/AbstractHashFunction.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/primitives/ImmutableLongArray.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/util/concurrent/ForwardingCondition.java
No license file was found, but licenses were detected in source scan.

```
/*  
* Copyright (C) 2020 The Guava Authors  
*  
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except  
* in compliance with the License. You may obtain a copy of the License at  
*  
* http://www.apache.org/licenses/LICENSE-2.0  
*  
* Unless required by applicable law or agreed to in writing, software distributed under the License  
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either  
express
```

* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/io/Java8Compatibility.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/OverflowAvoidingLockSupport.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/math/ToDoubleRounder.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/math/BigDecimalMath.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/Java8Compatibility.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2015 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you
* may not use this file except in compliance with the License. You may
* obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or
* implied. See the License for the specific language governing
* permissions and limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/Streams.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2019 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either

express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/primitives/Platform.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/Internal.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2015 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/LittleEndianByteArray.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/AsyncCallable.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/FarmHashFingerprint64.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/io/ReaderInputStream.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/MacHashFunction.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ConsumingQueueIterator.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/CombinedFuture.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/Platform.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/InterruptibleTask.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/AggregateFutureState.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2018 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except

* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License

* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under

* the License.

*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/JdkBackedImmutableMultiset.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/JdkBackedImmutableSet.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/hash/ImmutableSupplier.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/util/concurrent/ExecutionSequencer.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright 2019 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except

* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License

* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under

* the License.

*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/util/concurrent/IgnoreJRERequirement.java

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2011 The Guava Authors
 *
 * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
 * in compliance with the License. You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software distributed under the License
 * is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
 * express
 * or implied. See the License for the specific language governing permissions and limitations under
 * the License.
 */
/*
 * This method was written by Doug Lea with assistance from members of JCP JSR-166 Expert Group
 * and released to the public domain, as explained at
 * http://creativecommons.org/licenses/publicdomain
 *
 * As of 2010/06/11, this method is identical to the (package private) hash method in OpenJDK 7's
 * java.util.HashMap class.
 */
```

Found in path(s):

```
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/util/concurrent/Striped.java
```

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2011 The Guava Authors
 *
 * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
 * in compliance with the License. You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software distributed under the License
 * is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
 * express
 * or implied. See the License for the specific language governing permissions and limitations under
 * the License.
 */
```

Found in path(s):

```
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/primitives/UnsignedInts.java
```

```
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/util/concurrent/WrappingExecutorService.java
```

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/AbstractScheduledService.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/UncheckedExecutionException.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/cache/Weigher.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/cache/CacheStats.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/AbstractCompositeHashFunction.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/Hashing.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/cache/AbstractLoadingCache.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/cache/package-info.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/cache/ForwardingLoadingCache.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/cache/CacheBuilderSpec.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/Optional.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/DescendingImmutableSortedMultiset.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/Ticker.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/Present.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/primitives/UnsignedInteger.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/Murmur3_32HashFunction.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/PrimitiveSink.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/BoundType.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/AbstractHasher.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/cache/RemovalListeners.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/primitives/UnsignedLong.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/reflect/Types.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/reflect/TypeParameter.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/RegularImmutableMultiset.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/ForwardingExecutorService.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/PairwiseEquivalence.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/CycleDetectingLockFactory.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/TreeRangeSet.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/RegularContiguousSet.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/Absent.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/cache/RemovalNotification.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/AbstractListeningExecutorService.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/Hasher.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/ForwardingListeningExecutorService.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/HashCode.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/net/MediaType.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/AbstractStreamingHasher.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/Crc32cHashFunction.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/Uninterruptibles.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/net/HostAndPort.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/Murmur3_128HashFunction.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/Enums.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/math/MathPreconditions.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/MessageDigestHashFunction.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/primitives/UnsignedLongs.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/cache/RemovalListener.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/ListeningScheduledExecutorService.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/net/HttpHeaders.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/cache/RemovalCause.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/math/package-info.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/FunctionalEquivalence.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/AsyncFunction.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/cache/Cache.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/BloomFilterStrategies.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/math/BigIntegerMath.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/cache/AbstractCache.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/ExecutionError.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/math/IntMath.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/HashingOutputStream.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/EmptyContiguousSet.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/math/DoubleMath.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/Funnels.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/cache/CacheLoader.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/AbstractNonStreamingHashFunction.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/Funnel.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/cache/ForwardingCache.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/Queues.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/math/LongMath.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/math/DoubleUtils.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/AbstractSortedMultiset.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/cache/LoadingCache.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/primitives/ParseRequest.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/FutureCallback.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/BloomFilter.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/HashFunction.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2011 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the
* License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND,
either

* express or implied. See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/RegularImmutableSortedMultiset.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ImmutableSortedMultisetFauxverideShim.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/GeneralRange.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingSortedMultiset.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/SortedIterable.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/RangeSet.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/AbstractRangeSet.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/Count.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/SortedIterables.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ImmutableSortedMultiset.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2007 The Guava Authors

```

*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/
/**
 * Returns an array containing all of the elements in the specified collection. This method
 * returns the elements in the order they are returned by the collection's iterator. The returned
 * array is "safe" in that no references to it are maintained by the collection. The caller is
 * thus free to modify the returned array.
 *
 * <p>This method assumes that the collection size doesn't change while the method is running.
 *
 * <p>TODO(kevinb): support concurrently modified collections?
 *
 * @param c the collection for which to return an array of elements
 */

```

Found in path(s):

```

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/ObjectArrays.java

```

No license file was found, but licenses were detected in source scan.

```

/*
 * Copyright (C) 2012 The Guava Authors
 *
 * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
 * in compliance with the License. You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software distributed under the License
 * is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
 * express
 * or implied. See the License for the specific language governing permissions and limitations under
 * the License.
*/
/**
 * This method was rewritten in Java from an intermediate step of the Murmur hash function in
 * http://code.google.com/p/smhasher/source/browse/trunk/MurmurHash3.cpp, which contained the

```

* following header:
*
* MurmurHash3 was written by Austin Appleby, and is placed in the public domain. The author
* hereby disclaims copyright to this source code.
*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/SmallCharMatcher.java
No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2014 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/eventbus/SubscriberRegistry.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/eventbus/Dispatcher.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/MoreObjects.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/ListenerCallQueue.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/math/Quantiles.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/eventbus/Subscriber.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/TrustedListenableFutureTask.java
No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2020 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/util/concurrent/ServiceManagerBridge.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/base/Java8Usage.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2006 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/io/AppendableWriter.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/reflect/TypeToken.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/util/concurrent/FluentFuture.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/util/concurrent/AggregateFuture.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/util/concurrent/TimeLimiter.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/util/concurrent/AbstractCatchingFuture.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/util/concurrent/AbstractTransformFuture.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/UncheckedTimeoutException.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/FakeTimeLimiter.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/FuturesGetChecked.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/GwtFluentFutureCatchingSpecialization.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/Futures.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/CollectionFuture.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/CaseFormat.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/escape/CharEscaper.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/io/PatternFilenameFilter.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/GwtFuturesCatchingSpecialization.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/escape/CharEscaperBuilder.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/TimeoutFuture.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/ImmediateFuture.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/SimpleTimeLimiter.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/annotations/VisibleForTesting.java
No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2013 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except

* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License

* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under

* the License.

*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/reflect/TypeVisitor.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/thirdparty/publicsuffix/PublicSuffixType.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/HashingInputStream.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/VerifyException.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/eventbus/SubscriberExceptionHandler.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/AbstractTable.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/Runnables.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/Verify.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/eventbus/SubscriberExceptionContext.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/FilteredMultimapValues.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/io/CharSequenceReader.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/Utf8.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/WrappingScheduledExecutorService.java
No license file was found, but licenses were detected in source scan.

/*
* Copyright (C) 2018 The Guava Authors
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/JdkBackedImmutableMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-

jar/com/google/common/collect/BaseImmutableMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/JdkBackedImmutableBiMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/IndexedImmutableSet.java
No license file was found, but licenses were detected in source scan.

```
/*  
* Copyright (C) 2012 The Guava Authors  
*  
* Licensed under the Apache License, Version 2.0 (the "License");  
* you may not use this file except in compliance with the License.  
* You may obtain a copy of the License at  
*  
* http://www.apache.org/licenses/LICENSE-2.0  
*  
* Unless required by applicable law or agreed to in writing, software  
* distributed under the License is distributed on an "AS IS" BASIS,  
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
* See the License for the specific language governing permissions and  
* limitations under the License.  
*/
```

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/FilteredKeySetMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/FilteredKeyListMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/AllEqualOrdering.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/TransformedListIterator.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/FilteredMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/FilteredEntrySetMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/SortedMultisetBridge.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/CompactLinkedHashSet.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/CompactLinkedHashMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/FilteredSetMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/CompactHashMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/AbstractSortedKeySortedSetMultimap.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ImmutableEnumMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/UnmodifiableSortedMultiset.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/ForwardingBlockingDeque.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingImmutableList.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingBlockingDeque.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingDeque.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/TransformedIterator.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingImmutableMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/TreeTraverser.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/CompactHashSet.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/DescendingMultiset.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/FilteredEntryMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/RangeMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingNavigableSet.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/TreeRangeMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/DescendingImmutableSortedSet.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/AbstractMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/RegularImmutableAsList.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/EvictingQueue.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingNavigableMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingImmutableSet.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/AbstractNavigableMap.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2011 The Guava Authors.

*
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/hash/package-info.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2016 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

/**

* Holder for extra methods of {@code Objects} only in web. Intended to be empty for regular
* version.

*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/base/ExtraObjectsMethodsForWeb.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2007 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/
/*
* This following method is a modified version of one found in
* <http://gee.cs.oswego.edu/cgi-bin/viewcvs.cgi/jsr166/src/test/tck/AbstractExecutorServiceTest.java?revision=1.30>
* which contained the following notice:
*
* Written by Doug Lea with assistance from members of JCP JSR-166 Expert Group and released to
* the public domain, as explained at <http://creativecommons.org/publicdomain/zero/1.0/>
*
* Other contributors include Andrew Wright, Jeffrey Hayes, Pat Fisher, Mike Judd.
*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/util/concurrent/MoreExecutors.java
No license file was found, but licenses were detected in source scan.

/*
* Copyright (C) 2013 The Guava Authors
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/ImmutableMapEntry.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/MultimapBuilder.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/io/MoreFiles.java

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2008 The Guava Authors
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

```
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/ImmutableEntry.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/Tables.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/thirdparty/publicsuffix/PublicSuffixPatterns.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/Serialization.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/StandardTable.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/ImmutableListMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/PeekingIterator.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/RegularImmutableMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/ImmutableMultiset.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/SingletonImmutableBiMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/RegularImmutableBiMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/ImmutableBiMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/ImmutableSortedSet.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/ImmutableMapValues.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
```

jar/com/google/common/collect/Collections2.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/ImmutableMapEntrySet.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/ImmutableCollection.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/Table.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/EmptyImmutableListMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/CollectPreconditions.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/HashBasedTable.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/ImmutableMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/Platform.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/TreeBasedTable.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/StandardRowSortedTable.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/ImmutableMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/Range.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/UnmodifiableIterator.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/ImmutableMapKeySet.java
No license file was found, but licenses were detected in source scan.

```
/*  
* Copyright (C) 2020 The Guava Authors  
*  
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except  
* in compliance with the License. You may obtain a copy of the License at  
*  
* http://www.apache.org/licenses/LICENSE-2.0  
*  
* Unless required by applicable law or agreed to in writing, software distributed under the License  
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either  
* express  
* or implied. See the License for the specific language governing permissions and limitations under  
* the License.  
*/  
/**  
* Holder for web specializations of methods of { @code Shorts}. Intended to be empty for regular  
* version.
```

*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/primitives/ShortsMethodsForWeb.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2012 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except

* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License

* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express

* or implied. See the License for the specific language governing permissions and limitations under

* the License.

*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ImmutableRangeSet.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/math/LinearTransformation.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/io/CharSink.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/LongAddable.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/SmoothRateLimiter.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/FilteredKeyMultimap.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/reflect/Parameter.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/io/ByteSink.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/io/Closer.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/math/Stats.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/html/package-info.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/math/PairedStatsAccumulator.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/reflect/Element.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/io/CharSource.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/reflect/package-info.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/reflect/ImmutableTypeToInstanceMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/math/StatsAccumulator.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/escape/package-info.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/reflect/MutableTypeToInstanceMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/SipHashFunction.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/reflect/TypeCapture.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/cache/LongAddable.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/io/ByteSource.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/ChecksumHashFunction.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/reflect/Invokable.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/RateLimiter.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/base/StandardSystemProperty.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/AbstractByteHasher.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/reflect/AbstractInvocationHandler.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/io/BaseEncoding.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/reflect/TypeToInstanceMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/math/PairedStats.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/cache/LongAddables.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/ListenableScheduledFuture.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/hash/LongAddables.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/CartesianList.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/io/FileWriteMode.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/reflect/ClassPath.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/xml/package-info.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ImmutableRangeMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/ServiceManager.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2017 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/AbstractBaseGraph.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/BaseGraph.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/Traverser.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/ClosingFuture.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2019 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/IncidentEdgeSet.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/CompactHashing.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2008 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

/*

* This method was rewritten in Java from an intermediate step of the Murmur hash function in

* <http://code.google.com/p/smhasher/source/browse/trunk/MurmurHash3.cpp>, which contained the

* following header:

*

* MurmurHash3 was written by Austin Appleby, and is placed in the public domain. The author

* hereby disclaims copyright to this source code.

*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/Hashing.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2005 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except

* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/reflect/Reflection.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2009 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

/**

* Outer class that exists solely to let us write {@code Partially.GwtIncompatible} instead of plain
* {@code GwtIncompatible}. This is more accurate for {@link Futures#catching}, which is available
* under GWT but with a slightly different signature.

*

* <p>We can't use {@code PartiallyGwtIncompatible} because then the GWT compiler wouldn't recognize
* it as a {@code GwtIncompatible} annotation. And for {@code Futures.catching}, we need the GWT
* compiler to autostrip the normal server method in order to expose the special, inherited GWT
* version.

*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/util/concurrent/Partially.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2014 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

- * You may obtain a copy of the License at
- *
- * <http://www.apache.org/licenses/LICENSE-2.0>
- *
- * Unless required by applicable law or agreed to in writing, software
- * distributed under the License is distributed on an "AS IS" BASIS,
- * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
- * See the License for the specific language governing permissions and
- * limitations under the License.
- */

Found in path(s):

- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/TopKSelector.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/ImmutableGraph.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/SuccessorsFunction.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/MutableNetwork.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/ImmutableNetwork.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/Graphs.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/io/InsecureRecursiveDeleteException.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/Graph.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/io/RecursiveDeleteOption.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/PredecessorsFunction.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/MutableGraph.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/graph/Network.java

No license file was found, but licenses were detected in source scan.

- /*
- * Written by Doug Lea with assistance from members of JCP JSR-166
- * Expert Group and released to the public domain, as explained at
- * <http://creativecommons.org/publicdomain/zero/1.0/>
- */

Found in path(s):

- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/AtomicDoubleArray.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-

```
jar/com/google/common/hash/LongAdder.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/cache/LongAdder.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/cache/Striped64.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/hash/Striped64.java
```

No license file was found, but licenses were detected in source scan.

```
/*
* Copyright (C) 2008 The Guava Authors
*
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/
```

Found in path(s):

```
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/io/FileBackedOutputStream.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/primitives/Shorts.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/primitives/Doubles.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/util/concurrent/SequentialExecutor.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/base/CharMatcher.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/FluentIterable.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/primitives/Booleans.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/primitives/Chars.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/net/PercentEscaper.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/base/Joiner.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/primitives/Floats.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
```

jar/com/google/common/util/concurrent/ListenableFutureTask.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/escape/UnicodeEscaper.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/primitives/Bytes.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/io/MultiReader.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/base/Stopwatch.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/base/Converter.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/primitives/Longs.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/primitives/Ints.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/base/internal/Finalizer.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/net/InetAddresses.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/escape/Escaper.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/thirdparty/publicsuffix/TrieParser.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2010 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/ForwardingSetMultimap.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/MinMaxPriorityQueue.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/AbstractSequentialIterator.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingListMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/RowSortedTable.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingSortedSetMultimap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingImmutableCollection.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/UnmodifiableListIterator.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/SortedMapDifference.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2011 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/SortedMultiset.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/SortedMultisets.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2009 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/

Found in path(s):

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/DenseImmutableTable.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/ForwardingFuture.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/primitives/UnsignedBytes.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/net/HostSpecifier.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/AbstractExecutionThreadService.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/JdkFutureAdapters.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/primitives/SignedBytes.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/annotations/GwtIncompatible.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/SparseImmutableTable.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/net/UrlEscapers.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/cache/ReferenceEntry.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/MapMakerInternalMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/reflect/TypeResolver.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/escape/Platform.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/MapMaker.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/escape/ArrayBasedUnicodeEscaper.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/cache/CacheBuilder.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/Cut.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/io/ByteArrayDataInput.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/SettableFuture.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/util/concurrent/Callables.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-

jar/com/google/common/util/concurrent/Service.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/util/concurrent/AbstractIdleService.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/util/concurrent/ForwardingFluentFuture.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/base/Platform.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/io/ByteArrayDataOutput.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/html/HtmlEscapers.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/escape/ArrayBasedEscaperMap.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/io/LineProcessor.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/xml/XmlEscapers.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/RegularImmutableTable.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/util/concurrent/ForwardingListenableFuture.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/annotations/GwtCompatible.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/io/ByteProcessor.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/escape/ArrayBasedCharEscaper.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/net/InternetDomainName.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/util/concurrent/AbstractService.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/base/Splitter.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/cache/LocalCache.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/escape/Escapers.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2009 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

```

* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/
/**
 * Not supported. <b>You are attempting to create a map that may contain a non-{@code Comparable}
 * key.</b> Proper calls will resolve to the version in {@code ImmutableSortedMap}, not this dummy
 * version.
 *
 * @throws UnsupportedOperationException always
 * @deprecated <b>Pass a key of type {@code Comparable} to use {@link
 *     ImmutableSortedMap#of(Comparable, Object)}.</b>
 */

```

Found in path(s):

```

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/collect/ImmutableSortedMapFauxverideShim.java

```

No license file was found, but licenses were detected in source scan.

```

/*
 * Copyright (C) 2020 The Guava Authors
 *
 * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
 * in compliance with the License. You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software distributed under the License
 * is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
 * express
 * or implied. See the License for the specific language governing permissions and limitations under
 * the License.
 */
/**
 * Holder for web specializations of methods of {@code Floats}. Intended to be empty for regular
 * version.
 */

```

Found in path(s):

```

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-
jar/com/google/common/primitives/FloatsMethodsForWeb.java

```

No license file was found, but licenses were detected in source scan.

```

/*
 * Copyright (C) 2009 The Guava Authors
 *

```


- * Licensed under the Apache License, Version 2.0 (the "License");
- * you may not use this file except in compliance with the License.
- * You may obtain a copy of the License at
- *
- * <http://www.apache.org/licenses/LICENSE-2.0>
- *
- * Unless required by applicable law or agreed to in writing, software
- * distributed under the License is distributed on an "AS IS" BASIS,
- * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
- * See the License for the specific language governing permissions and
- * limitations under the License.
- */

Found in path(s):

- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ComputationException.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/DiscreteDomain.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ImmutableClassToInstanceMap.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ImmutableSortedSetFauxverideShim.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ImmutableTable.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ImmutableAsList.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ArrayTable.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ForwardingTable.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/TableCollectors.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ImmutableEnumSet.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/RegularImmutableSortedSet.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ImmutableSortedMap.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/SingletonImmutableList.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/SingletonImmutableTable.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ImmutableSetMultimap.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/ComparisonChain.java
- * /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/RegularImmutableList.java

* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/AbstractIndexedListIterator.java
* /opt/cola/permits/1119092615_1608716259.54/0/guava-30-1-jre-sources-1-jar/com/google/common/collect/EmptyImmutableSetMultimap.java

1.9 httpcomponents-core 4.4.13

1.9.1 Available under license :

Apache HttpCore
Copyright 2005-2020 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation,

and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s)

with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.
Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.
6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.
7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.
8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.
9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

1.10 slf4j 1.6.6

1.10.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
/**
```

```
* Copyright (c) 2004-2011 QOS.ch
```

```
* All rights reserved.
```

```
*
```

```
* Permission is hereby granted, free of charge, to any person obtaining
```

```
* a copy of this software and associated documentation files (the
```

```
* "Software"), to deal in the Software without restriction, including
```

```
* without limitation the rights to use, copy, modify, merge, publish,
```

```
* distribute, sublicense, and/or sell copies of the Software, and to
```

```
* permit persons to whom the Software is furnished to do so, subject to
```

```
* the following conditions:
```

```
*
```

```
* The above copyright notice and this permission notice shall be
```

```
* included in all copies or substantial portions of the Software.
```

```
*
```

```
* THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND,
```

* EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF
* MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND
* NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE
* LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION
* OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION
* WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.
*
*/

Found in path(s):

* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/IMarkerFactory.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/helpers/BasicMDCAdapter.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/helpers/MarkerIgnoringBase.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/spi/MDCAdapter.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/helpers/SubstituteLoggerFactory.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/LoggerFactory.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/impl/StaticLoggerBinder.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/helpers/NOPMDCAdapter.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/MarkerFactory.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/impl/StaticMDCBinder.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/helpers/BasicMarkerFactory.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/spi/LocationAwareLogger.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/helpers/FormattingTuple.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/spi/MarkerFactoryBinder.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/helpers/MessageFormatter.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/helpers/NamedLoggerBase.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/spi/LoggerFactoryBinder.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/MDC.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/helpers/Util.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/helpers/NOPLogger.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/ILoggerFactory.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/Logger.java
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/helpers/NOPLoggerFactory.java

```
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-  
jar/org/slf4j/helpers/BasicMarker.java  
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-jar/org/slf4j/Marker.java  
* /opt/cola/permits/1512417657_1673636624.6005318/0/slf4j-api-1-6-6-sources-  
jar/org/slf4j/impl/StaticMarkerBinder.java
```

1.11 jackson-annotations 2.14.2

1.11.1 Available under license :

Jackson JSON processor

Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers.

Licensing

Jackson 2.x core and extension components are licensed under Apache License 2.0 To find the details that apply to this artifact see the accompanying LICENSE file.

Credits

A list of contributors may be found from CREDITS(-2.x) file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses.

Maven Wrapper Jar
Copyright 2016-2021 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity

on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:
 - (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
 - (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
 - (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
 - (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one

of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a

result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

1.12 zt 1.14

1.12.1 Available under license :

No license file was found, but licenses were detected in source scan.

/*

* Licensed to the Apache Software Foundation (ASF) under one or more
* contributor license agreements. See the NOTICE file distributed with
* this work for additional information regarding copyright ownership.
* The ASF licenses this file to You under the Apache License, Version 2.0
* (the "License"); you may not use this file except in compliance with
* the License. You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*
*/

Found in path(s):

* /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-
jar/org/zeroturnaround/zip/extra/AsiExtraField.java
* /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-
jar/org/zeroturnaround/zip/extra/ZipLong.java
* /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-
jar/org/zeroturnaround/zip/extra/ZipExtraField.java
* /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-
jar/org/zeroturnaround/zip/extra/ZipShort.java
* /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-
jar/org/zeroturnaround/zip/extra/ExtraFieldUtils.java
* /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-
jar/org/zeroturnaround/zip/extra/ZipConstants.java
* /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-
jar/org/zeroturnaround/zip/extra/UnrecognizedExtraField.java

No license file was found, but licenses were detected in source scan.

/*

* Licensed to the Apache Software Foundation (ASF) under one or more
* contributor license agreements. See the NOTICE file distributed with
* this work for additional information regarding copyright ownership.
* The ASF licenses this file to You under the Apache License, Version 2.0
* (the "License"); you may not use this file except in compliance with
* the License. You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
*/

- * Unless required by applicable law or agreed to in writing, software
- * distributed under the License is distributed on an "AS IS" BASIS,
- * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
- * See the License for the specific language governing permissions and
- * limitations under the License.
- */

Found in path(s):

- * /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-jar/org/zeroturnaround/zip/commons/FileExistsException.java
- * /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-jar/org/zeroturnaround/zip/commons/IOUtils.java
- * /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-jar/org/zeroturnaround/zip/commons/FileUtilsV2_2.java
- * /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-jar/org/zeroturnaround/zip/commons/StringBuilderWriter.java
- * /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-jar/org/zeroturnaround/zip/commons/FilenameUtils.java

No license file was found, but licenses were detected in source scan.

/**

* Copyright (C) 2012 ZeroTurnaround LLC <support@zeroturnaround.com>

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

- * /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-jar/org/zeroturnaround/zip/ZTFileUtil.java
- * /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-jar/org/zeroturnaround/zip/ZipInfoCallback.java
- * /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-jar/org/zeroturnaround/zip/NameMapper.java
- * /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-jar/org/zeroturnaround/zip/FileSource.java
- * /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-jar/org/zeroturnaround/zip/ZipEntryUtil.java
- * /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-jar/org/zeroturnaround/zip/timestamps/PreJava8TimestampStrategy.java
- * /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-jar/org/zeroturnaround/zip/Zips.java

* /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-jar/org/zeroturnaround/zip/timestamps/TimestampStrategy.java
* /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-jar/org/zeroturnaround/zip/ByteSource.java
* /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-jar/org/zeroturnaround/zip/timestamps/Java8TimestampStrategy.java
* /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-jar/org/zeroturnaround/zip/ZipEntrySource.java
* /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-jar/org/zeroturnaround/zip/IdentityNameMapper.java
* /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-jar/org/zeroturnaround/zip/ZipUtil.java
* /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-jar/org/zeroturnaround/zip/timestamps/TimestampStrategyFactory.java
* /opt/cola/permits/1135879776_1613624027.25/0/zt-zip-1-14-sources-1-jar/org/zeroturnaround/zip/ZipEntryCallback.java

1.13 xerces-j 2.12.2

1.13.1 Available under license :

Apache XML Commons Resolver
Copyright 2006 The Apache Software Foundation.

This product includes software developed at
The Apache Software Foundation <http://www.apache.org/>

Portions of this code are derived from classes placed in the
public domain by Arbortext on 10 Apr 2000. See:
http://www.arbortext.com/customer_support/updates_and_technical_notes/catalogs/docs/README.htm

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction,
and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by
the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all
other entities that control, are controlled by, or are under common
control with that entity. For the purposes of this definition,

"control" means (i) the power, direct or indirect, to cause the

direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of

this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and

wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor

has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

=====
== NOTICE file corresponding to section 4(d) of the Apache License, ==
== Version 2.0, in this case for the Apache Xerces Java distribution. ==
=====

Apache Xerces Java
Copyright 1999-2022 The Apache Software Foundation

This product includes software developed at

The Apache Software Foundation (<http://www.apache.org/>).

Portions of this software were originally based on the following:

- software copyright (c) 1999, IBM Corporation., <http://www.ibm.com>.
- software copyright (c) 1999, Sun Microsystems., <http://www.sun.com>.
- voluntary contributions made by Paul Eng on behalf of the Apache Software Foundation that were originally developed at iClick, Inc., software copyright (c) 1999.

=====
== NOTICE file corresponding to section 4(d) of the Apache License, ==
== Version 2.0, in this case for the Apache Xalan Java distribution. ==
=====

Apache Xalan (Xalan serializer)
Copyright 1999-2012 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

Portions of this software was originally based on the following:

- software copyright (c) 1999-2002, Lotus Development Corporation., <http://www.lotus.com>.
- software copyright (c) 2001-2002, Sun Microsystems., <http://www.sun.com>.
- software copyright (c) 2003, IBM Corporation., <http://www.ibm.com>.

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the

Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:
 - (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and

 - (b) You must cause any modified files to carry prominent notices stating that You changed the files; and

 - (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and

 - (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside

or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. **Submission of Contributions.** Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.
6. **Trademarks.** This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.
7. **Disclaimer of Warranty.** Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.
8. **Limitation of Liability.** In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.
9. **Accepting Warranty or Additional Liability.** While redistributing the Work or Derivative Works thereof, You may choose to offer,

and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

1.14 j2objc-annotations 1.3

1.14.1 Available under license :

For org.w3c.dom code.

See <<http://www.w3.org/Consortium/Legal/>>.
The MIT License

Copyright (c) 2007 Mockito contributors

Permission is hereby granted, free of charge, to any person obtaining a copy

of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Copyright (c) 2007-2009, JSR305 expert group
All rights reserved.

<http://www.opensource.org/licenses/bsd-license.php>

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of the JSR305 expert group nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

/*

- * Licensed to the Apache Software Foundation (ASF) under one or more
- * contributor license agreements. See the NOTICE file distributed with
- * this work for additional information regarding copyright ownership.

```

* The ASF licenses this file to You under the Apache License, Version 2.0
* (the "License"); you may not use this file except in compliance with
* the License. You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

```

```
package java.security;
```

```
import java.io.Serializable;
```

```
/**
```

```
* Legacy security code; do not use.
```

```
*/
```

```
public abstract class Permission implements Guard, Serializable {
    public Permission(String name) { }
```

```
    public final String getName() { return null; }
```

```
    public void checkGuard(Object obj) throws SecurityException { }
```

```
    public PermissionCollection newPermissionCollection() {
        return new AllPermissionCollection();
    }
```

```
    public abstract String getActions();
```

```
    public abstract boolean implies(Permission permission);
}
```

```

=====
== NOTICE file corresponding to the section 4 d of          ==
== the Apache License, Version 2.0,                          ==
== in this case for the Android-specific code.                ==
=====

```

Android Code

Copyright 2005-2008 The Android Open Source Project

This product includes software developed as part of
The Android Open Source Project (<http://source.android.com>).

```
=====
```

== NOTICE file corresponding to the section 4 d of ==
== the Apache License, Version 2.0, ==
== in this case for the Apache Harmony distribution. ==

=====
Apache Harmony
Copyright 2006 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

Portions of Harmony were originally developed by
Intel Corporation and are licensed to the Apache Software
Foundation under the "Software Grant and Corporate Contribution
License Agreement", informally known as the "Intel Harmony CLA".

=====
== NOTICE file for the ICU License. ==
=====
=====

Copyright (c) 1995-2014 International Business Machines Corporation and others

All rights reserved.

Permission is hereby granted, free of charge, to any person obtaining
a copy of this software and associated documentation files (the
"Software"), to deal in the Software without restriction, including
without limitation the rights to use, copy, modify, merge, publish,
distribute, and/or sell copies of the Software, and to permit persons
to whom the Software is furnished to do so, provided that the above
copyright notice(s) and this permission notice appear in all copies of
the Software and that both the above copyright notice(s) and this
permission notice appear in supporting documentation.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND,
EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF
MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT
OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR
HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY
SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER
RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF
CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN
CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Except as contained in this notice, the name of a copyright holder
shall not be used in advertising or otherwise to promote the sale, use
or other dealings in this Software without prior written authorization

of the copyright holder.

All trademarks and registered trademarks mentioned herein are the property of their respective owners.

=====
== NOTICE file for the KXML License. ==
=====

Copyright (c) 2002,2003, Stefan Haustein, Oberhausen, Rhld., Germany

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

=====
== NOTICE file for the W3C License. ==
=====

Copyright (c) 2000 World Wide Web Consortium, (Massachusetts Institute of Technology, Institut National de Recherche en Informatique et en Automatique, Keio University). All Rights Reserved. This program is distributed under the W3C's Software Intellectual Property License. This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

See W3C License <http://www.w3.org/Consortium/Legal/> for more details.

=====
== NOTICE file for the fdlibm License. ==
=====

=====
Copyright (C) 1993 by Sun Microsystems, Inc. All rights reserved.

Developed at SunSoft, a Sun Microsystems, Inc. business.

Permission to use, copy, modify, and distribute this software is freely granted, provided that this notice is preserved.

Copyright (C) 2003, International Business Machines Corporation and *
others. All Rights Reserved. *

Created on May 2, 2003

To change the template for this generated file go to
Window>Preferences>Java>Code Generation>Code and Comments

(C) Copyright IBM Corp. 1996-2005 - All Rights Reserved *

The original version of this source code and documentation is copyrighted *
and owned by IBM, These materials are provided under terms of a License *
Agreement between IBM and Sun. This technology is protected by multiple *
US and International patents. This notice and attribution to IBM may not *
to removed. *

(C) Copyright IBM Corp. and others, 1996-2009 - All Rights Reserved *

The original version of this source code and documentation is copyrighted *
and owned by IBM, These materials are provided under terms of a License *
Agreement between IBM and Sun. This technology is protected by multiple *
US and International patents. This notice and attribution to IBM may not *
to removed. *

(C) Copyright IBM Corp. and others, 1996-2009 - All Rights Reserved *

The original version of this source code and documentation is copyrighted *

and owned by IBM, These materials are provided under terms of a License *
Agreement between IBM and Sun. This technology is protected by multiple *
US and International patents. This notice and attribution to IBM may not *
to removed. *

- * file name: UBiDiProps.java
- * encoding: US-ASCII
- * tab size: 8 (not used)
- * indentation:4
- *
- * created on: 2005jan16
- * created by: Markus W. Scherer
- *
- * Low-level Unicode bidi/shaping properties access.
- * Java port of ubidi_props.h/c.

Copyright (C) 2003-2004, International Business Machines Corporation and *
others. All Rights Reserved. *

Copyright (C) 2003-2004, International Business Machines Corporation and *
others. All Rights Reserved. *

Copyright (C) 2004, International Business Machines Corporation and *
others. All Rights Reserved. *

Copyright (C) 2009, International Business Machines Corporation and *
others. All Rights Reserved. *

Copyright (C) 2009-2010, International Business Machines Corporation and *

others. All Rights Reserved.

*

Copyright (C) 2010, International Business Machines Corporation and
others. All Rights Reserved.

*

*

(C) Copyright IBM Corp. 1996-2003 - All Rights Reserved

*

*

The original version of this source code and documentation is copyrighted
and owned by IBM, These materials are provided under terms of a License
Agreement between IBM and Sun. This technology is protected by multiple
US and International patents. This notice and attribution to IBM may not
to removed.

*

This locale data is based on the ICU's Vietnamese locale data (rev. 1.38)
found at:

<http://oss.software.ibm.com/cvs/icu/icu/source/data/locales/vi.txt?rev=1.38>

(C) Copyright IBM Corp. 1999-2003 - All Rights Reserved

The original version of this source code and documentation is
copyrighted and owned by IBM. These materials are provided
under terms of a License Agreement between IBM and Sun.
This technology is protected by multiple US and International
patents. This notice and attribution to IBM may not be removed.

(C) Copyright Taligent, Inc. 1996 - 1997, All Rights Reserved

(C) Copyright IBM Corp. 1996 - 1998, All Rights Reserved

The original version of this source code and documentation is
copyrighted and owned by Taligent, Inc., a wholly-owned subsidiary
of IBM. These materials are provided under terms of a License
Agreement between Taligent and Sun. This technology is protected
by multiple US and International patents.

This notice and attribution to Taligent may not be removed.

Taligent is a registered trademark of Taligent, Inc.

(C) Copyright Taligent, Inc. 1996 - All Rights Reserved
(C) Copyright IBM Corp. 1996 - All Rights Reserved

The original version of this source code and documentation is copyrighted and owned by Taligent, Inc., a wholly-owned subsidiary of IBM. These materials are provided under terms of a License Agreement between Taligent and Sun. This technology is protected by multiple US and International patents. This notice and attribution to Taligent may not be removed.
Taligent is a registered trademark of Taligent, Inc.

(C) Copyright Taligent, Inc. 1996 - All Rights Reserved
(C) Copyright IBM Corp. 1996-1998 - All Rights Reserved

The original version of this source code and documentation is copyrighted and owned by Taligent, Inc., a wholly-owned subsidiary of IBM. These materials are provided under terms of a License Agreement between Taligent and Sun. This technology is protected by multiple US and International patents. This notice and attribution to Taligent may not be removed.
Taligent is a registered trademark of Taligent, Inc.

(C) Copyright Taligent, Inc. 1996, 1997 - All Rights Reserved
(C) Copyright IBM Corp. 1996 - 1998 - All Rights Reserved

The original version of this source code and documentation is copyrighted and owned by Taligent, Inc., a wholly-owned subsidiary of IBM. These materials are provided under terms of a License Agreement between Taligent and Sun. This technology is protected by multiple US and International patents. This notice and attribution to Taligent may not be removed.
Taligent is a registered trademark of Taligent, Inc.

(C) Copyright Taligent, Inc. 1996, 1997 - All Rights Reserved
(C) Copyright IBM Corp. 1996 - 1998 - All Rights Reserved

The original version of this source code and documentation is copyrighted and owned by Taligent, Inc., a wholly-owned subsidiary of IBM. These materials are provided under terms of a License Agreement between Taligent and Sun. This technology is protected by multiple US and International patents.

This notice and attribution to Taligent may not be removed.
Taligent is a registered trademark of Taligent, Inc.

(C) Copyright Taligent, Inc. 1996, 1997 - All Rights Reserved
(C) Copyright IBM Corp. 1996 - 1999 - All Rights Reserved

The original version of this source code and documentation is copyrighted and owned by Taligent, Inc., a wholly-owned subsidiary of IBM. These materials are provided under terms of a License Agreement between Taligent and Sun. This technology is protected by multiple US and International patents.

This notice and attribution to Taligent may not be removed.
Taligent is a registered trademark of Taligent, Inc.

(C) Copyright Taligent, Inc. 1996, 1997 - All Rights Reserved
(C) Copyright IBM Corp. 1996 - 2002 - All Rights Reserved

The original version of this source code and documentation is copyrighted and owned by Taligent, Inc., a wholly-owned subsidiary of IBM. These materials are provided under terms of a License Agreement between Taligent and Sun. This technology is protected by multiple US and International patents.

This notice and attribution to Taligent may not be removed.
Taligent is a registered trademark of Taligent, Inc.

(C) Copyright Taligent, Inc. 1996, 1997 - All Rights Reserved
(C) Copyright IBM Corp. 1996, 1997 - All Rights Reserved

The original version of this source code and documentation is copyrighted and owned by Taligent, Inc., a wholly-owned subsidiary of IBM. These materials are provided under terms of a License Agreement between Taligent and Sun. This technology is protected by multiple US and International patents. This notice and attribution to Taligent may not be removed.
Taligent is a registered trademark of Taligent, Inc.

(C) Copyright Taligent, Inc. 1996, 1997 - All Rights Reserved
(C) Copyright IBM Corp. 1996-1998 - All Rights Reserved

The original version of this source code and documentation is copyrighted and owned by Taligent, Inc., a wholly-owned subsidiary of IBM. These materials are provided under terms of a License Agreement between Taligent and Sun. This technology is protected by multiple US and International patents. This notice and attribution to Taligent may not be removed. Taligent is a registered trademark of Taligent, Inc.

(C) Copyright Taligent, Inc. 1996,1997 - All Rights Reserved
(C) Copyright IBM Corp. 1996, 1997 - All Rights Reserved

(C) Copyright Taligent, Inc. 1996-1998 - All Rights Reserved
(C) Copyright IBM Corp. 1996-1998 - All Rights Reserved

The original version of this source code and documentation is copyrighted and owned by Taligent, Inc., a wholly-owned subsidiary of IBM. These materials are provided under terms of a License Agreement between Taligent and Sun. This technology is protected by multiple US and International patents. This notice and attribution to Taligent may not be removed. Taligent is a registered trademark of Taligent, Inc.

(C) Copyright Taligent, Inc. 1996-1998 - All Rights Reserved
(C) Copyright IBM Corp. 1996-1998 - All Rights Reserved

The original version of this source code and documentation is copyrighted and owned by Taligent, Inc., a wholly-owned subsidiary of IBM. These materials are provided under terms of a License Agreement between Taligent and Sun. This technology is protected by multiple US and International patents. This notice and attribution to Taligent may not be removed. Taligent is a registered trademark of Taligent, Inc.

* Copyright (C) 1996-2004, International Business Machines Corporation and *
* others. All Rights Reserved. *

Oracle designates certain files in this repository as subject to the "Classpath" exception. The designated files include the following notices. In the following notices, the

LICENSE file referred to is:

```
*****  
START LICENSE file  
*****
```

The GNU General Public License (GPL)

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.
59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the

corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions

are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs

whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

One line to give the program's name and a brief idea of what it does.

Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option)

any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author Gnomovision comes
with ABSOLUTELY NO WARRANTY; for details type 'show w'. This is free
software, and you are welcome to redistribute it under certain conditions;
type 'show c' for details.
```

The hypothetical commands 'show w' and 'show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than 'show w' and 'show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
'Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
signature of Ty Coon, 1 April 1989
```

```
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

"CLASSPATH" EXCEPTION TO THE GPL

Certain source files distributed by Oracle America and/or its affiliates are subject to the following clarification and special exception to the GPL, but

only where Oracle has expressly included in the particular source file's header the words "Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code."

Linking this library statically or dynamically with other modules is making a combined work based on this library. Thus, the terms and conditions of the GNU General Public License cover the whole combination.

As a special exception, the copyright holders of this library give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent modules, and to copy and distribute the resulting executable under terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module. An independent module is a module which is not derived from or based on this library. If you modify this library, you may extend this exception to your version of the library, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version.

END LICENSE file

<!--

Copyright (c) 1998, 1999, Oracle and/or its affiliates. All rights reserved.

DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

<!--

Copyright (c) 1998, 2003, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

<!--

Copyright (c) 1998, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

<!--

Copyright (c) 1998, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,
Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

<!--

Copyright (c) 1998, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

<!--

Copyright (c) 2000, 2004, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

<!--

Copyright (c) 2000, 2009, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT

ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

<!--

Copyright (c) 2001, 2005, Oracle and/or its affiliates. All rights reserved.

DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

<!--

Copyright (c) 2001, 2010, Oracle and/or its affiliates. All rights reserved.

DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this

particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

<!--

Copyright (c) 2003, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

<!--

Copyright (c) 1999, 2007, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

<!--

Copyright (c) 1999, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2001, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1998, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any

questions.

Copyright (c) 1998, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1998, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 1998, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,
Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 1998, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,

Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 1999, 2001, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,
Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 1999, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1999, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2000, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that

accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2000, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2000, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or

FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2001, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2005, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2003, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2003, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided

by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2003, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

<?xml version="1.0" encoding="UTF-8"?>

<!--

Copyright (c) 2003, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

<?xml version="1.0"?>

<!--

Copyright (c) 2003, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1998, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

<code>Replaceable</code> is an interface representing a string of characters that supports the replacement of a range of itself with a new string of characters. It is used by APIs that change a piece of text while retaining metadata. Metadata is data other than the Unicode characters returned by `char32At()`. One example of metadata is style attributes; another is an edit history, marking each character with an author and revision number.

<p>An implicit aspect of the <code>Replaceable</code> API is that during a replace operation, new characters take on the metadata of the old characters. For example, if the string "the bold font" has range (4, 8) replaced with "strong", then it becomes "the strong font".

<p><code>Replaceable</code> specifies ranges using a start offset and a limit offset. The range of characters thus specified includes the characters at offset `start..limit-1`. That is, the start offset is inclusive, and the limit offset is exclusive.

<p><code>Replaceable</code> also includes API to access characters

in the string: `length()`, `charAt()`,
`char32At()`, and `extractBetween()`.

For a subclass to support metadata, typical behavior of
`replace()` is the following:

- Set the metadata of the new text to the metadata of the first
character replaced

- If no characters are replaced, use the metadata of the
previous character

- If there is no previous character (i.e. `start == 0`), use the
following character

- If there is no following character (i.e. the replaceable was
empty), use default metadata

- If the code point U+FFFF is seen, it should be interpreted as
a special marker having no metadata

If this is not the behavior, the subclass should document any differences.

Copyright © IBM Corporation 1999. All rights reserved.

@author Alan Liu

@stable ICU 2.0

`ReplaceableString` is an adapter class that implements the
`Replaceable` API around an ordinary `StringBuffer`.

Note: This class does not support attributes and is not
intended for general use. Most clients will need to implement
{ @link Replaceable } in their text representation class.

Copyright © IBM Corporation 1999. All rights reserved.

@see Replaceable

@author Alan Liu

@stable ICU 2.0

Copyright (C) 1991-2007 Unicode, Inc. All rights reserved.

Distributed under the Terms of Use in <http://www.unicode.org/copyright.html>.

Permission is hereby granted, free of charge, to any person obtaining a copy
of the Unicode data files and any associated documentation (the "Data
Files") or Unicode software and any associated documentation (the

"Software") to deal in the Data Files or Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Data Files or Software, and to permit persons to whom the Data Files or Software are furnished to do so, provided that (a) the above copyright notice(s) and this permission notice appear with all copies of the Data Files or Software, (b) both the above copyright notice(s) and this permission notice appear in associated documentation, and (c) there is clear notice in each modified Data File or in the Software as well as in the documentation associated with the Data File(s) or Software that the data or software has been modified.

THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in these Data Files or Software without prior written authorization of the copyright holder.

Generated automatically from the Common Locale Data Repository. DO NOT EDIT!

Copyright (C) 1991-2011 Unicode, Inc. All rights reserved.
Distributed under the Terms of Use in <http://www.unicode.org/copyright.html>.

Permission is hereby granted, free of charge, to any person obtaining a copy of the Unicode data files and any associated documentation (the "Data Files") or Unicode software and any associated documentation (the "Software") to deal in the Data Files or Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Data Files or Software, and to permit persons to whom the Data Files or Software are furnished to do so, provided that (a) the above copyright notice(s) and this permission notice appear with all copies of the Data Files or Software, (b) both the above copyright notice(s) and this permission notice appear in associated documentation, and (c) there is clear notice in each modified Data File or in the Software as well as in the documentation associated with the Data File(s) or Software that the data or software has been modified.

THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in these Data Files or Software without prior written authorization of the copyright holder.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1994, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1994, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1994, 2009, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1994, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1994, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA

or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1994, 2013, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1995, 2000, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version

2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1995, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1995, 2007, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License

version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1995, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1995, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1995, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1995, 2013, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it

under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1996, 2004, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project

Copyright (c) 1996, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1996, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1996, 2009, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1996, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1996, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,
Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1996, 2012, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1996, 2013, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1997, 2005, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT

ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1997, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1997, 2007, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this

particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1997, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1997, 2009, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1997, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1997, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1997, 2012, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA

or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1997, 2013, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1998, 2005, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version

2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1998, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1998, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License

version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1998, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1999, 2005, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1999, 2009, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1999, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it

under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 1999, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project

Copyright (c) 2000, 2003, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2000, 2004, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2000, 2005, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2000, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2000, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,
Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2000, 2009, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2000, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2000, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT

ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2000, 2012, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2000, 2013, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this

particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2001, 2002, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2001, 2005, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2001, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2001, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2001, 2012, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA

or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2002, 2005, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2002, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version

2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2002, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2003, 2004, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License

version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2003, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2003, 2009, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2003, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2003, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it

under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2003, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project

Copyright (c) 2004, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2005, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2005, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2005, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2005, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,
Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2005, 2012, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2005, 2013 Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2005, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT

ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2007, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this

particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2008, 2009, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (C) 2014 The Android Open Source Project
Copyright (c) 2009, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1994, 1995, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1994, 1998, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1994, 2000, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1994, 2001, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1994, 2002, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any

questions.

Copyright (c) 1994, 2003, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1994, 2004, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 1994, 2005, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,
Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 1994, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,

Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 1994, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,
Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 1994, 2009, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1994, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1994, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that

accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1994, 2013, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1995, 1996, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or

FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1995, 1997, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1995, 1999, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1995, 2000, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1995, 2001, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided

by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1995, 2003, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1995, 2004, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as

published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1995, 2005, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1995, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1995, 2007, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1995, 2008, Oracle and/or its affiliates. All rights reserved.

DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1995, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1995, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1995, 2012, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1995, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1996, 1997, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA

or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1996, 1998, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1996, 1999, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 1996, 2000, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,
Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 1996, 2001, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version

2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1996, 2002, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1996, 2003, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1996, 2004, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1996, 2005, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License

version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1996, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1996, 2007, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT

ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1996, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1996, 2009, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1996, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1996, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this

particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1996, 2012, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1996, 2013, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it

under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1996, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1997, 1998, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1997, 1999, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1997, 2000, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1997, 2001, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1997, 2002, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1997, 2003, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any

questions.

Copyright (c) 1997, 2004, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1997, 2005, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 1997, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,
Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 1997, 2007, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,

Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 1997, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,
Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 1997, 2009, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1997, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1997, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that

accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1997, 2012, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1997, 2013, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or

FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1997, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1998, 2001, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1998, 2002, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1998, 2003, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided

by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1998, 2004, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1998, 2005, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as

published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1998, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1998, 2007, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1998, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1998, 2009, Oracle and/or its affiliates. All rights reserved.

DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1998, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1998, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1998, 2012, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1998, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1999, 2000, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA

or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1999, 2001, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1999, 2002, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 1999, 2003, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,
Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 1999, 2004, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version

2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1999, 2005, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1999, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1999, 2007, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1999, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License

version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1999, 2009, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1999, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT

ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1999, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1999, 2012, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 1999, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2000, 2001, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this

particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2000, 2002, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2000, 2003, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it

under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2000, 2004, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2000, 2005, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2000, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2000, 2007, Oracle and/or its affiliates. All rights reserved.

DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2000, 2007, Oracle and/or its affiliates. All rights reserved.

DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2000, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2000, 2009, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA

or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2000, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2000, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 2000, 2012, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,
Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 2000, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version

2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2001, 2002, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2001, 2003, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2001, 2004, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2001, 2005, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License

version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2001, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2001, 2007, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT

ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2001, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2001, 2009, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2001, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2001, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this

particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2001, 2012, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2001, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it

under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2002, 2003, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2002, 2004, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2002, 2005, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2002, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2002, 2007, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2002, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2002, 2009, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any

questions.

Copyright (c) 2002, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2002, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 2002, 2012, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,
Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 2002, 2013, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,

Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 2002, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,
Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 2003, 2004, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2003, 2005, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2003, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that

accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2003, 2007, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2003, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or

FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2003, 2009, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2003, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2003, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2003, 2013, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided

by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2003, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2003,2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as

published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2004, 2005, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2004, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2004, 2009, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2004, 2010, Oracle and/or its affiliates. All rights reserved.

DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2004, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2004, 2012, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2004, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2005, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2005, 2007, Oracle and/or its affiliates. All rights reserved.

Copyright (c) 2005, 2007, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version

2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2005, 2007, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

(C) Copyright Taligent, Inc. 1996, 1997 - All Rights Reserved
(C) Copyright IBM Corp. 1996 - 1999 - All Rights Reserved

The original version of this source code and documentation is copyrighted and owned by Taligent, Inc., a wholly-owned subsidiary of IBM. These materials are provided under terms of a License Agreement between Taligent and Sun. This technology is protected by multiple US and International patents.

This notice and attribution to Taligent may not be removed.
Taligent is a registered trademark of Taligent, Inc.

Copyright (c) 2005, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2005, 2009, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2005, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2005, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2005, 2012, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2005, Oracle and/or its affiliates. All rights reserved.

Copyright (c) 2005, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation,

Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 2006, 2007, Oracle and/or its affiliates. All rights reserved.

Copyright (c) 2006, 2007, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,
Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 2006, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or

FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2006, 2012, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2007, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2007, 2009, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided

by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2007, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2007, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as

published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2007, 2012, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2007, Oracle and/or its affiliates. All rights reserved.

Copyright (c) 2007, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2008, 2009, Oracle and/or its affiliates. All rights reserved.

DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any

questions.

Copyright (c) 2008, 2009, Oracle and/or its affiliates. All rights reserved.

DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2008, 2009, Oracle and/or its affiliates. All rights reserved.

DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 2008, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,
Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

Copyright (c) 2008, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version

2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2008, 2012, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2009, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2009, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License

version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2009, 2013, Oracle and/or its affiliates. All rights reserved.
Copyright 2009 Google Inc. All Rights Reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2009, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2010, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2010, 2012, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided

by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2010, 2013, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as

published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2012, 2013, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2012, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright (c) 2013, Oracle and/or its affiliates. All rights reserved.

DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

Copyright 2015 Google Inc.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Google designates this particular file as subject to the "Classpath" exception as provided by Google in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Licensed Materials - Property of IBM

(C) Copyright IBM Corp. 1999 All Rights Reserved.

(C) IBM Corp. 1997-1998. All Rights Reserved.

The program is provided "as is" without any warranty express or implied, including the warranty of non-infringement and the implied warranties of merchantability and fitness for a particular purpose. IBM will not be liable for any damages suffered by you as a result of using the Program. In no event will IBM be liable for any special, indirect or consequential damages or lost profits even if IBM has been advised of the possibility of their occurrence. IBM will not be liable for any third party claims against you.

is licensed under the same terms. The copyright and license information for java/net/Inet4AddressImpl.java follows.

Copyright (c) 2002, 2005, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

licensed under the same terms. The copyright and license information for java/net/PlainDatagramSocketImpl.java follows.

Copyright (c) 2007, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as

published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

licensed under the same terms. The copyright and license information for `java/net/PlainSocketImpl.java` follows.

Copyright (c) 2007, 2008, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

licensed under the same terms. The copyright and license information for sun/nio/ch/FileChannelImpl.java follows.

Copyright (c) 2000, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

licensed under the same terms. The copyright and license information for sun/nio/ch/FileDispatcherImpl.java follows.

Copyright (c) 2000, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation,

Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

licensed under the same terms. The copyright and license information for
sun/nio/ch/InheritedChannel.java follows.

Copyright (c) 2003, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,
Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

licensed under the same terms. The copyright and license information for
sun/nio/ch/ServerSocketChannelImpl.java follows.

Copyright (c) 2000, 2012, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

same terms. The copyright and license information for sun/nio/ch/Net.java follows.

Copyright (c) 2000, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

the same terms. The copyright and license information for java/io/FileSystem.java follows.

Copyright (c) 1998, 2005, Oracle and/or its affiliates. All rights reserved.

DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

the same terms. The copyright and license information for java/lang/Long.java follows.

Copyright (c) 1994, 2009, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any

questions.

the same terms. The copyright and license information for
sun/nio/ch/IOStatus.java follows.

Copyright (c) 2002, 2003, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that
accompanied this code).

You should have received a copy of the GNU General Public License version
2 along with this work; if not, write to the Free Software Foundation,
Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA
or visit www.oracle.com if you need additional information or have any
questions.

under the same terms. The copyright and license information for
java/io/UnixFileSystem.java follows.

Copyright (c) 1998, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 only, as
published by the Free Software Foundation. Oracle designates this
particular file as subject to the "Classpath" exception as provided
by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT
ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
version 2 for more details (a copy is included in the LICENSE file that

accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

under the same terms. The copyright and license information for `java/lang/Integer.java` follows.

Copyright (c) 1994, 2010, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

under the same terms. The copyright and license information for `java/net/NetworkInterface.java` follows.

Copyright (c) 2000, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as

published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

under the same terms. The copyright and license information for `java/net/SocketOptions.java` follows.

Copyright (c) 1996, 2006, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

under the same terms. The copyright and license information for java/util/zip/ZipFile.java follows.

Copyright (c) 1995, 2011, Oracle and/or its affiliates. All rights reserved.
DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS FILE HEADER.

This code is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 only, as published by the Free Software Foundation. Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code.

This code is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License version 2 for more details (a copy is included in the LICENSE file that accompanied this code).

You should have received a copy of the GNU General Public License version 2 along with this work; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

Please contact Oracle, 500 Oracle Parkway, Redwood Shores, CA 94065 USA or visit www.oracle.com if you need additional information or have any questions.

=====
== NOTICE file corresponding to section 4(d) of the Apache License, ==
== Version 2.0, in this case for the Apache Xalan Java distribution. ==
=====

Apache Xalan (Xalan XSLT processor)
Copyright 1999-2006 The Apache Software Foundation

Apache Xalan (Xalan serializer)
Copyright 1999-2006 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

=====
Portions of this software was originally based on the following:
- software copyright (c) 1999-2002, Lotus Development Corporation.,
 <http://www.lotus.com>.
- software copyright (c) 2001-2002, Sun Microsystems.,
 <http://www.sun.com>.
- software copyright (c) 2003, IBM Corporation.,

<http://www.ibm.com>.

The binary distribution package (ie. jars, samples and documentation) of this product includes software developed by the following:

- The Apache Software Foundation
 - Xerces Java - see LICENSE.txt
 - JAXP 1.3 APIs - see LICENSE.txt
 - Bytecode Engineering Library - see LICENSE.txt
 - Regular Expression - see LICENSE.txt

- Scott Hudson, Frank Flannery, C. Scott Ananian
 - CUP Parser Generator runtime (javacup\runtime) - see LICENSE.txt

The source distribution package (ie. all source and tools required to build Xalan Java) of this product includes software developed by the following:

- The Apache Software Foundation
 - Xerces Java - see LICENSE.txt
 - JAXP 1.3 APIs - see LICENSE.txt
 - Bytecode Engineering Library - see LICENSE.txt
 - Regular Expression - see LICENSE.txt
 - Ant - see LICENSE.txt
 - Stylebook doc tool - see LICENSE.txt

- Elliot Joel Berk and C. Scott Ananian
 - Lexical Analyzer Generator (JLex) - see LICENSE.txt

Apache Xerces Java
Copyright 1999-2006 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

Portions of Apache Xerces Java in xercesImpl.jar and xml-apis.jar were originally based on the following:

- software copyright (c) 1999, IBM Corporation., <http://www.ibm.com>.
- software copyright (c) 1999, Sun Microsystems., <http://www.sun.com>.
- voluntary contributions made by Paul Eng on behalf of the Apache Software Foundation that were originally developed at iClick, Inc., software copyright (c) 1999.

Apache xml-commons xml-apis (redistribution of xml-apis.jar)

Apache XML Commons
Copyright 2001-2003,2006 The Apache Software Foundation.

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

Portions of this software were originally based on the following:

- software copyright (c) 1999, IBM Corporation., <http://www.ibm.com>.
- software copyright (c) 1999, Sun Microsystems., <http://www.sun.com>.
- software copyright (c) 2000 World Wide Web Consortium, <http://www.w3.org>

The GNU General Public License (GPL)

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.
59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus

forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by

third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation.

If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

One line to give the program's name and a brief idea of what it does.

Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author Gnomovision comes
with ABSOLUTELY NO WARRANTY; for details type 'show w'. This is free
software, and you are welcome to redistribute it under certain conditions;
type 'show c' for details.
```

The hypothetical commands 'show w' and 'show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than 'show w' and 'show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
'Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
signature of Ty Coon, 1 April 1989
```

```
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

"CLASSPATH" EXCEPTION TO THE GPL

Certain source files distributed by Oracle America and/or its affiliates are subject to the following clarification and special exception to the GPL, but only where Oracle has expressly included in the particular source file's header the words "Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code."

Linking this library statically or dynamically with other modules is making a combined work based on this library. Thus, the terms and conditions of the GNU General Public License cover the whole combination.

As a special exception, the copyright holders of this library give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent modules, and to copy and distribute the resulting executable under terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module. An independent module is a module which is not derived from or based on this library. If you modify this library, you may extend this exception to your version of the library, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version.

ICU

There are two licenses here:

- ICU license
- Unicode Terms of Use

ICU License - ICU 1.8.1 and later

From <http://source.icu-project.org/repos/icu/icu/trunk/license.html>

X License (old version). For license pedigree see the

ICU FAQ at <http://icu-project.org/userguide/icufaq.html>

COPYRIGHT AND PERMISSION NOTICE

Copyright (c) 1995-2014 International Business Machines Corporation and others

All rights reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, provided that the above copyright notice(s) and this permission notice appear in all copies of the Software and that both the above copyright notice(s) and this permission notice appear in supporting documentation.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization of the copyright holder.

All trademarks and registered trademarks mentioned herein are the property of their respective owners.

Unicode Terms of Use, from <http://www.unicode.org/copyright.html>

For the general privacy policy governing access to this site, see the Unicode Privacy Policy. For trademark usage, see the Unicode Consortium Name and Trademark Usage Policy.

Notice to End User: Terms of Use

Carefully read the following legal agreement ("Agreement"). Use or copying of the software and/or codes provided with this agreement (The "Software") constitutes your acceptance of these terms. If you have any questions about these terms of use, please contact the Unicode Consortium.

A. Unicode Copyright.

1. Copyright 1991-2014 Unicode, Inc. All rights reserved.
2. Certain documents and files on this website contain a legend indicating that "Modification is permitted." Any person is hereby authorized, without fee, to modify such documents and files to create derivative works conforming to the Unicode Standard, subject to Terms and Conditions herein.
3. Any person is hereby authorized, without fee, to view, use, reproduce, and distribute all documents and files solely for informational purposes in the creation of products supporting the Unicode Standard, subject to the Terms and Conditions herein.
4. Further specifications of rights and restrictions pertaining to the use of the particular set of data files known as the "Unicode Character Database" can be found in Exhibit 1.
5. Each version of the Unicode Standard has further specifications of rights and restrictions of use. For the book editions (Unicode 5.0 and earlier), these are found on the back of the title page. The online code charts carry specific restrictions. All other files, including online documentation of the core specification for Unicode 6.0 and later, are

covered under these general Terms of Use.

6. No license is granted to "mirror" the Unicode website where a fee is charged for access to the "mirror" site.
7. Modification is not permitted with respect to this document. All copies of this document must be verbatim.

B. Restricted Rights Legend. Any technical data or software which is licensed to the United States of America, its agencies and/or instrumentalities under this Agreement is commercial technical data or commercial computer software developed exclusively at private expense as defined in FAR 2.101, or DFARS 252.227-7014 (June 1995), as applicable. For technical data, use, duplication, or disclosure by the Government is subject to restrictions as set forth in DFARS 202.227-7015 Technical Data, Commercial and Items (Nov 1995) and this Agreement. For Software, in accordance with FAR 12-212 or DFARS 227-7202, as applicable, use, duplication or disclosure by the Government is subject to the restrictions set forth in this Agreement.

C. Warranties and Disclaimers.

1. This publication and/or website may include technical or typographical errors or other inaccuracies . Changes are periodically added to the information herein; these changes will be incorporated in new editions of the publication and/or website. Unicode may make improvements and/or changes in the product(s) and/or program(s) described in this publication and/or website at any time.
2. If this file has been purchased on magnetic or optical media from Unicode, Inc. the sole and exclusive remedy for any claim will be exchange of the defective media within ninety (90) days of original purchase.
3. EXCEPT AS PROVIDED IN SECTION C.2, THIS PUBLICATION AND/OR SOFTWARE IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND EITHER EXPRESS, IMPLIED, OR STATUTORY, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. UNICODE AND ITS LICENSORS ASSUME NO RESPONSIBILITY FOR ERRORS OR OMISSIONS IN THIS PUBLICATION AND/OR SOFTWARE OR OTHER DOCUMENTS WHICH ARE REFERENCED BY OR LINKED TO THIS PUBLICATION OR THE UNICODE WEBSITE.

D. Waiver of Damages. In no event shall Unicode or its licensors be liable for any special, incidental, indirect or consequential damages of any kind, or any damages whatsoever, whether or not Unicode was advised of the possibility of the damage, including, without limitation, those resulting from the following: loss of use, data or profits, in connection with the use, modification or distribution of this information or its derivatives.

E. Trademarks & Logos.

1. The Unicode Word Mark and the Unicode Logo are trademarks of Unicode, Inc. The Unicode Consortium and Unicode, Inc. are trade names of Unicode, Inc. Use of the information and materials found on this website indicates your acknowledgement of Unicode, Inc.'s exclusive worldwide rights in the Unicode Word Mark, the Unicode Logo, and the Unicode trade names.
2. The Unicode Consortium Name and Trademark Usage Policy (Trademark Policy) are incorporated herein by reference and you agree to abide by the provisions of the Trademark Policy, which may be changed from time to time in the sole discretion of Unicode, Inc.

3. All third party trademarks referenced herein are the property of their respective owners.

F. Miscellaneous.

1. Jurisdiction and Venue. This server is operated from a location in the State of California, United States of America. Unicode makes no representation that the materials are appropriate for use in other locations. If you access this server from other locations, you are responsible for compliance with local laws. This Agreement, all use of this site and any claims and damages resulting from use of this site are governed solely by the laws of the State of California without regard to any principles which would apply the laws of a different jurisdiction. The user agrees that any disputes regarding this site shall be resolved solely in the courts located in Santa Clara County, California. The user agrees said courts have personal jurisdiction and agree to waive any right to transfer the dispute to any other forum.
2. Modification by Unicode Unicode shall have the right to modify this Agreement at any time by posting it to this site. The user may not assign any part of this Agreement without Unicodes prior written consent.
3. Taxes. The user agrees to pay any taxes arising from access to this website or use of the information herein, except for those based on Unicodes net income.
4. Severability. If any provision of this Agreement is declared invalid or unenforceable, the remaining provisions of this Agreement shall remain in effect.
5. Entire Agreement. This Agreement constitutes the entire agreement between the parties.

EXHIBIT 1

UNICODE, INC. LICENSE AGREEMENT - DATA FILES AND SOFTWARE

Unicode Data Files include all data files under the directories <http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>, and <http://www.unicode.org/cldr/data/>. Unicode Data Files do not include PDF online code charts under the directory <http://www.unicode.org/Public/>. Software includes any source code published in the Unicode Standard or under the directories <http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>, and <http://www.unicode.org/cldr/data/>.

NOTICE TO USER: Carefully read the following legal agreement. BY DOWNLOADING, INSTALLING, COPYING OR OTHERWISE USING UNICODE INC.'S DATA FILES ("DATA FILES"), AND/OR SOFTWARE ("SOFTWARE"), YOU UNEQUIVOCALLY ACCEPT, AND AGREE TO BE BOUND BY, ALL OF THE TERMS AND CONDITIONS OF THIS AGREEMENT. IF YOU DO NOT AGREE, DO NOT DOWNLOAD, INSTALL, COPY, DISTRIBUTE OR USE THE DATA FILES OR SOFTWARE.

COPYRIGHT AND PERMISSION NOTICE

Copyright 1991-2014 Unicode, Inc. All rights reserved.

Distributed under the Terms of Use in
<http://www.unicode.org/copyright.html>.

Permission is hereby granted, free of charge, to any person obtaining a copy of the Unicode data files and any associated documentation (the "Data Files") or Unicode software and any associated documentation (the "Software") to deal in the Data Files or Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Data Files or Software, and to permit persons to whom the Data Files or Software are furnished to do so, provided that

- (a) this copyright and permission notice appear with all copies of the Data Files or Software,
- (b) this copyright and permission notice appear in associated documentation, and
- (c) there is clear notice in each modified Data File or in the Software as well as in the documentation associated with the Data File(s) or Software that the data or software has been modified.

THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS.

IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in these Data Files or Software without prior written authorization of the copyright holder.

JUnit

Common Public License - v 1.0

THE ACCOMPANYING PROGRAM IS PROVIDED UNDER THE TERMS OF THIS COMMON PUBLIC LICENSE ("AGREEMENT"). ANY USE, REPRODUCTION OR DISTRIBUTION OF THE PROGRAM CONSTITUTES RECIPIENT'S ACCEPTANCE OF THIS AGREEMENT.

1. DEFINITIONS

"Contribution" means:

- a) in the case of the initial Contributor, the initial code and documentation distributed under this Agreement, and

b) in the case of each subsequent Contributor:

i) changes to the Program, and

ii) additions to the Program;

where such changes and/or additions to the Program originate from and are distributed by that particular Contributor. A Contribution 'originates' from a Contributor if it was added to the Program by such Contributor itself or anyone acting on such Contributor's behalf. Contributions do not include additions to the Program which: (i) are separate modules of software distributed in conjunction with the Program under their own license agreement, and (ii) are not derivative works of the Program.

"Contributor" means any person or entity that distributes the Program.

"Licensed Patents " mean patent claims licensable by a Contributor which are necessarily infringed by the use or sale of its Contribution alone or when combined with the Program.

"Program" means the Contributions distributed in accordance with this Agreement.

"Recipient" means anyone who receives the Program under this Agreement, including all Contributors.

2. GRANT OF RIGHTS

a) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free copyright license to reproduce, prepare derivative works of, publicly display, publicly perform, distribute and sublicense the Contribution of such Contributor, if any, and such derivative works, in source code and object code form.

b) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free patent license under Licensed Patents to make, use, sell, offer to sell, import and otherwise transfer the Contribution of such Contributor, if any, in source code and object code form. This patent license shall apply to the combination of the Contribution and the Program if, at the time the Contribution is added by the Contributor, such addition of the Contribution causes such combination to be covered by the Licensed Patents. The patent license shall not apply to any other combinations which include the Contribution. No hardware per se is licensed hereunder.

c) Recipient understands that although each Contributor grants the licenses to its Contributions set forth herein, no assurances are provided by any Contributor that the Program does not infringe the patent or other intellectual property rights of any other entity. Each Contributor disclaims

any liability to Recipient for claims brought by any other entity based on infringement of intellectual property rights or otherwise. As a condition to exercising the rights and licenses granted hereunder, each Recipient hereby assumes sole responsibility to secure any other intellectual property rights needed, if any. For example, if a third party patent license is required to allow Recipient to distribute the Program, it is Recipient's responsibility to acquire that license before distributing the Program.

d) Each Contributor represents that to its knowledge it has sufficient copyright rights in its Contribution, if any, to grant the copyright license set forth in this Agreement.

3. REQUIREMENTS

A Contributor may choose to distribute the Program in object code form under its own license agreement, provided that:

- a) it complies with the terms and conditions of this Agreement; and
- b) its license agreement:
 - i) effectively disclaims on behalf of all Contributors all warranties and conditions, express and implied, including warranties or conditions of title and non-infringement, and implied warranties or conditions of merchantability and fitness for a particular purpose;
 - ii) effectively excludes on behalf of all Contributors all liability for damages, including direct, indirect, special, incidental and consequential damages, such as lost profits;
 - iii) states that any provisions which differ from this Agreement are offered by that Contributor alone and not by any other party; and
 - iv) states that source code for the Program is available from such Contributor, and informs licensees how to obtain it in a reasonable manner on or through a medium customarily used for software exchange.

When the Program is made available in source code form:

- a) it must be made available under this Agreement; and
- b) a copy of this Agreement must be included with each copy of the Program.

Contributors may not remove or alter any copyright notices contained within the Program.

Each Contributor must identify itself as the originator of its Contribution, if

any, in a manner that reasonably allows subsequent Recipients to identify the originator of the Contribution.

4. COMMERCIAL DISTRIBUTION

Commercial distributors of software may accept certain responsibilities with respect to end users, business partners and the like. While this license is intended to facilitate the commercial use of the Program, the Contributor who includes the Program in a commercial product offering should do so in a manner which does not create potential liability for other Contributors. Therefore, if a Contributor includes the Program in a commercial product offering, such Contributor ("Commercial Contributor") hereby agrees to defend and indemnify every other Contributor ("Indemnified Contributor") against any losses, damages and costs (collectively "Losses") arising from claims, lawsuits and other legal actions brought by a third party against the Indemnified Contributor to the extent caused by the acts or omissions of such Commercial Contributor in connection with its distribution of the Program in a commercial product offering. The obligations in this section do not apply to any claims or Losses relating to any actual or alleged intellectual property infringement. In order to qualify, an Indemnified Contributor must: a) promptly notify the Commercial Contributor in writing of such claim, and b) allow the Commercial Contributor to control, and cooperate with the Commercial Contributor in, the defense and any related settlement negotiations. The Indemnified Contributor may participate in any such claim at its own expense.

For example, a Contributor might include the Program in a commercial product offering, Product X. That Contributor is then a Commercial Contributor. If that Commercial Contributor then makes performance claims, or offers warranties related to Product X, those performance claims and warranties are such Commercial Contributor's responsibility alone. Under this section, the Commercial Contributor would have to defend claims against the other Contributors related to those performance claims and warranties, and if a court requires any other Contributor to pay any damages as a result, the Commercial Contributor must pay those damages.

5. NO WARRANTY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE PROGRAM IS PROVIDED ON AN "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OR CONDITIONS OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Each Recipient is solely responsible for determining the appropriateness of using and distributing the Program and assumes all risks associated with its exercise of rights under this Agreement, including but not limited to the risks and costs of program errors, compliance with applicable laws, damage to or loss of data, programs or equipment, and unavailability or interruption of operations.

6. DISCLAIMER OF LIABILITY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER RECIPIENT NOR ANY CONTRIBUTORS SHALL HAVE ANY LIABILITY FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOST PROFITS), HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OR DISTRIBUTION OF THE PROGRAM OR THE EXERCISE OF ANY RIGHTS GRANTED HEREUNDER, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

7. GENERAL

If any provision of this Agreement is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this Agreement, and without further action by the parties hereto, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.

If Recipient institutes patent litigation against a Contributor with respect to a patent applicable to software (including a cross-claim or counterclaim in a lawsuit), then any patent licenses granted by that Contributor to such Recipient under this Agreement shall terminate as of the date such litigation is filed. In addition, if Recipient institutes patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Program itself (excluding combinations of the Program with other software or hardware) infringes such Recipient's patent(s), then such Recipient's rights granted under Section 2(b) shall terminate as of the date such litigation is filed.

All Recipient's rights under this Agreement shall terminate if it fails to comply with any of the material terms or conditions of this Agreement and does not cure such failure in a reasonable period of time after becoming aware of such noncompliance. If all Recipient's rights under this Agreement terminate, Recipient agrees to cease use and distribution of the Program as soon as reasonably practicable. However, Recipient's obligations under this Agreement and any licenses granted by Recipient relating to the Program shall continue and survive.

Everyone is permitted to copy and distribute copies of this Agreement, but in order to avoid inconsistency the Agreement is copyrighted and may only be modified in the following manner. The Agreement Steward reserves the right to publish new versions (including revisions) of this Agreement from time to time. No one other than the Agreement Steward has the right to modify this Agreement. IBM is the initial Agreement Steward. IBM may assign the responsibility to serve as the Agreement Steward to a suitable separate entity. Each new version of the Agreement will be given a distinguishing version number. The Program (including Contributions) may always be distributed subject to the version of the Agreement under which it was received. In addition, after a new version of the Agreement is published, Contributor may elect to distribute the Program

(including its Contributions) under the new version. Except as expressly stated in Sections 2(a) and 2(b) above, Recipient receives no rights or licenses to the intellectual property of any Contributor under this Agreement, whether expressly, by implication, estoppel or otherwise. All rights in the Program not expressly granted under this Agreement are reserved.

This Agreement is governed by the laws of the State of New York and the intellectual property laws of the United States of America. No party to this Agreement will bring a legal action under this Agreement more than one year after the cause of action arose. Each party waives its rights to a jury trial in any resulting litigation.

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a

copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct

or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of

this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.
7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.
8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.
9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following

boilerplate notice, with the fields enclosed by brackets "[]"
replaced with your own identifying information. (Don't include
the brackets!) The text should be enclosed in the appropriate
comment syntax for the file format. We also recommend that a
file or class name and description of purpose be included on the
same "printed page" as the copyright notice for easier
identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software
distributed under the License is distributed on an "AS IS" BASIS,
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
See the License for the specific language governing permissions and
limitations under the License.

UNICODE, INC. LICENSE AGREEMENT - DATA FILES AND SOFTWARE

Unicode Data Files include all data files under the directories
<http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>, and
<http://www.unicode.org/cldr/data/> . Unicode Software includes any source code
published in the Unicode Standard or under the directories
<http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>, and
<http://www.unicode.org/cldr/data/>.

NOTICE TO USER: Carefully read the following legal agreement. BY
DOWNLOADING, INSTALLING, COPYING OR OTHERWISE USING UNICODE INC.'S DATA FILES
("DATA FILES"), AND/OR SOFTWARE ("SOFTWARE"), YOU UNEQUIVOCALLY ACCEPT, AND
AGREE TO BE BOUND BY, ALL OF THE TERMS AND CONDITIONS OF THIS AGREEMENT. IF YOU
DO NOT AGREE, DO NOT DOWNLOAD, INSTALL, COPY, DISTRIBUTE OR USE THE DATA FILES
OR SOFTWARE.

COPYRIGHT AND PERMISSION NOTICE

Copyright 1991-2006 Unicode, Inc. All rights reserved. Distributed under
the Terms of Use in <http://www.unicode.org/copyright.html>.

Permission is hereby granted, free of charge, to any person obtaining a copy
of the Unicode data files and any associated documentation (the "Data Files") or
Unicode software and any associated documentation (the "Software") to deal in
the Data Files or Software without restriction, including without limitation the
rights to use, copy, modify, merge, publish, distribute, and/or sell copies of
the Data Files or Software, and to permit persons to whom the Data Files or

Software are furnished to do so, provided that (a) the above copyright notice(s) and this permission notice appear with all copies of the Data Files or Software, (b) both the above copyright notice(s) and this permission notice appear in associated documentation, and (c) there is clear notice in each modified Data File or in the Software as well as in the documentation associated with the Data File(s) or Software that the data or software has been modified.

THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in these Data Files or Software without prior written authorization of the copyright holder.

1.15 disruptor 2.11.2.3

1.15.1 Available under license :

Apache Log4j Core
Copyright 1999-2012 Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

ResolverUtil.java
Copyright 2005-2006 Tim Fennell

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:
 - (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
 - (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
 - (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
 - (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not

pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special,

incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright 1999-2005 The Apache Software Foundation

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

1.16 openjdk-jre 11.0.19u7

1.16.1 Available under license :

```
## Pako v1.0
```

```
### Pako License
```

```
<pre>
```

```
Copyright (C) 2014-2017 by Vitaly Puzrin and Andrei Tuputcyn
```

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

```
(C) 1995-2013 Jean-loup Gailly and Mark Adler
```

```
(C) 2014-2017 Vitaly Puzrin and Andrey Tupitsin
```

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

```
</pre>
```

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: XZ Utils

Upstream-Contact:

Lasse Collin <lasse.collin@tukaani.org>

<https://tukaani.org/xz/lists.html>

Source:

<https://tukaani.org/xz>

<https://git.tukaani.org/xz.git>

Comment:

XZ Utils is developed and maintained upstream by Lasse Collin. Major portions are based on code by other authors; see AUTHORS for details. Most of the source has been put into the public domain, but some files have not (details below).

.

This file describes the source package. The binary packages contain some files derived from other works: for example, images in the API documentation come from Doxygen.

License:

Different licenses apply to different files in this package. Here is a rough summary of which licenses apply to which parts of this package (but check the individual files to be sure!):

.

- liblzma is in the public domain.

.

- xz, xzdec, and lzmadec command line tools are in the public domain unless GNU getopt_long had to be compiled and linked in from the lib directory. The getopt_long code is under GNU LGPLv2.1+.

.

- The scripts to grep, diff, and view compressed files have been adapted from gzip. These scripts and their documentation are under GNU GPLv2+.

.

- All the documentation in the doc directory and most of the XZ Utils specific documentation files in other directories are in the public domain.

.

- Translated messages are in the public domain.

.

- The build system contains public domain files, and files that are under GNU GPLv2+ or GNU GPLv3+. None of these files end up in the binaries being built.

.

- Test files and test code in the tests directory, and debugging utilities in the debug directory are in the public domain.

.

- The extra directory may contain public domain files, and files that are under various free software licenses.

.
You can do whatever you want with the files that have been put into the public domain. If you find public domain legally problematic, take the previous sentence as a license grant. If you still find the lack of copyright legally problematic, you have too many lawyers.

.
As usual, this software is provided "as is", without any warranty.

.
If you copy significant amounts of public domain code from XZ Utils into your project, acknowledging this somewhere in your software is polite (especially if it is proprietary, non-free software), but naturally it is not legally required. Here is an example of a good notice to put into "about box" or into documentation:

.
This software includes code from XZ Utils <<http://tukaani.org/xz/>>.

.
The following license texts are included in the following files:

- COPYING.LGPLv2.1: GNU Lesser General Public License version 2.1
- COPYING.GPLv2: GNU General Public License version 2
- COPYING.GPLv3: GNU General Public License version 3

.
Note that the toolchain (compiler, linker etc.) may add some code pieces that are copyrighted. Thus, it is possible that e.g. liblzma binary wouldn't actually be in the public domain in its entirety even though it contains no copyrighted code from the XZ Utils source package.

.
If you have questions, don't hesitate to ask the author(s) for more information.

Files: *

Copyright: 2006-2018, Lasse Collin

1999-2008, Igor Pavlov

2006, Ville Koskinen

1998, Steve Reid

2000, Wei Dai

2003, Kevin Springle

2009, Jonathan Nieder

2010, Anders F Bjrklund

License: PD

This file has been put in the public domain.

You can do whatever you want with this file.

Comment:

From: Lasse Collin <lasse.collin@tukaani.org>

To: Jonathan Nieder <jrnieder@gmail.com>

Subject: Re: XZ utils for Debian

Date: Sun, 19 Jul 2009 13:28:23 +0300

Message-Id: <200907191328.23816.lasse.collin@tukaani.org>

[...]

> AUTHORS, ChangeLog, COPYING, README, THANKS, TODO,
> dos/README, windows/README

COPYING says that most docs are in the public domain. Maybe that's not clear enough, but on the other hand it looks a bit stupid to put copyright information in tiny and relatively small docs like README.

I don't dare to say that `_all_ XZ Utils` specific docs are in the public domain unless otherwise mentioned in the file. I'm including PDF files generated by `groff + ps2pdf`, and some day I might include Doxygen-generated HTML docs too. Those don't include any copyright notices, but it seems likely that `groff + ps2pdf` or at least Doxygen put some copyrighted content into the generated files.

Files: INSTALL NEWS PACKAGERS

windows/README-Windows.txt

windows/INSTALL-MinGW.txt

Copyright: 2009-2010, Lasse Collin

License: probably-PD

See the note on AUTHORS, README, and so on above.

Files: src/scripts/* lib/* extra/scanlzma/scanlzma.c

Copyright: 1993, Jean-loup Gailly

1989-1994, 1996-1999, 2001-2007, Free Software Foundation, Inc.

2006 Timo Lindfors

2005, Charles Levert

2005, 2009, Lasse Collin

2009, Andrew Dudman

Other-Authors: Paul Eggert, Ulrich Drepper

License: GPL-2+

Files: src/scripts/Makefile.am src/scripts/xzless.1

Copyright: 2009, Andrew Dudman

2009, Lasse Collin

License: PD

This file has been put in the public domain.

You can do whatever you want with this file.

Files: doc/examples/xz_pipe_comp.c doc/examples/xz_pipe_decomp.c

Copyright: 2010, Daniel Mealha Cabrita

License: PD

Not copyrighted -- provided to the public domain.

Files: lib/getopt.c lib/getopt1.c lib/getopt.in.h

Copyright: 1987-2007 Free Software Foundation, Inc.

Other-Authors: Ulrich Drepper

License: LGPL-2.1+

Files: m4/getopt.m4 m4/posix-shell.m4

Copyright: 2002-2006, 2008 Free Software Foundation, Inc.

2007-2008 Free Software Foundation, Inc.

Other-Authors: Bruno Haible, Paul Eggert

License: permissive-fsf

Files: m4/acx_pthread.m4

Copyright: 2008, Steven G. Johnson <stevenj@alum.mit.edu>

License: Autoconf

files: m4/ax_check_capsicum.m4

Copyright: 2014, Google Inc.

2015, Lasse Collin <lasse.collin@tukaani.org>

License: permissive-nowarranty

Files: Doxyfile.in

Copyright: 1997-2007 by Dimitri van Heesch

Origin: Doxygen 1.4.7

License: GPL-2

Files: src/liblzma/check/crc32_table_?e.h

src/liblzma/check/crc64_table_?e.h

src/liblzma/lzma/fastpos_table.c

src/liblzma/rangecoder/price_table.c

Copyright: none, automatically generated data

Generated-With:

src/liblzma/check/crc32_tablegen.c

src/liblzma/check/crc64_tablegen.c

src/liblzma/lzma/fastpos_tablegen.c

src/liblzma/rangecoder/price_tablegen.c

License: none

No copyright to license.

Files: .gitignore m4/.gitignore po/.gitignore po/LINGUAS po/POTFILES.in

Copyright: none; these are just short lists.

License: none

No copyright to license.

Files: tests/compress_prepared_bcj_*

Copyright: 2008-2009, Lasse Collin

Source-Code: tests/bcj_test.c

License: PD

This file has been put into the public domain.

You can do whatever you want with this file.

Comment:

changelog.gz (commit 975d8fd) explains:

.
Recreated the BCJ test files for x86 and SPARC. The old files were linked with crt*.o, which are copyrighted, and thus the old test files were not in the public domain as a whole. They are freely distributable though, but it is better to be careful and avoid including any copyrighted pieces in the test files. The new files are just compiled and assembled object files, and thus don't contain any copyrighted code.

Files: po/cs.po po/de.po po/fr.po

Copyright: 2010, Marek ernock

2010, Andre Noll

2011, Adrien Nader

License: PD

This file is put in the public domain.

Files: po/it.po po/pl.po

Copyright: 2009, 2010, Gruppo traduzione italiano di Ubuntu-it

2010, Lorenzo De Liso

2009, 2010, 2011, Milo Casagrande

2011, Jakub Bogusz

License: PD

This file is in the public domain

Files: INSTALL.generic

Copyright: 1994, 1995, 1996, 1999, 2000, 2001, 2002, 2004, 2005,
2006, 2007, 2008, 2009, 2010 Free Software Foundation, Inc.

License: permissive-nowarranty

Files: dos/config.h

Copyright: 1992, 1993, 1994, 1999, 2000, 2001, 2002, 2005

Free Software Foundation, Inc.

2007-2010, Lasse Collin

Other-Authors: Roland McGrath, Akim Demaille, Paul Eggert,

David Mackenzie, Bruno Haible, and many others.

Origin: configure.ac from XZ Utils,

visibility.m4 serial 1 (gettext-0.15),

Autoconf 2.52g

License: config-h

configure.ac:

.

Author: Lasse Collin

#

This file has been put into the public domain.

You can do whatever you want with this file.

.

visibility.m4:

```
.
dnl Copyright (C) 2005 Free Software Foundation, Inc.
dnl This file is free software; the Free Software Foundation
dnl gives unlimited permission to copy and/or distribute it,
dnl with or without modifications, as long as this notice is preserved.
```

```
.
dnl From Bruno Haible.
```

```
.
comments from Autoconf 2.52g:
```

```
.
# Copyright 1992, 1993, 1994, 1999, 2000, 2001, 2002
# Free Software Foundation, Inc.
```

```
.
[...]
```

```
.
# As a special exception, the Free Software Foundation gives unlimited
# permission to copy, distribute and modify the configure scripts that
# are the output of Autoconf. You need not follow the terms of the GNU
# General Public License when using or distributing such scripts, even
# though portions of the text of Autoconf appear in them. The GNU
# General Public License (GPL) does govern all other use of the material
# that constitutes the Autoconf program.
```

```
.
On Debian systems, the complete text of the GNU General Public
License version 2 can be found in /usr/share/common-licenses/GPL-2.
dos/config.h was generated with autoheader, which tells Autoconf to
output a script to generate a config.h file and then runs it.
```

Files: po/Makevars

Origin: gettext-runtime/po/Makevars (gettext-0.12)

Copyright: 2003 Free Software Foundation, Inc.

Authors: Bruno Haible

License: LGPL-2.1+

The gettext-runtime package is under the LGPL, see files intl/COPYING.LIB-2.0
and intl/COPYING.LIB-2.1.

```
.
On Debian systems, the complete text of intl/COPYING.LIB-2.0 from
gettext-runtime 0.12 can be found in /usr/share/common-licenses/LGPL-2
and the text of intl/COPYING.LIB-2.1 can be found in
/usr/share/common-licenses/LGPL-2.1.
```

```
.
po/Makevars consists mostly of helpful comments and does not contain a
copyright and license notice.
```

Files: COPYING.GPLv2 COPYING.GPLv3 COPYING.LGPLv2.1

Copyright: 1989, 1991, 1999, 2007 Free Software Foundation, Inc.

License: noderivs

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Files: debian/*

Copyright: 2009-2012, Jonathan Nieder

License: PD-debian

The Debian packaging files are in the public domain.

You may freely use, modify, distribute, and relicense them.

License: LGPL-2.1+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

.

You should have received a copy of the GNU Lesser General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

.

On Debian systems, the complete text of the GNU Lesser General Public License version 2.1 can be found in `/usr/share/common-licenses/LGPL-2.1`.

License: GPL-2

Permission to use, copy, modify, and distribute this software and its documentation under the terms of the GNU General Public License is hereby granted. No representations are made about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty. See the GNU General Public License for more details.

.

Documents produced by doxygen are derivative works derived from the input used in their production; they are not affected by this license.

.

On Debian systems, the complete text of the version of the GNU General Public License distributed with Doxygen can be found in `/usr/share/common-licenses/GPL-2`.

License: GPL-2+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
GNU General Public License for more details.

You should have received a copy of the GNU General Public License along
with this program; if not, write to the Free Software Foundation,
Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

On Debian systems, the complete text of the GNU General Public License
version 2 can be found in /usr/share/common-licenses/GPL-2.

License: Autoconf

This program is free software: you can redistribute it and/or modify it
under the terms of the GNU General Public License as published by the
Free Software Foundation, either version 3 of the License, or (at your
option) any later version.

This program is distributed in the hope that it will be useful, but
WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General
Public License for more details.

You should have received a copy of the GNU General Public License along
with this program. If not, see <<http://www.gnu.org/licenses/>>.

As a special exception, the respective Autoconf Macro's copyright owner
gives unlimited permission to copy, distribute and modify the configure
scripts that are the output of Autoconf when processing the Macro. You
need not follow the terms of the GNU General Public License when using
or distributing such scripts, even though portions of the text of the
Macro appear in them. The GNU General Public License (GPL) does govern
all other use of the material that constitutes the Autoconf Macro.

This special exception to the GPL applies to versions of the Autoconf
Macro released by the Autoconf Archive. When you make and distribute a
modified version of the Autoconf Macro, you may extend this special
exception to the GPL to apply to your modified version as well.

On Debian systems, the complete text of the GNU General Public
License version 3 can be found in /usr/share/common-licenses/GPL-3.

License: permissive-fsf

This file is free software; the Free Software Foundation
gives unlimited permission to copy and/or distribute it,
with or without modifications, as long as this notice is preserved.

License: permissive-nowarranty

Copying and distribution of this file, with or without modification, are permitted in any medium without royalty provided the copyright notice and this notice are preserved. This file is offered as-is, without warranty of any kind.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: p11-kit

Source: <https://p11-glue.github.io/p11-glue/p11-kit.html>

Files: *

Copyright: 2011 Collabora Ltd.

2004, 2005, 2007, 2008, 2012, 2013 Stefan Walter

2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019 Red Hat, Inc.

2012, 2013 Redhat Inc.

License: BSD-3-Clause

Files: common/pkcs11.h

Copyright: 2006, 2007 g10 Code GmbH

2006 Andreas Jellinghaus

Copyright 2017 Red Hat, Inc.

License: permissive-like-automake-output

This file is free software; as a special exception the author gives unlimited permission to copy and/or distribute it, with or without modifications, as long as this notice is preserved.

This file is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY, to the extent permitted by law; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. */

Files: common/vsock.c common/vsock.h

Copyright: 2020 Amazon.com, Inc. or its affiliates.

License: BSD-3-Clause

Files: p11-kit/server.c

common/unix-peer.h

Copyright: 2014 Red Hat Inc.

License: BSD-3-Clause

Comment: make_private_security_descriptor() and the helper functions were

* copied from putty/windows/winsecur.c in the PuTTY source code as of

* git commit 12bd5a6c722152aa27f24598785593e72b3284ea.

*

* PuTTY is copyright 1997-2017 Simon Tatham.

*

* Portions copyright Robert de Bath, Joris van Rantwijk, Delian

* Delchev, Andreas Schultz, Jeroen Massar, Wez Furlong, Nicolas Barry,

* Justin Bradford, Ben Harris, Malcolm Smith, Ahmad Khalifa, Markus

* Kuhn, Colin Watson, Christopher Staite, and CORE SDI S.A.

- *
- * Permission is hereby granted, free of charge, to any person
- * obtaining a copy of this software and associated documentation files
- * (the "Software"), to deal in the Software without restriction,
- * including without limitation the rights to use, copy, modify, merge,
- * publish, distribute, sublicense, and/or sell copies of the Software,
- * and to permit persons to whom the Software is furnished to do so,
- * subject to the following conditions:
- *
- * The above copyright notice and this permission notice shall be
- * included in all copies or substantial portions of the Software.

Files: trust/digest.c common/hash.c

Copyright: 2004, 2005, 2007, 2011 Internet Systems Consortium, Inc. ("ISC")
2000, 2001, 2003 Internet Software Consortium.

License: ISC

Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

.
THE SOFTWARE IS PROVIDED "AS IS" AND ISC DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL ISC BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Files: trust/base64.c trust/base64.h

Copyright: 1996, 1998 by Internet Software Consortium
Portions Copyright (c) 1995 by International Business Machines, Inc.

License: ISC+IBM

Copyright (c) 1996, 1998 by Internet Software Consortium.

.
Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

.
THE SOFTWARE IS PROVIDED "AS IS" AND INTERNET SOFTWARE CONSORTIUM DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL INTERNET SOFTWARE CONSORTIUM BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

.
Portions Copyright (c) 1995 by International Business Machines, Inc.

.
International Business Machines, Inc. (hereinafter called IBM) grants permission under its copyrights to use, copy, modify, and distribute this Software with or without fee, provided that the above copyright notice and all paragraphs of this notice appear in all copies, and that the name of IBM not be used in connection with the marketing of any product incorporating the Software or modifications thereof, without specific, written prior permission.

.
To the extent it has a right to do so, IBM grants an immunity from suit under its patents, if any, for the use, sale or manufacture of products to the extent that such products are used for performing Domain Name System dynamic updates in TCP/IP networks by means of the Software. No immunity is granted for any product per se or for any other function of any product.

.
THE SOFTWARE IS PROVIDED "AS IS", AND IBM DISCLAIMS ALL WARRANTIES, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL IBM BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE, EVEN IF IBM IS APPRISED OF THE POSSIBILITY OF SUCH DAMAGES.

Files: common/compat.c

Copyright: Copyright (c) 2011 Collabora Ltd.

Portions of this file are covered by the following copyright:

Copyright (c) 2001 Mike Barcroft <mike@FreeBSD.org>

Copyright (c) 1990, 1993

Copyright (c) 1987, 1993

The Regents of the University of California.

Comment: This code is derived from software contributed to Berkeley by Chris Torek.

License: BSD-3-Clause

Files: common/unix-peer.c

Copyright: 2013 Nikos Mavrogiannopoulos

License: BSD-3-Clause

Files: common/frob-getprogname.c

Copyright: 2020 Red Hat Inc.

License: BSD-3-Clause

Files: p11-kit/mock-module-ep8.c

Copyright: 2012 Stefan Walter

2020 Red Hat, Inc.

License: BSD-3-Clause

Files: debian/*

Copyright: 2011 Chris Coulson <chris.coulson@canonical.com>

2011-2020 Andreas Metzler <ametzler@debian.org>

License: BSD-3-Clause

Files: po/de.po

Copyright: 2011 Chris Leick

Comment: This file is distributed under the same license as the
debian files of the p11-kit package.

License: BSD-3-Clause

Files: po/fi.po

Copyright: 2012 Rosetta Contributors and Canonical Ltd 2012

Eerik Uusi-Illikainen <https://launchpad.net/~ekiuusi-4>, 2012

Timo Jyrinki <timo.jyrinki@iki.fi>, 2012

License: same-as-rest-of-p11kit

This file is distributed under the same license as the p11-kit
package.

License: BSD-3-Clause

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions
are met:

1. Redistributions of source code must retain the above copyright
notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright
notice, this list of conditions and the following disclaimer in the
documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors
may be used to endorse or promote products derived from this software
without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND
ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE
FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
SUCH DAMAGE.

c-libutl 20160225

c-libutl License
...

This software is distributed under the terms of the BSD license.

== BSD LICENSE =====

(C) 2009 by Remo Dentato (rdentato@gmail.com)

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

<http://opensource.org/licenses/bsd-license.php>

...

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: sysvinit

Upstream-Contact: sysvinit-devel@nongnu.org

Source: <https://download.savannah.gnu.org/releases/sysvinit/>

Files: *

Copyright: 1997-2005 Miquel van Smoorenburg <miquels@cistron.nl>

License: GPL-2+

Files: debian/*

License: GPL-2+

Copyright: 2015 Adam Conrad <adconrad@debian.org>

2018 Dmitry Bogatov <KAction@gnu.org>

2018 Vincenzo (KatolaZ) Nicosia <katolaz@freaknet.org>
2006 Henrique de Moraes Holschuh <hnh@debian.org>
2017 Ian Jackson <ijackson@chiark.greenend.org.uk>
2014 Petter Reinholdtsen <pere@debian.org>
2014 Robert Millan <rmh@debian.org>
2014 Thomas Goirand <zigo@debian.org>
2006 Thomas Hood <jdthood@yahoo.co.uk>
2015-2016 Andreas Henriksson <andreas@fatal.se>
2011,2016 Ben Hutchings <ben@decadent.org.uk>
2010-2012 Christian Perrier <bubulle@debian.org>
2015-2016 Martin Pitt <mpitt@debian.org>
2014-2018 Michael Biebl <biebl@debian.org>
1996-2004 Miquel van Smoorenburg <miquels@cistron.nl>
2005-2006 Petter Reinholdtsen <pere@debian.org>
2006-2010 Petter Reinholdtsen <pere@debian.org>
2011-2013 Roger Leigh <rleigh@debian.org>
2006-2007 Steinar H. Gunderson <sesse@debian.org>
2012-2013 Steve Langasek <vorlon@debian.org>

License: GPL-2+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

.

On Debian system, copy of GNU Lesser General Public License version 2 is also located at `~/usr/share/common-licenses/GPL-2'`

This is the Debian package for libsepol, and it is built from sources obtained from <http://userspace.selinuxproject.org/releases/current/devel/>

This package was debianized by Russell Coker <russell@coker.com.au> on Fri, 20 Aug 2004 17:26:18 +1000.

libsepol is

Copyright (C) 2003, 2004 Stephen Smalley <sds@epoch.ncsc.mil>

Copyright (C) 2003-2007 Red Hat, Inc.

Copyright (C) 2004, 2005 Trusted Computer Solutions, Inc.

Copyright (C) 2003-2008 Tresys Technology, LLC

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA

On Debian GNU/Linux systems, the complete text of the Lesser GNU General Public License can be found in ``usr/share/common-licenses/LGPL'`.

This package is maintained by Manoj Srivastava <srivasta@debian.org>.

The Debian specific changes are 2005-2008, Manoj Srivastava <srivasta@debian.org>, and distributed under the terms of the GNU General Public License, version 2.

On Debian GNU/Linux systems, the complete text of the GNU General Public License can be found in ``usr/share/common-licenses/GPL'`.

A copy of the GNU General Public License is also available at <URL:<http://www.gnu.org/copyleft/gpl.html>>. You may also obtain it by writing to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA

Manoj Srivastava <srivasta@debian.org>

arch-tag: d4250e44-a0e0-4ee0-adb9-2bd74f6eeb27

This package was debianized by Thom May <thom@debian.org> on Wed, 17 Nov 2004 11:27:14 -0800

It was downloaded from <http://httpd.apache.org/download.cgi>

Upstream Authors: The Apache Software Foundation - <http://apr.apache.org/>

Copyright:

Licensed to the Apache Software Foundation (ASF) under one or more contributor license agreements. The ASF licenses this work to You under the Apache License, Version 2.0 (the "License"); you may not use this work except in compliance

with the License. You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

On a Debian system, the license can be found at
`/usr/share/common-licenses/Apache-2.0`.

APACHE PORTABLE RUNTIME SUBCOMPONENTS:

The Apache Portable Runtime includes a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the following licenses.

From `strings/apr_fnmatch.c`, `include/apr_fnmatch.h`, `misc/unix/getopt.c`,
`file_io/unix/mktemp.c`, `strings/apr_strings.c`:

/*

* Copyright (c) 1987, 1993, 1994

* The Regents of the University of California. All rights reserved.

*

* Redistribution and use in source and binary forms, with or without

* modification, are permitted provided that the following conditions

* are met:

* 1. Redistributions of source code must retain the above copyright

* notice, this list of conditions and the following disclaimer.

* 2. Redistributions in binary form must reproduce the above copyright

* notice, this list of conditions and the following disclaimer in the

* documentation and/or other materials provided with the distribution.

* 3. All advertising materials mentioning features or use of this software

* must display the following acknowledgement:

* This product includes software developed by the University of

* California, Berkeley and its contributors.

* 4. Neither the name of the University nor the names of its contributors

* may be used to endorse or promote products derived from this software

* without specific prior written permission.

*

* THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS'' AND

* ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE

* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE

* ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE

* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL

* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS

* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)

* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT

* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY

* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF

* SUCH DAMAGE.

From network_io/unix/inet_ntop.c, network_io/unix/inet_pton.c:

/* Copyright (c) 1996 by Internet Software Consortium.

*

* Permission to use, copy, modify, and distribute this software for any
* purpose with or without fee is hereby granted, provided that the above
* copyright notice and this permission notice appear in all copies.

*

* THE SOFTWARE IS PROVIDED "AS IS" AND INTERNET SOFTWARE CONSORTIUM DISCLAIMS
* ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES
* OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL INTERNET SOFTWARE
* CONSORTIUM BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL
* DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR
* PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS
* ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS
* SOFTWARE.

From dso/aix/dso.c:

* Based on libdl (dlfcn.c/dlfcn.h) which is

* Copyright (c) 1992,1993,1995,1996,1997,1988

* Jens-Uwe Mager, Helios Software GmbH, Hannover, Germany.

*

* Not derived from licensed software.

*

* Permission is granted to freely use, copy, modify, and redistribute
* this software, provided that the author is not construed to be liable
* for any results of using the software, alterations are clearly marked
* as such, and this notice is not modified.

From strings/apr_strnatcmp.c, include/apr_strings.h:

strnatcmp.c -- Perform 'natural order' comparisons of strings in C.

Copyright (C) 2000 by Martin Pool <mbp@humblebug.org.au>

This software is provided 'as-is', without any express or implied
warranty. In no event will the authors be held liable for any damages
arising from the use of this software.

Permission is granted to anyone to use this software for any purpose,
including commercial applications, and to alter it and redistribute it
freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not
claim that you wrote the original software. If you use this software
in a product, an acknowledgment in the product documentation would be

- appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
 3. This notice may not be removed or altered from any source distribution.

From test/CuTest.c, test/CuTest.h:

- * Copyright (c) 2002-2006 Asim Jalis
- *
- * This library is released under the zlib/libpng license as described at
- *
- * <http://www.opensource.org/licenses/zlib-license.html>
- *
- * Here is the statement of the license:
- *
- * This software is provided 'as-is', without any express or implied warranty.
- * In no event will the authors be held liable for any damages arising from
- * the use of this software.
- *
- * Permission is granted to anyone to use this software for any purpose,
- * including commercial applications, and to alter it and redistribute it
- * freely, subject to the following restrictions:
- *
- * 1. The origin of this software must not be misrepresented; you must not
- * claim that you wrote the original software. If you use this software in a
- * product, an acknowledgment in the product documentation would be
- * appreciated but is not required.
- *
- * 2. Altered source versions must be plainly marked as such, and must not be
- * misrepresented as being the original software.
- *
- * 3. This notice may not be removed or altered from any source distribution.

The source files crypto/apr_md4.c and crypto/apr_md5.c contain code which is derived from reference code from RFC-1320, and RFC-1321. This code is copyright RSA Data Security, Inc. ("RSA"). RSA made the following statement about the conditions of use of this code. Debian chooses to use and distribute this code according to the conditions outlined in this statement and NOT according to the license contained in the source files.

The following was received February 23, 2000 From: "Linn, John" February 19, 2000

The purpose of this memo is to clarify the status of intellectual property rights asserted by RSA Security Inc. ("RSA") in the MD2, MD4 and MD5 message-digest algorithms, which are documented in RFC-1319, RFC-1320,

and RFC-1321 respectively. Implementations of these message-digest algorithms, including implementations derived from the reference C code in RFC-1319, RFC-1320, and RFC-1321, may be made, used, and sold without license from RSA for any purpose. No rights other than the ones explicitly set forth above are granted. Further, although RSA grants rights to implement certain algorithms as defined by identified RFCs, including implementations derived from the reference C code in those RFCs, no right to use, copy, sell, or distribute any other implementations of the MD2, MD4, or MD5 message-digest algorithms created, implemented, or distributed by RSA is hereby granted by implication, estoppel, or otherwise. Parties interested in licensing security components and toolkits written by RSA should contact the company to discuss receiving a license. All other questions should be directed to Margaret K. Seif, General Counsel, RSA Security Inc., 36 Crosby Drive, Bedford, Massachusetts 01730. Implementations of the MD2, MD4, or MD5 algorithms may be subject to United States laws and regulations controlling the export of technical data, computer software, laboratory prototypes and other commodities (including the Arms Export Control Act, as amended, and the Export Administration Act of 1970). The transfer of certain technical data and commodities may require a license from the cognizant agency of the United States Government. RSA neither represents that a license shall not be required for a particular implementation nor that, if required, one shall be issued.

DISCLAIMER: RSA MAKES NO REPRESENTATIONS AND EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, VALIDITY OF INTELLECTUAL PROPERTY RIGHTS, ISSUED OR PENDING, OR THE ABSENCE OF LATENT OR OTHER DEFECTS, WHETHER OR NOT DISCOVERABLE, IN CONNECTION WITH THE MD2, MD4, OR MD5 ALGORITHMS. NOTHING IN THIS GRANT OF RIGHTS SHALL BE CONSTRUED AS A REPRESENTATION OR WARRANTY GIVEN BY RSA THAT THE IMPLEMENTATION OF THE ALGORITHM WILL NOT INFRINGE THE INTELLECTUAL PROPERTY RIGHTS OF ANY THIRD PARTY. IN NO EVENT SHALL RSA, ITS TRUSTEES, DIRECTORS, OFFICERS, EMPLOYEES, PARENTS AND AFFILIATES BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND RESULTING FROM IMPLEMENTATION OF THIS ALGORITHM, INCLUDING ECONOMIC DAMAGE OR INJURY TO PROPERTY AND LOST PROFITS, REGARDLESS OF WHETHER RSA SHALL BE ADVISED, SHALL HAVE OTHER REASON TO KNOW, OR IN FACT SHALL KNOW OF THE POSSIBILITY OF SUCH INJURY OR DAMAGE.

The statement was downloaded from <http://www.ietf.org/ietf-ftp/IPR/RSA-MD-all> on January 8th, 2012.

This package was debianized by Colin Walters <walters@debian.org> on Sun, 13 Oct 2002 15:01:50 -0400

It was downloaded from <http://www.fontconfig.org/>

Upstream Author: Keith Packard

Copyright:

Copyright 2001,2003 Keith Packard

Permission to use, copy, modify, distribute, and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Keith Packard not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. Keith Packard makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

KEITH PACKARD DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL KEITH PACKARD BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: Libidn2

Upstream-Contact: Simon Josefsson <simon@josefsson.org>

Source: <https://www.gnu.org/software/libidn/#libidn2>

Files: *

Copyright: Copyright (C) 2011-2014 Simon Josefsson

License: GPL-3+

Files: *.c *.h

Copyright: Copyright (C) 2011-2014 Simon Josefsson

License: LGPL-3+ or GPL-2+

Files: build-aux/* lib/* GNUmakefile maint.mk

Copyright: Copyright (C) 2001-2011 Free Software Foundation, Inc.

License: GPL-3+

Files: doc/gdoc

Copyright: Copyright (c) 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011 Simon Josefsson

Copyright (c) 2001, 2002 Nikos Mavrogiannopoulos

Copyright (c) 1998 Michael Zucchi

License: GPL-3+

Files: lib/IdnaMappingTable.txt lib/DerivedNormalizationProps.txt tests/IdnaTest.txt

Copyright: Copyright (c) 1991-2010 Unicode, Inc.

License: Unicode

License: GPL-3+

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

.

On Debian GNU/Linux systems, the complete text of the GNU General Public License version 3 can be found in /usr/share/common-licenses/GPL-3.

License: GPL-2+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

.

On Debian GNU/Linux systems, the complete text of the GNU General Public License version 2 can be found in /usr/share/common-licenses/GPL-2.

License: LGPL-3+

This program is free software: you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU Lesser General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

.

On Debian GNU/Linux systems, the complete text of the GNU Lesser General

Public License version 3 can be found in /usr/share/common-licenses/LGPL-3.

License: Unicode

For terms of use, see http://www.unicode.org/terms_of_use.html
Copyright 1991-2011 Unicode, Inc. All rights reserved. Distributed
under the Terms of Use in <http://www.unicode.org/copyright.html>.

Permission is hereby granted, free of charge, to any person obtaining
a copy of the Unicode data files and any associated documentation
(the "Data Files") or Unicode software and any associated
documentation (the "Software") to deal in the Data Files or Software
without restriction, including without limitation the rights to use,
copy, modify, merge, publish, distribute, and/or sell copies of the
Data Files or Software, and to permit persons to whom the Data Files
or Software are furnished to do so, provided that (a) the above
copyright notice(s) and this permission notice appear with all copies
of the Data Files or Software, (b) both the above copyright notice(s)
and this permission notice appear in associated documentation, and
(c) there is clear notice in each modified Data File or in the
Software as well as in the documentation associated with the Data
File(s) or Software that the data or software has been modified.

THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF
ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE
WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND
NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE
COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY
CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY
DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS,
WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS
ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE
OF THE DATA FILES OR SOFTWARE.

Except as contained in this notice, the name of a copyright holder
shall not be used in advertising or otherwise to promote the sale,
use or other dealings in these Data Files or Software without prior
written authorization of the copyright holder.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: Nettle

Upstream-Contact: Niels Mller <nisse@lysator.liu.se>

Source: <http://www.lysator.liu.se/~nisse/nettle/>

Copyright: 2001-2020 Niels Mller

Some parts are Copyright the Free Software Foundation and various
people. See below and source code comments for details.

License: LGPL-3+ or GPL-2+

Comment:

Nettle is dual licenced under the GNU General Public License version
2 or later, and the GNU Lesser General Public License version 3 or

later. When using Nettle, you must comply fully with all conditions of at least one of these licenses. A few of the individual files are licensed under more permissive terms, or in the public domain. To find the current status of particular files, you have to read the copyright notices at the top of the files.

.

A list of the supported algorithms, their origins, and exceptions to the above licensing:

.

AES

The implementation of the AES cipher (also known as rijndael) is written by Rafael Sevilla. Assembler for x86 by Rafael Sevilla and Niels Miller, Sparc assembler by Niels Miller.

.

ARCFOUR

The implementation of the ARCFOUR (also known as RC4) cipher is written by Niels Miller.

.

ARCTWO

The implementation of the ARCTWO (also known as RC2) cipher is written by Nikos Mavroyanopoulos and modified by Werner Koch and Simon Josefsson.

.

BLOWFISH

The implementation of the BLOWFISH cipher is written by Werner Koch, copyright owned by the Free Software Foundation. Also hacked by Simon Josefsson and Niels Miller.

.

CAMELLIA

The C implementation is by Nippon Telegraph and Telephone Corporation (NTT), heavily modified by Niels Miller. Assembler for x86 and x86_64 by Niels Miller.

.

CAST128

The implementation of the CAST128 cipher is written by Steve Reid. Released into the public domain.

.

CHACHA

Implemented by Joachim Strömbergson, based on the implementation of SALSA20 (see below). Assembly for x86_64 by Niels Miller.

.

DES

The implementation of the DES cipher is written by Dana L. How, and released under the LGPL, version 2 or later.

.

GOSTHASH94

The C implementation of the GOST94 message digest is written by Aleksey Kravchenko and was ported from the rhash library by Nikos

Mavrogiannopoulos. It is released under the MIT license.

MD2

The implementation of MD2 is written by Andrew Kuchling, and hacked some by Andreas Sigfridsson and Niels Miller. Python Cryptography Toolkit license (essentially public domain).

MD4

This is almost the same code as for MD5 below, with modifications by Marcus Comstedt. Released into the public domain.

MD5

The implementation of the MD5 message digest is written by Colin Plumb. It has been hacked some more by Andrew Kuchling and Niels Miller. Released into the public domain.

PBKDF2

The C implementation of PBKDF2 is based on earlier work for Shishi and GnuTLS by Simon Josefsson.

RIPEMD160

The implementation of RIPEMD160 message digest is based on the code in libcrypto, copyright owned by the Free Software Foundation. Ported to Nettle by Andres Mejia.

SALSA20

The C implementation of SALSA20 is based on D. J. Bernsteins reference implementation (in the public domain), adapted to Nettle by Simon Josefsson, and heavily modified by Niels Miller. Assembly for x86_64 and ARM by Niels Miller.

SERPENT

The implementation of the SERPENT cipher is based on the code in libcrypto, copyright owned by the Free Software Foundation. Adapted to Nettle by Simon Josefsson and heavily modified by Niels Miller. Assembly for x86_64 by Niels Miller.

POLY1305

Based on the implementation by Andrew M. (floodyberry), modified by Nikos Mavrogiannopoulos and Niels Miller. Assembly for x86_64 by Niels Miller.

SHA1

The C implementation of the SHA1 message digest is written by Peter Gutmann, and hacked some more by Andrew Kuchling and Niels Miller. Released into the public domain. Assembler for x86, x86_64 and ARM by Niels Miller, released under the LGPL.

SHA2

Written by Niels Mller, using Peter Gutmanns SHA1 code as a model.

.

SHA3

Written by Niels Mller.

.

TWOFISH

The implementation of the TWOFISH cipher is written by Ruud de Rooij.

.

UMAC

Written by Niels Mller.

.

CMAC

Written by Nikos Mavrogiannopoulos, Niels Mller, Jeremy Allison, Michael Adam and Stefan Metzmacher.

.

RSA

Written by Niels Mller. Uses the GMP library for bignum operations.

.

DSA

Written by Niels Mller. Uses the GMP library for bignum operations.

.

ECDSA

Written by Niels Mller. Uses the GMP library for bignum operations. Development of Nettle's ECC support was funded by the .SE Internet Fund.

Files: *

Copyright: 2001-2020 Niels Mller

License: LGPL-3+ or GPL-2+

Files: aes-invert-internal.c aes-set-decrypt-key.c

aes-set-encrypt-key.c aes-set-key-internal.c

Copyright: 2013, Niels Mller

2000-2002, Rafael R. Sevilla, Niels Mller

License: LGPL-3+ or GPL-2+

Files: x86*/aes-*-internal.asm

Copyright: 2001, 2002, 2005 Rafael R. Sevilla, Niels Mller

2008, 2013 Niels Mller

License: LGPL-3+ or GPL-2+

Files: arctwo.c

Copyright: 2003 Nikos Mavroyanopoulos

2004 Simon Josefsson
2004 Free Software Foundation, Inc.
2002, 2004, 2014 Niels Miller
License: LGPL-3+ or GPL-2+

Files: arctwo-meta.c pbkdf2.c
salsa20-128-set-key.c salsa20-256-set-key.c
salsa20-core-internal.c
salsa20-set-key.c salsa20-set-nonce.c
Copyright: 2012-2014 Niels Miller
2004, 2012 Simon Josefsson
License: LGPL-3+ or GPL-2+

Files: arctwo.h
salsa20-internal.h salsa20.h
Copyright: 2004, 2012 Simon Josefsson
2001, 2002, 2004, 2014 Niels Miller
License: LGPL-3+ or GPL-2+

Files: base64.h base64-meta.c
Copyright: 2002 Dan Egnor, Niels Miller
License: LGPL-3+ or GPL-2+

Files: base64url-decode.c base64url-encode.c
Copyright: 2015 Amos Jeffries, Niels Miller
License: LGPL-3+ or GPL-2+

Files: block-internal.h
Copyright: 2019 Dmitry Eremin-Solenikov
2018 Red Hat, Inc.
2011 Katholieke Universiteit Leuven
2011, 2013, 2018 Niels Miller
License: LGPL-3+ or GPL-2+

Files: blowfish.c
Copyright: 1998, 2001, 2002, 2003 Free Software Foundation, Inc.
2010 Simon Josefsson
License: LGPL-3+ or GPL-2+

Files: blowfish.h
Copyright: 1998, 2001 Free Software Foundation, Inc.
1998, 2001 Ray Dassen
1998, 2001 Niels Miller
License: LGPL-3+ or GPL-2+

Files: camellia-table.c camellia-crypt-internal.c camellia.h camellia-internal.h
camellia128-set-encrypt-key.c camellia256-set-encrypt-key.c camellia-absorb.c
Copyright: 2006, 2007 NTT (Nippon Telegraph and Telephone Corporation)

2010, 2013 Niels Mller
License: LGPL-3+ or GPL-2+

Files: ccm.c ccm.h ccm-aes128.c
ccm-aes192.c ccm-aes256.c
Copyright: 2014 Owen Kirby
2014 Exegin Technologies Limited
License: LGPL-3+ or GPL-2+

Files: cfb.c
cfb.h
ecc-gostdsa-sign.c
ecc-gostdsa-verify.c
gostdsa-sign.c
gostdsa-verify.c
Copyright: 2015, 2017 Dmitry Eremin-Solenikov
2001, 2011, 2013, 2014 Niels Mller
License: LGPL-3+ or GPL-2+

Files: chacha-core-internal.c chacha-crypt.c
chacha-internal.h chacha.h chacha-set-nonce.c
Copyright: 2012 Simon Josefsson
2013 Joachim Strmbergson
2012, 2014 Niels Mller
License: LGPL-3+ or GPL-2+

Files: cmac-aes128.c cmac-aes256.c
cmac.h hkdf.c hkdf.h
xts-aes128.c xts-aes256.c xts.c
Copyright: 2017, 2018 Red Hat, Inc.
License: LGPL-3+ or GPL-2+

Files: cmac-des3-meta.c
Copyright: 2020 Dmitry Baryshkov
License: LGPL-3+ or GPL-2+

Files: cmac-des3.c
ecc-gost-gc256b.c ecc-gost-gc512a.c
gost28147-internal.h gostdsa-vko.c
hmac-gosthash94.c pbkdf2-hmac-gosthash94.c
Copyright: 2016-2020 Dmitry Eremin-Solenikov
License: LGPL-3+ or GPL-2+

Files: cmac.c cmac64.c
Copyright: 2012 Stefan Metzmacher, Michael Adam, Jeremy Allison
2017 Red Hat Inc.
2019 Dmitry Eremin-Solenikov
License: LGPL-3+ or GPL-2+

Files: ctr16.c
pkcs1-internal.h pkcs1-sec-decrypt.c
version.h.in xts.h
Copyright: 2015, 2017, 2018 Red Hat, Inc.
2001, 2002, 2005-2018 Niels Mller
License: LGPL-3+ or GPL-2+

Files: curve448-eh-to-x.c curve448.h
curve448-mul-g.c curve448-mul.c
ecc-curve448.c ed448-shake256-pubkey.c
ed448-shake256-sign.c ed448-shake256-verify.c
shake256.c
Copyright: 2017 Red Hat, Inc.
2017 Daiki Ueno
License: LGPL-3+ or GPL-2+

Files: der2dsa.c
Copyright: 2005, 2009, 2014 Niels Mller
2009 Magnus Holmgren
License: LGPL-3+ or GPL-2+

Files: desCode.h descode.README desdata.c desinfo.c
Copyright: 2002 Dana L. How
License: LGPL-2+

This program is free software; you can redistribute it and/or modify
it under the terms of the GNU Library General Public License as published by
the Free Software Foundation; either version 2 of the License, or
(at your option) any later version.

.
This program is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
GNU Library General Public License for more details.

.
You should have received a copy of the GNU Library General Public License
along with this program; if not, write to the Free Software
Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301, USA.

.
On Debian GNU/Linux systems, the complete text of the GNU Library
General Public License, version 2, can be found in
/usr/share/common-licenses/LGPL-2.

Files: des.c des.h
Copyright: 1992 Dana L. How
1997, 2001 Niels Mller
License: LGPL-3+ or GPL-2+

Files: dsa2sexp.c
Copyright: 2002, 2009, 2014 Niels Mller
2009 Magnus Holmgren
License: LGPL-3+ or GPL-2+

Files: eccdata.c eddsa-hash.c
Copyright: 2017 Red Hat, Inc.
2017 Daiki Ueno
2013, 2014, 2017, 2019 Niels Mller
License: LGPL-3+ or GPL-2+

Files: examples/base16dec.c examples/base16enc.c
examples/base64dec.c examples/base64enc.c
Copyright: 2006, 2012, Jeronimo Pellegrini, Niels Mller
License: LGPL-3+ or GPL-2+

Files: examples/nettle-openssl.c
Copyright: 2015, 2017, 2018, Red Hat, Inc.
2001, 2002, 2005-2018, Niels Mller
License: LGPL-3+ or GPL-2+

Files: gcm.c gcm.h
Copyright: 2011 Katholieke Universiteit Leuven
2011, 2013, 2018 Niels Mller
2018 Red Hat, Inc.
License: LGPL-3+ or GPL-2+

Files: gmp-glue.c
gmp-glue.h
Copyright: 2013 Red Hat, Niels Mller
License: LGPL-3+ or GPL-2+

Files: gost28147.c gosthash94.c
Copyright: 2019 Dmitry Eremin-Solenikov <dbaryshkov@gmail.com>
2009-2012 Aleksey Kravchenko <rhash.admin@gmail.com>
License: Expat

Files: gostdsa.h
Copyright: 2015, Dmitry Eremin-Solenikov
2013, Niels Mller
License: LGPL-3+ or GPL-2+

Files: gosthash94-meta.c
Copyright: 2012, Nikos Mavrogiannopoulos, Niels Mller
License: LGPL-3+ or GPL-2+

Files: gosthash94.h
Copyright: 2012, Nikos Mavrogiannopoulos, Niels Mller

License: LGPL-3+ or GPL-2+

Files: hmac-md5-meta.c hmac-ripemd160-meta.c
hmac-sha1-meta.c hmac-sha224-meta.c
hmac-sha256-meta.c hmac-sha384-meta.c
hmac-sha512-meta.c nettle-meta-macs.c
pss-mgf1.c pss-mgf1.h pss.c pss.h
rsa-pss-sha256-sign-tr.c rsa-pss-sha256-verify.c
rsa-pss-sha512-sign-tr.c rsa-pss-sha512-verify.c
Copyright: 2017, 2020 Daiki Ueno
License: LGPL-3+ or GPL-2+

Files: md2.c
Copyright: ? Andrew Kuchling
2003 Andreas Sigfridsson
2003 Niels Mller
License: LGPL-3+ or GPL-2+

Files: md4.c
Copyright: 2003 Marcus Comstedt
2003 Niels Mller
License: LGPL-3+ or GPL-2+

Files: md5.c md5-compress.c
Copyright: Colin Plumb, Andrew Kuchling
2001 Niels Mller
License: LGPL-3+ or GPL-2+

Files: memxor.c
Copyright: 1991,1993, 1995 Free Software Foundation, Inc.
2010 Niels Mller
License: LGPL-3+ or GPL-2+

Files: nettle-meta-armors.c
nettle-meta-ciphers.c
nettle-meta-hashes.c
Copyright: 2011 Daniel Kahn Gillmor
License: LGPL-3+ or GPL-2+

Files: pbkdf2-hmac-sha1.c
pbkdf2-hmac-sha256.c
pbkdf2.h
salsa20-crypt.c
Copyright: 2012, Simon Josefsson
License: LGPL-3+ or GPL-2+

Files: pbkdf2-hmac-sha384.c pbkdf2-hmac-sha512.c
Copyright: 2012 Simon Josefsson

2021 Nicolas Mora
License: LGPL-3+ or GPL-2+

Files: poly1305-aes.c
Copyright: 2014 Niels Mller
2013 Nikos Mavrogiannopoulos
License: LGPL-3+ or GPL-2+

Files: poly1305-internal.c
Copyright: 2013, Nikos Mavrogiannopoulos
2013 Niels Mller
2012, 2013 Andrew M. (floodyberry)
License: LGPL-3+ or GPL-2+

Files: poly1305-internal.h
poly1305.h
Copyright: 2013, Nikos Mavrogiannopoulos
2013, 2014, Niels Mller
License: LGPL-3+ or GPL-2+

Files: ripemd160.c ripemd160-compress.c
Copyright: 1998, 2001, 2002, 2003 Free Software Foundation, Inc.
License: LGPL-3+ or GPL-2+

Files: ripemd160-meta.c ripemd160.h ripemd160-internal.h
Copyright: 2011 Andres Mejia
License: LGPL-3+ or GPL-2+

Files: rsa-blind.c rsa-decrypt-tr.c
Copyright: 2001, 2012, Niels Mller, Nikos Mavrogiannopoulos
License: LGPL-3+ or GPL-2+

Files: rsa-pkcs1-sign-tr.c salsa20r12-crypt.c
siv-cmac-aes128.c siv-cmac-aes256.c
siv-cmac.c siv-cmac.h
Copyright: 2012, 2013, 2017, 2018, Nikos Mavrogiannopoulos
License: LGPL-3+ or GPL-2+

Files: rsa-sec-compute-root.c
Copyright: 2018 Red Hat, Inc
2018 Niels Mller
License: LGPL-3+ or GPL-2+

Files: rsa-sec-decrypt.c
Copyright: 2018, Red Hat, Inc.
2001, 2012, Niels Mller, Nikos Mavrogiannopoulos
License: LGPL-3+ or GPL-2+

Files: rsa-sign-tr.c
Copyright: 2018, Red Hat Inc.
2012, Nikos Mavrogiannopoulos
2001, 2015, Niels Mller
License: LGPL-3+ or GPL-2+

Files: serpent-encrypt.c serpent-decrypt.c serpent-set-key.c serpent-internal.h
Copyright: 1998 Ross Anderson, Eli Biham, Lars Knudsen
2003, 2004, 2005 Free Software Foundation, Inc.
2010, 2011 Simon Josefsson
2011, 2014 Niels Mller
License: LGPL-3+ or GPL-2+

Files: sha1-compress.c
Copyright: 2001, 2004 Peter Gutmann, Andrew Kuchling, Niels Mller
License: LGPL-3+ or GPL-2+

Files: sha512.c
Copyright: 2013, 2014 Joachim Strmbergson
2001, 2010, 2012, 2014 Niels Mller
License: LGPL-3+ or GPL-2+

Files: testsuite/arctwo-test.c
Copyright: 2004, 2012 Simon Josefsson
2001, 2002, 2004, 2014 Niels Mller
License: LGPL-3+ or GPL-2+

Files: testsuite/ccm-test.c
Copyright: 2014 Owen Kirby
2014 Exegin Technologies Limited
License: LGPL-3+ or GPL-2+

Files: testsuite/chacha-test.c
Copyright: 2013, 2014 Joachim Strmbergson
2001, 2010, 2012, 2014 Niels Mller
License: LGPL-3+ or GPL-2+

Files: testsuite/curve448-dh-test.c
testsuite/ed448-test.c
testsuite/shake256-test.c
Copyright: 2017, Red Hat, Inc.
2017, Daiki Ueno
License: LGPL-3+ or GPL-2+

Files: testsuite/siv-test.c
Copyright: 2012, 2013, 2017, 2018 Nikos Mavrogiannopoulos
License: LGPL-3+ or GPL-2+

Files: texinfo.tex

Copyright: 1985, 1986, 1988, 1990-2009, Free Software Foundation, Inc.

License: GPL-3+

This texinfo.tex file is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

.

This texinfo.tex file is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

.

As a special exception, when this file is read by TeX when processing a Texinfo source document, you may use the result without restriction. (This has been our intent since Texinfo was invented.)

Files: twofish*

Copyright: 1999 Ruud de Rooij <ruud@debian.org>

1999 J.H.M. Dassen (Ray) <jdassen@wi.LeidenUniv.nl>

2001 Niels Mller

License: LGPL-3+ or GPL-2+

Files: tools/pkcs1-conv.c

Copyright: 2005, 2009, 2014 Niels Mller

2009 Magnus Holmgren

License: LGPL-3+ or GPL-2+

Files: getopt*

Copyright: 1987-2001 Free Software Foundation, Inc.

License: GPL-2+

Files: config.guess config.sub

Copyright: 1992-2020 Free Software Foundation, Inc.

License: GPL-3+ with Autoconf exception

As a special exception to the GNU General Public License, if you distribute this file as part of a program that contains a configuration script generated by Autoconf, you may include it under the same distribution terms that you use for the rest of that program.

Files: debian/*

Copyright: none

License: public-domain

I believe that most files in debian/ hardly contains any creative expression eligible for copyright.

Files: debian/sexp-conv.1

Copyright: 2002 Timshel Knoll <timshel@debian.org>

2007 Magnus Holmgren

License: GPL-2

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; version 2 dated June. 1991.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

.

On Debian GNU/Linux systems, the complete text of the GNU General Public License, version 2, can be found in /usr/share/common-licenses/GPL-2.

Comment:

This manpage was copied from the lsh-utils package. Timshel didn't explicitly select a license for his packaging work, but I think that it can be considered released under the same license as LSH itself.

Files: debian/pkcs1-conv.1 debian/nettle-lfib-stream.1

Copyright: 2007 Magnus Holmgren

License: GAP

Copying and distribution of this file, with or without modification, are permitted in any medium without royalty provided the copyright notice and this notice are preserved.

License: LGPL-3+

The nettle library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 3 of the License, or (at your option) any later version.

.

GNU Nettle is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, see <http://www.gnu.org/licenses/>.

.

On Debian GNU/Linux systems, the complete text of the newest version of the GNU Lesser General Public License can be found in `/usr/share/common-licenses/LGPL`.

License: GPL-2+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

.

GNU Nettle is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

.

On Debian GNU/Linux systems, the complete text of the newest version of the GNU General Public License can be found in `/usr/share/common-licenses/GPL`.

License: Expat

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: libassuan

Upstream-Contact: Werner Koch <wk@gnupg.org>

Source: <https://gnupg.org/ftp/gcrypt/libassuan/>

Files: *

Makefile.am
src/Makefile.am
src/assuan-buffer.c
src/assuan-error.c
src/assuan-inquire.c
src/assuan-io.c
src/assuan-listen.c
src/assuan-pipe-server.c
src/assuan-socket-connect.c
src/assuan-socket-server.c
src/assuan-socket.c
src/assuan-uds.c
src/client.c
src/context.c
src/funopen.c
src/memrchr.c
src/posix-fd-t.inc.h
src/posix-includes.inc.h
src/posix-sock-nonce.inc.h
src/posix-sys-pth-impl.h
src/posix-types.inc.h
src/putc_unlocked.c
src/server.c
src/setenv.c
src/stpcpy.c
src/system-posix.c
src/system-w32.c
src/system-w32ce.c
src/system.c
src/w32-fd-t.inc.h
src/w32-includes.inc.h
src/w32-sock-nonce.inc.h
src/w32-sys-pth-impl.h
src/w32-types.inc.h
src/w32ce-add.h
src/w32ce-fd-t.inc.h

Copyright: 1992, 1995-2010, Free Software Foundation, Inc

License: LGPL-2.1+

Files: AUTHORS

aclocal.m4
build-aux/git-log-footer
configure
INSTALL
m4/gnupg-pth.m4
m4/ltoptions.m4
m4/ltsugar.m4

m4/ltversion.m4
m4/lt~obsolete.m4
m4/onceonly.m4
m4/socklen.m4
m4/sys_socket_h.m4
m4/Makefile.in

src/libassuan-config.in

src/libassuan.m4

src/mkheader.c

Copyright: 1992-1996, 1998-2013, Free Software Foundation, Inc

License: GAP~FSF

This file is free software; the Free Software Foundation gives unlimited permission to copy and/or distribute it, with or without modifications, as long as this notice is preserved.

Files: doc/Makefile.am

doc/Makefile.in

src/gpgcedev.c

src/gpgcedev.def

src/gpgcemgr.c

tests/Makefile.am

tests/Makefile.in

tests/ce-creatpipe.c

tests/ce-server.c

tests/common.h

tests/fdpassing.c

tests/pipeconnect.c

Copyright: 2003, 2006, 2009-2010 Free Software Foundation, Inc

License: LGPL-3+

Assuan is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 3 of the License, or (at your option) any later version.

.

Assuan is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

.

You should have received a copy of the GNU Lesser General Public License along with this program; if not, see <<http://www.gnu.org/licenses/>>.

.

On Debian systems, the full text of the GNU Lesser General Public License version 3 can be found in the file
`/usr/share/common-licenses/LGPL-3'

Files: src/debug.h

src/libassuan.def

src/libassuan.vers
tests/version.c
Copyright: 2002, 2004-2005, 2007, 2009, 2013 g10 Code GmbH
License: LGPL-2.1+

Files: build-aux/compile
build-aux/ltmain.sh
m4/libtool.m4
build-aux/missing
Copyright: 1999-2013, Free Software Foundation, Inc
License: GPL-2+ with libtool exception

GNU Libtool is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

.
As a special exception to the GNU General Public License, if you distribute this file as part of a program or library that is built using GNU Libtool, you may include this file under the same distribution terms that you use for the rest of that program.

.
GNU Libtool is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.
You should have received a copy of the GNU General Public License along with GNU Libtool; see the file COPYING. If not, a copy can be downloaded from <http://www.gnu.org/licenses/gpl.html>, or obtained by writing to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

.
On Debian systems, the full text of the GNU General Public License version 2 can be found in the file `~/usr/share/common-licenses/GPL-2'`.

Files: build-aux/config.guess
build-aux/config.sub
doc/assuan.info
doc/assuan.texi
Copyright: 1985-1986, 1988, 1990-2013, Free Software Foundation, Inc
License: GPL-3+

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3 of the License, or (at your option) any later version. The text of the license can be found in the section entitled ``Copying''.

On Debian systems, the full text of the GNU General Public License version 3 can be found in the file ``/usr/share/common-licenses/GPL-3'`.

Files: `src/conversion.c`
`src/debug.c`

Copyright: 2000, Werner Koch (dd9jn)
2001-2005, 2007, 2009, g10 Code GmbH
License: LGPL-2.1+

Files: `autogen.sh`
`m4/gpg-error.m4`
`src/versioninfo.rc.in`

Copyright: 2003-2013 g10 Code GmbH
License: GAP

This file is free software; as a special exception the author gives unlimited permission to copy and/or distribute it, with or without modifications, as long as this notice is preserved.

Files: `src/assuan.c`

Copyright: 2001-2002, 2012-2013, g10 Code GmbH
2009, Free Software Foundation, Inc
License: LGPL-2.1+

Files: `m4/autobuild.m4`

Copyright: 2004, Simon Josefsson
License: GPL-2+

This file is free software, distributed under the terms of the GNU General Public License. As a special exception to the GNU General Public License, this file may be distributed as part of a program that contains a configuration script generated by Autoconf, under the same distribution terms as the rest of that program.

.

This file can be used in projects which are not available under the GNU General Public License or the GNU Library General Public License but which still want to provide support for Autobuild.

.

On Debian systems, the full text of the GNU General Public License version 2 can be found in the file ``/usr/share/common-licenses/GPL-2'`.

License: LGPL-2.1+

Assuan is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

.

Assuan is distributed in the hope that it will be useful, but

WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this program; if not, see <<http://www.gnu.org/licenses/>>.

On Debian systems, the full text of the GNU Lesser General Public License version 2.1 can be found in the file ``usr/share/common-licenses/LGPL-2.1'`.

This package was debianized by J.H.M. Dassen (Ray) jdassen@debian.org on Wed, 23 Sep 1998 20:29:32 +0200.

It was downloaded from <ftp://ftp.kernel.org/pub/linux/libs/pam/pre/>

Copyright (C) 1994, 1995, 1996 Olaf Kirch, <okir@monad.swb.de>

Copyright (C) 1995 Wietse Venema

Copyright (C) 1995, 2001-2008 Red Hat, Inc.

Copyright (C) 1996-1999, 2000-2003, 2005 Andrew G. Morgan <morgan@kernel.org>

Copyright (C) 1996, 1997, 1999 Cristian Gafton <gafton@redhat.com>

Copyright (C) 1996, 1999 Theodore Ts'o

Copyright (C) 1996 Alexander O. Yuriev

Copyright (C) 1996 Elliot Lee

Copyright (C) 1997 Philip W. Dalrymple <pwd@mdtsoft.com>

Copyright (C) 1999 Jan Rkorajski

Copyright (C) 1999 Ben Collins <bcollins@debian.org>

Copyright (C) 2000-2001, 2003, 2005, 2007 Steve Langasek

Copyright (C) 2003, 2005 IBM Corporation

Copyright (C) 2003, 2006 SuSE Linux AG.

Copyright (C) 2003 Nalin Dahyabhai <nalin@redhat.com>

Copyright (C) 2005-2008 Thorsten Kukuk <kukuk@thkukuk.de>

Copyright (C) 2005 Darren Tucker

Unless otherwise *explicitly* stated the following text describes the licensed conditions under which the contents of this Linux-PAM release may be distributed:

Redistribution and use in source and binary forms of Linux-PAM, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain any existing copyright notice, and this entire permission notice in its entirety, including the disclaimer of warranties.
2. Redistributions in binary form must reproduce all prior and current

copyright notices, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. The name of any author may not be used to endorse or promote products derived from this software without their specific prior written permission.

ALTERNATIVELY, this product may be distributed under the terms of the GNU General Public License, in which case the provisions of the GNU GPL are required INSTEAD OF the above restrictions. (This clause is necessary due to a potential conflict between the GNU GPL and the restrictions contained in a BSD-style copyright.)

THIS SOFTWARE IS PROVIDED ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR(S) BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

On Debian GNU/Linux systems, the complete text of the GNU General Public License can be found in `~/usr/share/common-licenses/GPL`. This is Debian GNU/Linux's prepackaged version of the FSF's GNU Bash, the Bourne Again SHell.

This package was put together by Matthias Klose <doko@debian.org>, from the following sources:

bash: <ftp.gnu.org:/pub/gnu/bash/bash-4.3.tar.gz>

Bash homepage: <http://tiswww.case.edu/php/chet/bash/bashtop.html>

Copyright (C) 1987-2014 Free Software Foundation, Inc.

Bash is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3, or (at your option) any later version.

Bash is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or

FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with Bash. If not, see <http://www.gnu.org/licenses/>.

On Debian systems, the complete text of the GNU General Public License can be found in ``usr/share/common-licenses/GPL-3'`.

The Free Software Foundation has exempted Bash from the requirement of Paragraph 2c of the General Public License. This is to say, there is no requirement for Bash to print a notice when it is started interactively in the usual way. We made this exception because users and standards expect shells not to print such messages. This exception applies to any program that serves as a shell and that is based primarily on Bash as opposed to other GNU software.

Files with other copyright statement than: Copyright FSF, License GPL

doc/FAQ ("the Bash FAQ")

This document is Copyright 1995-2005 by Chester Ramey.

Permission is hereby granted, without written agreement and without license or royalty fees, to use, copy, and distribute this document for any purpose, provided that the above copyright notice appears in all copies of this document and that the contents of this document remain unaltered.

doc/bashref.texi ("Bash Reference Manual"):

Copyright (c) 1988-2014 Free Software Foundation, Inc.

Permission is granted to make and distribute verbatim copies of this manual provided the copyright notice and this permission notice are preserved on all copies.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled ``GNU Free Documentation License''.

lib/readline/doc/rlman.texi (part of the GNU Readline Library manual)

Copyright (c) 1988-2014 Free Software Foundation, Inc.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled ``GNU Free Documentation License".

lib/readline/doc/rltech.texi (part of the GNU Readline Library manual)

Copyright (C) 1988-2014 Free Software Foundation, Inc.

Permission is granted to make and distribute verbatim copies of this manual provided the copyright notice and this permission notice are preserved on all copies.

Permission is granted to process this file through TeX and print the results, provided the printed document carries copying permission notice identical to this one except for the removal of this paragraph (this paragraph not being relevant to the printed manual).

Permission is granted to copy and distribute modified versions of this manual under the conditions for verbatim copying, provided that the entire resulting derived work is distributed under the terms of a permission notice identical to this one.

Permission is granted to copy and distribute translations of this manual into another language, under the above conditions for modified versions, except that this permission notice may be stated in a translation approved by the Foundation.

lib/readline/doc/rluser.texi (part of the GNU Readline Library manual)

Copyright (C) 1988-2014 Free Software Foundation, Inc.

Authored by Brian Fox and Chet Ramey.

Permission is granted to process this file through Tex and print the results, provided the printed document carries copying permission notice identical to this one except for the removal of this paragraph (this paragraph not being relevant to the printed manual).

Permission is granted to make and distribute verbatim copies of this manual provided the copyright notice and this permission notice are preserved on all copies.

Permission is granted to copy and distribute modified versions of this manual under the conditions for verbatim copying, provided also that the GNU Copyright statement is available to the distributee, and provided that the entire resulting derived work is distributed under the terms of a permission notice identical to this one.

Permission is granted to copy and distribute translations of this manual into another language, under the above conditions for modified versions.

readline/doc/history.texi (GNU History Library Manual)

Copyright (C) 1988-2014 Free Software Foundation, Inc.
Authored by Brian Fox and Chet Ramey.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled ``GNU Free Documentation License".

readline/doc/{hstech,hsuser}.texi (GNU History Library Manual)

Copyright (C) 1988-2014 Free Software Foundation, Inc.
Authored by Brian Fox and Chet Ramey.

Permission is granted to make and distribute verbatim copies of this manual provided the copyright notice and this permission notice are preserved on all copies.

Permission is granted to process this file through Tex and print the results, provided the printed document carries copying permission notice identical to this one except for the removal of this paragraph (this paragraph not being relevant to the printed manual).

Permission is granted to copy and distribute modified versions of this manual under the conditions for verbatim copying, provided also that the GNU Copyright statement is available to the distributee, and provided that the entire resulting derived work is distributed under the terms of a permission notice identical to this one.

Permission is granted to copy and distribute translations of this manual into another language, under the above conditions for modified versions.

lib/sh/inet_aton.c:

* Copyright (c) 1983, 1990, 1993

* The Regents of the University of California. All rights reserved.

*

* Redistribution and use in source and binary forms, with or without

* modification, are permitted provided that the following conditions

* are met:

* 1. Redistributions of source code must retain the above copyright

* notice, this list of conditions and the following disclaimer.

* 2. Redistributions in binary form must reproduce the above copyright

* notice, this list of conditions and the following disclaimer in the

* documentation and/or other materials provided with the distribution.

* 3. All advertising materials mentioning features or use of this software

* must display the following acknowledgement:

* This product includes software developed by the University of

* California, Berkeley and its contributors.

* 4. Neither the name of the University nor the names of its contributors

* may be used to endorse or promote products derived from this software

* without specific prior written permission.

*

* THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND

* ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE

* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE

* ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE

* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL

* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS

* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)

* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT

* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY

* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF

* SUCH DAMAGE.

* -

* Portions Copyright (c) 1993 by Digital Equipment Corporation.

*

* Permission to use, copy, modify, and distribute this software for any

* purpose with or without fee is hereby granted, provided that the above

* copyright notice and this permission notice appear in all copies, and that

* the name of Digital Equipment Corporation not be used in advertising or

* publicity pertaining to distribution of the document or software without

* specific, written prior permission.

*

* THE SOFTWARE IS PROVIDED "AS IS" AND DIGITAL EQUIPMENT CORP. DISCLAIMS ALL

* WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES

* OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL DIGITAL EQUIPMENT

* CORPORATION BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL

* DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR

* PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS

* ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS

* SOFTWARE.

support/man2html.c

* This program was written by Richard Verhoeven (NL:5482ZX35)

* at the Eindhoven University of Technology. Email: rcb5@win.tue.nl

*

* Permission is granted to distribute, modify and use this program as long

* as this comment is not removed or changed.

*

* THIS IS A MODIFIED VERSION. IT WAS MODIFIED BY chet@po.cwru.edu FOR

* USE BY BASH.

Double-conversion v1.1.5

Double-conversion License

<https://raw.githubusercontent.com/google/double-conversion/master/LICENSE>

<pre>

Copyright 2006-2011, the V8 project authors. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of Google Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

</pre>

Apache Serf

Copyright 2015 The Apache Software Foundation

This product includes software developed by many people, and distributed under Contributor License Agreements to The Apache Software Foundation (<http://www.apache.org/>). See the revision logs for an exact contribution history.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Files:

*

Copyright:

Copyright 2009, 2011, 2016 Guillem Jover <guillem@hadrons.org>

License: BSD-3-clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Files:

include/sha2.h

src/sha2.c

Copyright:

Copyright 2000-2001, Aaron D. Gifford

All rights reserved.

License: BSD-3-clause-Aaron-D-Gifford

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright

- notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
 3. Neither the name of the copyright holder nor the names of contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTOR(S) ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTOR(S) BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Files:

include/rmd160.h

src/rmd160.c

Copyright:

Copyright 2001 Markus Friedl. All rights reserved.

License: BSD-2-clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Files:

src/md2.c

Copyright:

Copyright (c) 2001 The NetBSD Foundation, Inc.

All rights reserved.

This code is derived from software contributed to The NetBSD Foundation by Andrew Brown.

License: BSD-2-clause-NetBSD

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE NETBSD FOUNDATION, INC. AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE FOUNDATION OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Files:

man/rmd160.3

man/sha1.3

man/sha2.3

Copyright:

Copyright 1997, 2003, 2004 Todd C. Miller <Todd.Miller@courtesan.com>

License: ISC

Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Files:

man/mdX.3

src/helper.c

Copyright:

Poul-Henning Kamp <phk@login.dkuug.dk>

License: Beerware

"THE BEER-WARE LICENSE" (Revision 42):

<phk@login.dkuug.dk> wrote this file. As long as you retain this notice you can do whatever you want with this stuff. If we meet some day, and you think this stuff is worth it, you can buy me a beer in return. Poul-Henning Kamp

Files:

include/md4.h

src/md4.c

Copyright:

Colin Plumb

Todd C. Miller

License: public-domain-md4

This code implements the MD4 message-digest algorithm.

The algorithm is due to Ron Rivest. This code was written by Colin Plumb in 1993, no copyright is claimed.

This code is in the public domain; do with it what you wish.

Todd C. Miller modified the MD5 code to do MD4 based on RFC 1186.

Files:

include/md5.h

src/md5.c

Copyright:

Colin Plumb

License: public-domain-md5

This code implements the MD5 message-digest algorithm.

The algorithm is due to Ron Rivest. This code was written by Colin Plumb in 1993, no copyright is claimed.

This code is in the public domain; do with it what you wish.

Files:

include/sha1.h

src/sha1.c

Copyright:

Steve Reid <steve@edmweb.com>

License: public-domain-sha1

100% Public Domain

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: libpng

Source: <http://www.libpng.org/pub/png/>

Files: *

Copyright: 1995-2019 The PNG Reference Library Authors.

1998-2018 Glenn Randers-Pehrson

2018-2019 Cosmin Truta
License: libpng

Files: arm/arm_init.c
arm/filter_neon_intrinsics.c
arm/palette_neon_intrinsics.c
Copyright: 2018 Cosmin Truta
2017-2018 Arm Holdings. All rights reserved.
2014,2016 Glenn Randers-Pehrson
License: libpng

Files: contrib/pngminus/*
Copyright: 1999-2019 Willem van Schaik
License: expat

Files: contrib/tools/*
Copyright: 2013-2017 John Cunningham Bowler
License: libpng

Files: pngwutil.c pngstruct.h pngwrite.c pnginfo.h pngrio.c png.h
pngread.c pngwio.c pngutil.c pngmem.c pngget.c pngtest.c
pngtran.c pngpriv.h pngset.c pngpread.c
pngdebug.h pngerror.c pngwtran.c png.c pngtrans.c example.c
Copyright: 1996, 1997 Andreas Dilger
1995, 1996 Guy Eric Schalnat, Group 42, Inc.
1998-2013 Glenn Randers-Pehrson
License: libpng

Files: contrib/gregbook/rpng-win.c contrib/gregbook/rpng2-x.c contrib/gregbook/rpng-x.c
contrib/gregbook/readpng2.h contrib/gregbook/rpng2-win.c
Copyright: 1998-2008 Greg Roelofs
License: GPL-2+ or BSD-like-with-advertising-clause

Files: contrib/gregbook/writepng.h contrib/gregbook/readppm.c
contrib/gregbook/readpng.h contrib/gregbook/wpng.c
contrib/gregbook/readpng.c contrib/gregbook/readpng2.c
contrib/gregbook/writepng.c contrib/visupng/resource.h
contrib/visupng/cexcept.h
Copyright: 2000-2008 Adam M. Costello and Cosmin Truta
License: GPL-2+ or BSD-like-with-advertising-clause

Files: contrib/visupng/PngFile.c contrib/visupng/PngFile.h
contrib/visupng/VisualPng.c
Copyright: 2000,2017 Willem van Schaik
License: libpng

Files: contrib/libtests/tarith.c
Copyright: 2011-2013 John Cunningham Bowler

License: libpng

Files: contrib/oss-fuzz/*

Copyright: 2017 Glenn Randers-Pehrson
2016 Google Inc.

License: libpng OR Apache-2.0 OR BSD-3-clause

Files: contrib/oss-fuzz/Dockerfile

Copyright: 2016 Google Inc.

License: Apache-2.0

Files: debian/*

Copyright: 2001 Philippe Troin <phil@fifi.org>
2002 Junichi Uekawa <dancer@debian.org>
2003 Josselin Mouette <joss@debian.org>
2006-2009 Anibal Monsalve Salazar <anibal@debian.org>
2011-2014 Nobuhiro Iwamatsu <iwamatsu@debian.org>
2016-2019 Gianfranco Costamagna <locutusofborg@debian.org>
2016-2017 Tobias Frost <tobi@debian.org>

License: GPL-2+

License: expat

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

License: GPL-2+

This package is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

.

This package is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
GNU General Public License for more details.

You should have received a copy of the GNU General Public License
along with this program. If not, see <<http://www.gnu.org/licenses/>>

On Debian systems, the complete text of the GNU General
Public License version 2 can be found in "/usr/share/common-licenses/GPL-2".

License: BSD-like-with-advertising-clause

Permission is granted to anyone to use this software for any purpose,
including commercial applications, and to alter it and redistribute
it freely, subject to the following restrictions:

1. Redistributions of source code must retain the above copyright
notice, disclaimer, and this list of conditions.
2. Redistributions in binary form must reproduce the above copyright
notice, disclaimer, and this list of conditions in the documenta-
tion and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this
software must display the following acknowledgment:

This product includes software developed by Greg Roelofs
and contributors for the book, "PNG: The Definitive Guide,"
published by O'Reilly and Associates.

License: libpng

Here is the copyright and license for libpng:

libpng versions 1.2.6, August 15, 2004, through 1.5.2, March 31, 2011, are
Copyright (c) 2004, 2006-2011 Glenn Randers-Pehrson, and are
distributed according to the same disclaimer and license as libpng-1.2.5
with the following individual added to the list of Contributing Authors

Cosmin Truta

libpng versions 1.0.7, July 1, 2000, through 1.2.5 - October 3, 2002, are
Copyright (c) 2000-2002 Glenn Randers-Pehrson, and are
distributed according to the same disclaimer and license as libpng-1.0.6
with the following individuals added to the list of Contributing Authors

Simon-Pierre Cadieux

Eric S. Raymond

Gilles Vollant

and with the following additions to the disclaimer:

There is no warranty against interference with your enjoyment of the library or against infringement. There is no warranty that our efforts or the library will fulfill any of your particular purposes or needs. This library is provided with all faults, and the entire risk of satisfactory quality, performance, accuracy, and effort is with the user.

libpng versions 0.97, January 1998, through 1.0.6, March 20, 2000, are Copyright (c) 1998, 1999 Glenn Randers-Pehrson, and are distributed according to the same disclaimer and license as libpng-0.96, with the following individuals added to the list of Contributing Authors:

Tom Lane
Glenn Randers-Pehrson
Willem van Schaik

(Version 0.96 Copyright (c) 1996, 1997 Andreas Dilger)
(Version 0.88 Copyright (c) 1995, 1996 Guy Eric Schalnat, Group 42, Inc.)

Authors and maintainers:

libpng versions 0.71, May 1995, through 0.88, January 1996: Guy Schalnat
libpng versions 0.89c, June 1996, through 0.96, May 1997: Andreas Dilger
libpng versions 0.97, January 1998, through 1.2.26 - April 2, 2008: Glenn
See also "Contributing Authors", below.

COPYRIGHT NOTICE, DISCLAIMER, and LICENSE:

If you modify libpng you may insert additional notices immediately following this sentence.

libpng versions 1.2.6, August 15, 2004, through 1.2.26, April 2, 2008, are Copyright (c) 2004, 2006-2008 Glenn Randers-Pehrson, and are distributed according to the same disclaimer and license as libpng-1.2.5 with the following individual added to the list of Contributing Authors:

Cosmin Truta

libpng versions 1.0.7, July 1, 2000, through 1.2.5, October 3, 2002, are Copyright (c) 2000-2002 Glenn Randers-Pehrson, and are distributed according to the same disclaimer and license as libpng-1.0.6 with the following individuals added to the list of Contributing Authors:

Simon-Pierre Cadieux
Eric S. Raymond
Gilles Vollant

and with the following additions to the disclaimer:

There is no warranty against interference with your enjoyment of the library or against infringement. There is no warranty that our efforts or the library will fulfill any of your particular purposes or needs. This library is provided with all faults, and the entire risk of satisfactory quality, performance, accuracy, and effort is with the user.

libpng versions 0.97, January 1998, through 1.0.6, March 20, 2000, are Copyright (c) 1998, 1999, 2000 Glenn Randers-Pehrson, and are distributed according to the same disclaimer and license as libpng-0.96, with the following individuals added to the list of Contributing Authors:

Tom Lane
Glenn Randers-Pehrson
Willem van Schaik

libpng versions 0.89, June 1996, through 0.96, May 1997, are Copyright (c) 1996, 1997 Andreas Dilger
Distributed according to the same disclaimer and license as libpng-0.88, with the following individuals added to the list of Contributing Authors:

John Bowler
Kevin Bracey
Sam Bushell
Magnus Holmgren
Greg Roelofs
Tom Tanner

libpng versions 0.5, May 1995, through 0.88, January 1996, are Copyright (c) 1995, 1996 Guy Eric Schalnat, Group 42, Inc.

For the purposes of this copyright and license, "Contributing Authors" is defined as the following set of individuals:

Andreas Dilger
Dave Martindale
Guy Eric Schalnat
Paul Schmidt
Tim Wegner

The PNG Reference Library is supplied "AS IS". The Contributing Authors and Group 42, Inc. disclaim all warranties, expressed or implied, including, without limitation, the warranties of merchantability and of fitness for any purpose. The Contributing Authors and Group 42, Inc. assume no liability for direct, indirect, incidental, special, exemplary, or consequential damages, which may result from the use of the PNG

Reference Library, even if advised of the possibility of such damage.

Permission is hereby granted to use, copy, modify, and distribute this source code, or portions hereof, for any purpose, without fee, subject to the following restrictions:

1. The origin of this source code must not be misrepresented.
2. Altered versions must be plainly marked as such and must not be misrepresented as being the original source.
3. This Copyright notice may not be removed or altered from any source or altered source distribution.

The Contributing Authors and Group 42, Inc. specifically permit, without fee, and encourage the use of this source code as a component to supporting the PNG file format in commercial products. If you use this source code in a product, acknowledgment is not required but would be appreciated.

contrib/pngsuite:

(c) Willem van Schaik, 1999, 2011

Permission to use, copy, modify, and distribute these images for any purpose and without fee is hereby granted.

License: Apache-2.0

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License.

You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

On Debian systems, the full text of the Apache License can be found in the file `/usr/share/common-licenses/Apache-2.0`.

License: BSD-3-clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright

- notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
 3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Apache Subversion

Copyright 2021 The Apache Software Foundation

This product includes software developed by many people, and distributed under Contributor License Agreements to The Apache Software Foundation (<http://www.apache.org/>). See the accompanying COMMITTERS file and the revision logs for an exact contribution history.

Portions of the test suite for Subversion's Python bindings are copyrighted by Edgewall Software, Jonas Borgstrm and Christopher Lenz.

For more information, see LICENSE.

This product includes software developed under the X Consortium License see: build/install-sh

This product includes software developed by Markus Kuhn under a permissive license, see LICENSE.

This software contains code derived from the RSA Data Security Inc. MD5 Message-Digest Algorithm, including various modifications by Spyglass Inc., Carnegie Mellon University, and Bell Communications Research, Inc (Bellcore).

This product includes software developed by Public Software Group e. V. under a permissive license, see LICENSE.

This software contains code derived from TropicSSL under a BSD 3-Clause license, see LICENSE.

This product includes code derived from the software developed by Yann Collet under a BSD 2-Clause license, see LICENSE.

This product includes code derived from the software developed by Thomas Porschberg and Peter Adolphs under a permissive license, see LICENSE.

Eastman Kodak Company: Portions of color management and imaging software

Eastman Kodak Notice

<pre>

Portions Copyright Eastman Kodak Company 1991-2003

</pre>

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Files:

*

Copyright:

Copyright 2000-2008 Silicon Graphics, Inc.

Copyright 1999-2001,2007-2009 Andreas Gruenbacher

License: GPL-2+

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 2 of the License, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this program. If not, see <<https://www.gnu.org/licenses/>>.

Comment:

On Debian systems, the full text of the GNU General Public License can be found in '/usr/share/common-licenses/GPL-2'.

Files:

exports

include/*.h

libacl/*.c

libacl/*.h

libmisc/*.c

tools/do_set.*

tools/parse.*

tools/sequence.c

tools/setfacl.c

tools/user_group.h

Copyright:

Copyright 2001-2002 Silicon Graphics, Inc.

Copyright 1999-2003,2007,2009,2011 Andreas Gruenbacher

License: LGPL-2+

This program is free software: you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation, either version 2.1 of the License, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

.

You should have received a copy of the GNU Lesser General Public License along with this program. If not, see <<https://www.gnu.org/licenses/>>.

Comment:

On Debian systems, the full text of the GNU Lesser General Public License can be found in '/usr/share/common-licenses/LGPL-2.1'.

The "Artistic License"

Preamble

The intent of this document is to state the conditions under which a Package may be copied, such that the Copyright Holder maintains some semblance of artistic control over the development of the package, while giving the users of the package the right to use and distribute the Package in a more-or-less customary fashion, plus the right to make reasonable modifications.

Definitions:

"Package" refers to the collection of files distributed by the Copyright Holder, and derivatives of that collection of files created through textual modification.

"Standard Version" refers to such a Package if it has not been modified, or has been modified in accordance with the wishes of the Copyright Holder as specified below.

"Copyright Holder" is whoever is named in the copyright or copyrights for the package.

"You" is you, if you're thinking about copying or distributing this Package.

"Reasonable copying fee" is whatever you can justify on the basis of media cost, duplication charges, time of people involved, and so on. (You will not be required to justify it to the Copyright Holder, but only to the computing community at large as a market that must bear the fee.)

"Freely Available" means that no fee is charged for the item itself, though there may be fees involved in handling the item. It also means that recipients of the item may redistribute it under the same conditions they received it.

1. You may make and give away verbatim copies of the source form of the Standard Version of this Package without restriction, provided that you duplicate all of the original copyright notices and associated disclaimers.
2. You may apply bug fixes, portability fixes and other modifications derived from the Public Domain or from the Copyright Holder. A Package modified in such a way shall still be considered the Standard Version.
3. You may otherwise modify your copy of this Package in any way, provided that you insert a prominent notice in each changed file stating how and when you changed that file, and provided that you do at least ONE of the following:
 - a) place your modifications in the Public Domain or otherwise make them Freely Available, such as by posting said modifications to Usenet or an equivalent medium, or placing the modifications on a major archive site such as uunet.uu.net, or by allowing the Copyright Holder to include your modifications in the Standard Version of the Package.
 - b) use the modified Package only within your corporation or organization.
 - c) rename any non-standard executables so the names do not conflict with standard executables, which must also be provided, and provide a separate manual page for each non-standard executable that clearly documents how it differs from the Standard Version.
 - d) make other distribution arrangements with the Copyright Holder.
4. You may distribute the programs of this Package in object code or executable form, provided that you do at least ONE of the following:
 - a) distribute a Standard Version of the executables and library files, together with instructions (in the manual page or equivalent) on where to get the Standard Version.
 - b) accompany the distribution with the machine-readable source of the Package with your modifications.

c) give non-standard executables non-standard names, and clearly document the differences in manual pages (or equivalent), together with instructions on where to get the Standard Version.

d) make other distribution arrangements with the Copyright Holder.

5. You may charge a reasonable copying fee for any distribution of this Package. You may charge any fee you choose for support of this Package. You may not charge a fee for this Package itself. However, you may distribute this Package in aggregate with other (possibly commercial) programs as part of a larger (possibly commercial) software distribution provided that you do not advertise this Package as a product of your own. You may embed this Package's interpreter within an executable of yours (by linking); this shall be construed as a mere form of aggregation, provided that the complete Standard Version of the interpreter is so embedded.

6. The scripts and library files supplied as input to or produced as output from the programs of this Package do not automatically fall under the copyright of this Package, but belong to whoever generated them, and may be sold commercially, and may be aggregated with this Package. If such scripts or library files are aggregated with this Package via the so-called "undump" or "unexec" methods of producing a binary executable image, then distribution of such an image shall neither be construed as a distribution of this Package nor shall it fall under the restrictions of Paragraphs 3 and 4, provided that you do not represent such an executable image as a Standard Version of this Package.

7. C subroutines (or comparably compiled subroutines in other languages) supplied by you and linked into this Package in order to emulate subroutines and variables of the language defined by this Package shall not be considered part of this Package, but are the equivalent of input as in Paragraph 6, provided these subroutines do not change the language in any way that would cause it to fail the regression tests for the language.

8. Aggregation of this Package with a commercial distribution is always permitted provided that the use of this Package is embedded; that is, when no overt attempt is made to make this Package's interfaces visible to the end user of the commercial distribution. Such use shall not be construed as a distribution of this Package.

9. The name of the Copyright Holder may not be used to endorse or promote products derived from this software without specific prior written permission.

10. THIS PACKAGE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR

IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The End
GMP Debian Package

This gmp package was built for Debian by

Steve M. Robbins <smr@debian.org>
Philipp Matthias Hahn <pmhahn@debian.org>

from sources obtained at <http://gmplib.org/> .

GMP Source Code

Copyright 1991, 1996, 1999, 2000, 2007 Free Software Foundation, Inc.

This file is part of the GNU MP Library.

The GNU MP Library is free software; you can redistribute it and/or modify it under the terms of either:

* the GNU Lesser General Public License as published by the Free Software Foundation; either version 3 of the License, or (at your option) any later version.

or

* the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

or both in parallel, as here.

The GNU MP Library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received copies of the GNU General Public License and the GNU Lesser General Public License along with the GNU MP Library. If not, see <https://www.gnu.org/licenses/>.

The GNU Lesser General Public License v3 text is contained in /usr/share/common-licenses/LGPL-3.

The GNU General Public License v2 text is contained in /usr/share/common-licenses/GPL-2.
The GNU General Public License v3 text is contained in /usr/share/common-licenses/GPL-3.

GMP Documentation

The documentation is released under the GNU Free Documentation License (GFDL) and it has cover texts. As such, it has been determined not to meet the Debian Free Software Guidelines, and is not shipped in the debian packages.

The demo code in the -doc package is covered either by the LGPL, or under the GNU General Public License /usr/share/common-licenses/GPL. See the individual source files to determine the license under which it falls.

This work was packaged for Debian by:

Reinhard Tartler <siretart@tauware.de> on Sun, 30 May 2010 17:07:16 +0200

It was downloaded from <http://rtmpdump.mplayerhq.hu/>

Upstream Authors and Copyright:

RTMP Dump

(C) 2009 Andrej Stepanchuk

(C) 2009-2011 Howard Chu

(C) 2010 2a665470ced7adb7156fce47f8199a6371c117b8a79e399a2771e0b36384090

License of the programs in the rtmpdump package:

rtmpdump - small dumper for media content streamed over the RTMP protocol
Copyright (C) 2009 Andrej Stepanchuk
Copyright (C) 2009-2010 Howard Chu

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc.,

51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

License of the librtmp library (included in the librtmp-dev package and in the librtmp/ subdirectory in the source tree):

Copyright (C) 2005-2008 Team XBMC
<http://www.xbmc.org>
Copyright (C) 2008-2009 Andrej Stepanchuk
Copyright (C) 2009-2010 Howard Chu

librtmp is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1, or (at your option) any later version.

librtmp is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with librtmp see the file COPYING. If not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301, USA.
<http://www.gnu.org/copyleft/lgpl.html>

The Debian packaging is:

Copyright (C) 2010 Reinhard Tartler <siretart@tauware.de>

and is licensed under the GNU Lesser General Public License.

On Debian GNU/Linux systems, the complete text of the GNU General Public License can be found in ``/usr/share/common-licenses/GPL-2'` and the text of the GNU Lesser General Public License is in ``/usr/share/common-licenses/LGPL-2.1'`.
Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>
Upstream-Name: sqlite3
Source: <https://www.sqlite.org/cgi/src/dir?ci=trunk>

Files: *

Copyright: D. Richard Hipp <drh@hwaci.com>

License: public-domain

The files listed have been put on the public domain by the sqlite3 contributors.

Files: debian/*

Copyright: 2006- Laszlo Boszormenyi (GCS) <gcs@debian.org>,
2005-2006 Tomas Fauth <tomfa@debian.org>,
2001-2005 Andreas Rottmann <rotty@debian.org>

License: GPL-2+

This program is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License version 2 as published
by the Free Software Foundation.

.

This program is distributed in the hope that it will be useful, but
WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY
or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
for more details.

.

You should have received a copy of the GNU General Public License along
with this package; if not, write to the Free Software Foundation, Inc.,
51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA

.

On Debian systems, the full text of the GNU General Public License
version 2 can be found in the file `~/usr/share/common-licenses/GPL-2`.
This package was debianized by Ivo Timmermans <ivo@debian.org> on
Fri, 3 Aug 2001 10:00:42 +0200.

It was later taken over by Matthias Urlichs <smurf@debian.org> and is now
maintained by Andreas Metzler <ametzler@debian.org> Eric Dorland
<eric@debian.org>, James Westby <jw+debian@jameswestby.net>

It was downloaded from <https://www.gnupg.org/ftp/gcrypt/gnutls/>

Upstream Authors (from AUTHORS file):

The authors list is autogenerated from the git history; sorted by number of commits

Nikos Mavrogiannopoulos <nnav at gnutls.org>

Simon Josefsson <jas at josefsson.org>

Daiki Ueno <ueno at gnu.org>

Dmitry Baryshkov <dbaryshkov at gmail.com>

Tim Rhsen <tim.ruehsen at gmx.de>

Ludovic Courts <ludo at gnu.org>

Timo Schulz <twoaday at gnutls.org>

Jonathan Bastien-Filiatrault <joe at x2a.org>

Alon Bar-Lev <alon.barlev at gmail.com>

Andreas Metzler <ametzler at debian.org>

Tom Vrancken <dev at tomvrancken.nl>

Martin Storsjo <martin at martin.st>

Tim Kosse <tim.kosse at filezilla-project.org>

Simo Sorce <simo at redhat.com>

Daniel Kahn Gillmor <dkg at fifthhorseman.net>
Fabian Keil <fk at fabiankeil.de>
Fabio Fiorina <fiorinaf at gnutls.org>
Stef Walter <stefw at redhat.com>
Anderson Toshiyuki Sasaki <ansasaki at redhat.com>
Armin Burgmeier <armin at arbur.net>
Andrew McDonald <admcd at gnutls.org>
Alex Gaynor <alex.gaynor at gmail.com>
Fiona Klute <fiona.klute at gmx.de>
Martin Ukrop <mukrop at redhat.com>
Jaak Ristioja <jaak.ristioja at cyber.ee>
Attila Molnar <attilamolnar at hush.com>
Hugo Beauze-Luyssen <hugo at beauzee.fr>
Stefan Berger <stefanb at linux.ibm.com>
Jakub Jelen <jjelen at redhat.com>
Martin Sucha <anty.sk+git at gmail.com>
Steve Lhomme <robux4 at ycbcr.xyz>
Ander Juaristi <a at juaristi.eus>
David Woodhouse <dwmw2 at infradead.org>
Jan Vcelak <jan.vcelak at nic.cz>
Kevin Cernekee <cernekee at gmail.com>
Nikolay Sivov <nsivov at codeweavers.com>
Sahana Prasad <sahana at redhat.com>
Michael Catanzaro <mcatanzaro at gnome.org>
Daniel Lenski <dlenski at gmail.com>
JonasZhou <JonasZhou at zhaoxin.com>
Stefan Srensen <stefan.sorensen at spectralink.com>
Adam Sampson <ats at offog.org>
Alfredo Pironti <alfredo at pironti.eu>
Brad Hards <bradh at frogmouth.net>
Dimitri John Ledkov <xnox at ubuntu.com>
Michael Weiser <michael.weiser at gmx.de>
Patrick Pelletier <code at funwithsoftware.org>
Rolf Eike Beer <eike at sf-mail.de>
Sjoerd Simons <sjoerd.simons at collabora.co.uk>
Stefan Bhler <stbuehler at web.de>
Thomas Klute <thomas2.klute at uni-dortmund.de>
Wolfgang Meyer zu Bergsten <w.bergsten at sirrix.com>
Andreas Metzler <gitlab at bebt.de>
Christian Grothoff <christian at grothoff.org>
Daniel P. Berrange <berrange at redhat.com>
Gustavo Zacarias <gustavo at zacarias.com.ar>
James Bottomley <James.Bottomley at HansenPartnership.com>
Ji Klime <jklimes at redhat.com>
Karsten Ohme <k_o_ at users.sourceforge.net>
Kurt Roeckx <kurt at roeckx.be>
Peter Wu <peter at lekensteyn.nl>
Thierry Quemerai <tquemerai at awox.com>

Tom Carroll <incentivedesign at gmail.com>
Vitezslav Cizek <vcizek at suse.com>
Alessandro Ghedini <alessandro at ghedini.me>
Alex Monk <krenair at gmail.com>
Bernhard M. Wiedemann <bwiedemann at suse.de>
David Caldwell <david at porkrind.org>
Diego Elio Petten <flameeyes at flameeyes.eu>
Elta Koepp <alexi_2019 at protonmail.com>
Fabrice Fontaine <fontaine.fabrice at gmail.com>
Giuseppe Scrivano <gscrivano at gnu.org>
Hubert Kario <hkario at redhat.com>
Ilya Tumaykin <itumaykin at gmail.com>
Karl Tarbe <karl.tarbe at cyber.ee>
Ke Zhao <kzhao at redhat.com>
Mark Brand <mabrand at mabrand.nl>
Matthias-Christian Ott <ott at mirix.org>
Maya Rashish <coypu at sdf.org>
Michael Catanzaro <mcatanzaro at igalia.com>
Micha Grny <mgorny at gentoo.org>
Petr Psa <petr.pisar at atlas.cz>
Pierre Ossman <ossman at cendio.se>
Roman Bogorodskiy <bogorodskiy at gmail.com>
Steffen Jaeckel <jaeckel-floss at eyet-services.de>
Stephan Mueller <smueller at chronox.de>
Steve Dispensa <dispensa at phonefactor.com>
nia <nia at NetBSD.org>
raspa0 <raspa0 at protonmail.com>
Airtower <fiona.klute at gmx.de>
Alban Crequy <alban.crequy at collabora.co.uk>
Albrecht Dre <albrecht.dress at arcort.de>
Aleksei Nikiforov <darktemplar at basealt.ru>
Alexander Kanavin <alex.kanavin at gmail.com>
Alexander Sosedkin <asosedkin at redhat.com>
Alexandre Bique <bique.alexandre at gmail.com>
Anderson Sasaki <ansasaki at redhat.com>
Andreas Schneider <asn at samba.org>
Andreas Schwab <schwab at suse.de>
Avinash Sonawane <rootkea at gmail.com>
Bas van Schaik <gitlab.com at s.traiectum.net>
Bjoern Jacke <bjacke at samba.org>
Bjrn Jacke <bjacke at samba.org>
Bjrn Christensen <bhc at insight.dk>
Carolin Latze <latze at angry-red-pla.net>
Chen Hongzhi <hongzhi.chen at me.com>
Chris Barry <chris at barry.im>
Colin Walters <walters at verbum.org>
Dan Fandrich <dan at coneharvesters.com>
Daniel Schaefer <git at danielschaefer.me>

David Walker <david.walker at vcatechnology.com>
David Weber <dave at veryflatcat.com>
Dmitriy Tsvettsikh <dmitrycvet at gmail.com>
Dosenpfand <m at sad.bz>
Edward Stangler <estangler at bradmark.com>
Elias Pipping <pipping at exherbo.org>
Elta Koepp <elta_koepp at gmail.com>
Evgeny Grin <k2k at narod.ru>
Frank Morgner <morgner at informatik.hu-berlin.de>
Gnther Deschner <gd at samba.org>
Hani Benhabiles <kroosec at gmail.com>
Hans Leidekker <hans at codeweavers.com>
Ilya V. Matveychikov <i.matveychikov at securitycode.ru>
Jared Wong <jaredlwong at gmail.com>
Jason Spafford <>nullprogrammer at gmail.com>
Jay Foad <jay.foad at gmail.com>
Jeffrey Walton <noloder at gmail.com>
Jens Lechtenboerger <jens.lechtenboerger at fsfe.org>
Jussi Kukkonen <jussi.kukkonen at intel.com>
Kenneth J. Miller <ken at miller.ec>
KrenzelokFrantisek <krenzelok.frantisek at gmail.com>
Lei Maohui <leimaohui at cn.fujitsu.com>
Lili Quan <13132239506 at 163.com>
Lucas Fisher <lucas.fisher at gmail.com>
Ludwig Nussel <ludwig.nussel at suse.de>
Luis G.F <luisgf at gmail.com>
Luke Dashjr <luke-jr+git at utopios.org>
Maciej S. Szmigiero <mail at maciej.szmigiero.name>
Maks Naumov <maksqwe1 at ukr.net>
Marcin Cielak <saper at saper.info>
Marcus Meissner <meissner at suse.de>
Marga Manterola <marga at google.com>
Marius Bakke <mbakke at fastmail.com>
Marti Raudsepp <marti at juffo.org>
Matt Turner <mattst88 at gmail.com>
Matt Whitlock <matt at whitlock.name>
Micah Anderson <micah at riseup.net>
Miroslav Lichvar <mlichvar at redhat.com>
Nick Alcock <nick.alcock at oracle.com>
Nicolas Dufresne <nicolas.dufresne at collabora.com>
Nils Maier <maierman at web.de>
Norbert Pocs <npocs at redhat.com>
Olga <olyasib12 at gmail.com>
Ondrej Moris <omoris at redhat.com>
Petr Pavlu <petr.pavlu at suse.com>
Philippe Proulx <eppeliteloop at gmail.com>
Philippe Widmer <pw at earthwave.ch>
R. Andrew Bailey <bailey at akamai.com>

Raj Raman <rajramanca at gmail.com>
Remi Olivier <remi_8 at hotmail.com>
Rical Jasan <ricaljasan at pacific.net>
Ricardo M. Correia <rcorreia at wizy.org>
Rickard Bellgrim <rickard at opensssec.org>
Robert Scheck <robert at fedoraproject.org>
Roberto Newmon <robertonewmon at fake-box.com>
Ross Nicholson <phunkyfish at gmail.com>
Rowan Thorpe <rowan at rowanthorpe.com>
SUMIT AGGARWAL <aggarwal.s at samsung.com>
Sadie Powell <sadie at witchery.services>
Sahana Prasad <sahana.prasad07 at gmail.com>
Saurav Babu <saurav.babu at samsung.com>
Sebastian Drge <sebastian at centricular.com>
Simon Arlott <sa.me.uk>
Stanislav Zidek <szidek at redhat.com>
Thomas Klausner <wiz at NetBSD.org>
Tobias Polzer <tobias.polzer at fau.de>
Tomas Hoger <thoger at redhat.com>
Tomas Mraz <tmraz at fedoraproject.org>
Tristan Matthews <le.businessman at gmail.com>
Werner Koch <wk at gnupg.org>
Yuriy M. Kaminskiy <yumkam at gmail.com>
ihsinme <ihsinme at gmail.com>
rrivers2 <5981058-rrivers2 at users.noreply.gitlab.com>
sskaje <sskaje at gmail.com>
ukasz Stelmach <stlman at poczta.fm>

The translators list is autogenerated from po file history

Anders Jonsson
Benno Schulenberg
Felipe Castro
Francisco Javier Serrador
Jakub Bogusz
Jorma Karvonen
Milo Casagrande
Mingye Wang (Arthur2e5)
Petr Písar
Rafael Fontenelle
Roland Illig
Sharuzzaman Ahmat Raslan
Stphane Aulery
Trn Ngc Qun
Yuri Chornoivan

License: The main library is licensed under GNU Lesser General Public License (LGPL) version 2.1+, Gnutls Extra (which is currently just the openssl wrapper library), build system, testsuite and commandline utilities are licenced under the GNU General Public License version 3+. The Guile bindings use the same license as the respective underlying library, i.e. LGPLv2.1+ for the main library and GPLv3+ for Gnutls extra.

However to be able to use and link against libgnutls a program needs to be available under a license compatible with LGPLv3+ or GPLv2+ since GnuTLS requires nettle which requires GMP. GMP (>= 6.0.0) is dual licensed LGPLv3+ or GPLv2+. Starting with 3.5.7 libunistring is needed, too. It also is dual licensed LGPLv3+ or GPLv2+ (libunistring 0.9.7 and above, earlier version were LGPLv3+ only.)

Copyright:

/* *- c *-

* Copyright (C) 2000-2019 Free Software Foundation, Inc.

*

* Author: Nikos Mavrogiannopoulos

*

* This file is part of GnuTLS.

*

* The GnuTLS is free software; you can redistribute it and/or

* modify it under the terms of the GNU Lesser General Public License

* as published by the Free Software Foundation; either version 2.1 of

* the License, or (at your option) any later version.

*

* This library is distributed in the hope that it will be useful, but

* WITHOUT ANY WARRANTY; without even the implied warranty of

* MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU

* Lesser General Public License for more details.

*

* You should have received a copy of the GNU Lesser General Public License

* along with this program. If not, see <<http://www.gnu.org/licenses/>>

*

*/

/*

* Copyright (C) 2004-2015 Free Software Foundation, Inc.

* Copyright (c) 2002 Andrew McDonald <andrew@mcdonald.org.uk>

*

* This file is part of GnuTLS-EXTRA.

*

* GnuTLS-extra is free software: you can redistribute it and/or modify

* it under the terms of the GNU General Public License as published by

* the Free Software Foundation, either version 3 of the License, or

* (at your option) any later version.
*
* GnuTLS-extra is distributed in the hope that it will be useful,
* but WITHOUT ANY WARRANTY; without even the implied warranty of
* MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
* GNU General Public License for more details.
*
* You should have received a copy of the GNU General Public License
* along with this program. If not, see <<http://www.gnu.org/licenses/>>.
*/

The documentation is distributed under the terms of the GNU Free
Documentation License (FDL):

Copyright (C) 2001-2021 Free Software Foundation, Inc.
Copyright (C) 2001-2021 Nikos Mavrogiannopoulos

Permission is granted to copy, distribute and/or modify this
document under the terms of the GNU Free Documentation License,
Version 1.3 or any later version published by the Free Software
Foundation; with no Invariant Sections, no Front-Cover Texts, and
no Back-Cover Texts. A copy of the license is included in the
section entitled "GNU Free Documentation License".

From December 2012 onwards FSF is not the sole copyright holder of GnuTLS
anymore (See <<http://article.gmane.org/gmane.network.gnutls.general/3026>>),
the headers currently also list these authors/copyright holders::

- * Nikos Mavrogiannopoulos
- * KU Leuven
- * INRIA Paris-Rocquencourt
- * Lucas Fisher
- * Sean Buckheister
- * Frank Morgner
- * Bardenheuer GmbH, Munich and Bundesdruckerei GmbH, Berlin
- * Adam Sampson
- * Christian Grothoff
- * Andrew McDonald <andrew@mcdonald.org.uk>
- * Red Hat
- * Paul Sheer
- * Dyalog Ltd.
- * Tim Rhsen
- * Red Hat, Inc.
- * Thomas Klute
- * Dmitry Eremin-Solenikov
- * ARPA2 project

* Hugo Beauze-Luyssen

On Debian GNU/Linux systems, the complete text of the latest version of the GNU Lesser General Public License can be found in `~/usr/share/common-licenses/LGPL' v3` of the license in `~/usr/share/common-licenses/LGPL-3'`; the GNU General Public License can be found in `~/usr/share/common-licenses/GPL' (version 3` in `/usr/share/common-licenses/GPL-3)` The GNU Free Documentation License is available under `/usr/share/common-licenses/GFDL-1.3`.

=====

Excerpt from upstream's README:

LICENSING

=====

Since GnuTLS version 3.1.10, the core library has been released under the GNU Lesser General Public License (LGPL) version 2.1 or later.

Note, however, that version 6.0.0 and later of the gmp lib library used by GnuTLS are distributed under a LGPLv3+ or GPLv2+ dual license, and as such binaries of this library need to adhere to either LGPLv3+ or GPLv2+ license.

The GNU LGPL applies to the main GnuTLS library, while the included applications as well as gnutls-openssl library are under the GNU GPL version 3. The gnutls library is located in the lib/ and libdane/ directories, while the applications in src/ and, the gnutls-openssl library is at extra/.

For any copyright year range specified as YYYY-ZZZZ in this package note that the range specifies every single year in that closed interval.

=====

Non FSF code

=====

lib/accelerated/x86 contains code by Andy Polyakov <appro@openssl.org>, copyright is not assigned to the FSF. The code is licensed under the

CRYPTOGAMS license.

```
-----
# Copyright (c) 2011-2016, Andy Polyakov by <appro@openssl.org>
# All rights reserved.
#
# Redistribution and use in source and binary forms, with or without
# modification, are permitted provided that the following conditions
# are met:
#
# * Redistributions of source code must retain copyright notices,
#   this list of conditions and the following disclaimer.
#
# * Redistributions in binary form must reproduce the above
#   copyright notice, this list of conditions and the following
#   disclaimer in the documentation and/or other materials
#   provided with the distribution.
#
# * Neither the name of the Andy Polyakov nor the names of its
#   copyright holder and contributors may be used to endorse or
#   promote products derived from this software without specific
#   prior written permission.
#
# ALTERNATIVELY, provided that this notice is retained in full, this
# product may be distributed under the terms of the GNU General Public
# License (GPL), in which case the provisions of the GPL apply INSTEAD OF
# those given above.
#
# THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDER AND CONTRIBUTORS
# "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT
# LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR
# A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT
# OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,
# SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
# LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
# DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
# THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
# (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
# OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
-----
```

=====
lib/extras/randomart.*

Upstream Authors: Markus Friedl
Alexander von Gernler

Copyright:

- * Copyright (c) 2000, 2001 Markus Friedl. All rights reserved.
- * Copyright (c) 2008 Alexander von Gernler. All rights reserved.

License:

- * Redistribution and use in source and binary forms, with or without
- * modification, are permitted provided that the following conditions
- * are met:
- * 1. Redistributions of source code must retain the above copyright
- * notice, this list of conditions and the following disclaimer.
- * 2. Redistributions in binary form must reproduce the above copyright
- * notice, this list of conditions and the following disclaimer in the
- * documentation and/or other materials provided with the distribution.
- *
- * THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR
- * IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES
- * OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED.
- * IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT,
- * INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT
- * NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
- * DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
- * THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
- * (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF
- * THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

=====

lib/accelerated/x86/elf/aes-ssse3-x86.s
lib/accelerated/x86/macosx/aes-ssse3-x86.s

Upstream Authors: Mike Hamburg (Stanford University)

Copyright:

- * Mike Hamburg (Stanford University), 2009.

License:

Public domain.

=====

lib/system/inet_pton.c

Upstream Authors: Internet Software Consortium

Copyright/License:

- * Copyright (c) 1996,1999 by Internet Software Consortium.
- *
- * Permission to use, copy, modify, and distribute this software for any
- * purpose with or without fee is hereby granted, provided that the above

* copyright notice and this permission notice appear in all copies.
*
* THE SOFTWARE IS PROVIDED "AS IS" AND INTERNET SOFTWARE CONSORTIUM DISCLAIMS
* ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES
* OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL INTERNET SOFTWARE
* CONSORTIUM BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL
* DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR
* PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS
* ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS
* SOFTWARE.

=====

lib/extras/hex.*

Author: Rusty Russell <rusty@rustcorp.com.au>

Comment: <http://ccodearchive.net/info/str/hex.html>

License: CC0 license

Statement of Purpose

The laws of most jurisdictions throughout the world automatically confer exclusive Copyright and Related Rights (defined below) upon the creator and subsequent owner(s) (each and all, an "owner") of an original work of authorship and/or a database (each, a "Work").

Certain owners wish to permanently relinquish those rights to a Work for the purpose of contributing to a commons of creative, cultural and scientific works ("Commons") that the public can reliably and without fear of later claims of infringement build upon, modify, incorporate in other works, reuse and redistribute as freely as possible in any form whatsoever and for any purposes, including without limitation commercial purposes. These owners may contribute to the Commons to promote the ideal of a free culture and the further production of creative, cultural and scientific works, or to gain reputation or greater distribution for their Work in part through the use and efforts of others.

For these and/or other purposes and motivations, and without any expectation of additional consideration or compensation, the person associating CC0 with a Work (the "Affirmer"), to the extent that he or she is an owner of Copyright and Related Rights in the Work, voluntarily elects to apply CC0 to the Work and publicly distribute the Work under its terms, with knowledge of his or her Copyright and Related Rights in the Work and the meaning and intended legal effect of CC0 on those rights.

1. Copyright and Related Rights. A Work made available under CC0 may be protected by copyright and related or neighboring rights ("Copyright and Related Rights"). Copyright and Related Rights include, but are not limited to, the following:

- the right to reproduce, adapt, distribute, perform, display, communicate, and translate a Work;
- moral rights retained by the original author(s) and/or performer(s);
- publicity and privacy rights pertaining to a person's image or likeness depicted in a Work;
- rights protecting against unfair competition in regards to a Work, subject to the limitations in paragraph 4(a), below;
- rights protecting the extraction, dissemination, use and reuse of data in a Work;
- database rights (such as those arising under Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, and under any national implementation thereof, including any

amended or successor version of such directive); and

other similar, equivalent or corresponding rights throughout the world based on applicable law or treaty, and any national implementations thereof.

2. Waiver. To the greatest extent permitted by, but not in contravention of, applicable law, Affirmer hereby overtly, fully, permanently, irrevocably and unconditionally waives, abandons, and surrenders all of Affirmer's Copyright and Related Rights and associated claims and causes of action, whether now known or unknown (including existing as well as future claims and causes of action), in the Work (i) in all territories worldwide, (ii) for the maximum duration provided by applicable law or treaty (including future time extensions), (iii) in any current or future medium and for any number of copies, and (iv) for any purpose whatsoever, including without limitation commercial, advertising or promotional purposes (the "Waiver"). Affirmer makes the Waiver for the benefit of each member of the public at large and to the detriment of Affirmer's heirs and successors, fully intending that such Waiver shall not be subject to revocation, rescission, cancellation, termination, or any other legal or equitable action to disrupt the quiet enjoyment of the Work by the public as contemplated by Affirmer's express Statement of Purpose.

3. Public License Fallback. Should any part of the Waiver for any reason be judged legally invalid or ineffective under applicable law, then the Waiver shall be preserved to the maximum extent permitted taking into account Affirmer's express Statement of Purpose. In addition, to the extent the Waiver is so judged Affirmer hereby grants to each affected person a royalty-free, non transferable, non sublicensable, non exclusive, irrevocable and unconditional license to exercise Affirmer's Copyright and Related Rights in the Work (i) in all territories worldwide, (ii) for the maximum duration provided by applicable law or treaty (including future time extensions), (iii) in any current or future medium and for any number of copies, and (iv) for any purpose whatsoever, including without limitation commercial, advertising or promotional purposes (the "License"). The License shall be deemed effective as of the date CC0 was applied by Affirmer to the Work. Should any part of the License for any reason be judged legally invalid or ineffective under applicable law, such partial invalidity or ineffectiveness shall not invalidate the remainder of the License, and in such case Affirmer hereby affirms that he or she will not (i) exercise any of his or her remaining Copyright and Related Rights in the Work or (ii) assert any associated claims and causes of action with respect to the Work, in either case contrary to Affirmer's express Statement of Purpose.

4. Limitations and Disclaimers.

No trademark or patent rights held by Affirmer are waived, abandoned, surrendered, licensed or otherwise affected by this document.

Affirmer offers the Work as-is and makes no representations or warranties of any kind concerning the Work, express, implied, statutory or otherwise, including without limitation warranties of title, merchantability, fitness for a particular purpose, non infringement, or the absence of latent or other defects, accuracy, or the present or absence of errors, whether or not discoverable, all to the greatest extent permissible under applicable law.

Affirmer disclaims responsibility for clearing rights of other persons that may apply to the Work or any use thereof, including without limitation any person's Copyright and Related Rights in the Work. Further, Affirmer disclaims responsibility for obtaining any necessary consents, permissions or other rights required for any use of the Work.

Affirmer understands and acknowledges that Creative Commons is not a party to this document and has no duty or obligation with respect to this CC0 or use of the Work.

=====

doc/examples/tlsproxy/

Copyright: Copyright (c) 2016 Wrymouth Innovation Ltd

License: Expat

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

=====

Files: tests/pkcs11/pkcs11-mock.*

Copyright: 2011-2016 The Pkcs11Interop Project

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

X-Comment: Written originally for the Pkcs11Interop project by:

Jaroslav IMRICH <jimrich@jimrich.sk>

License: Apache-2.0

On Debian systems the complete text of the license can be found in
/usr/share/common-licenses/Apache-2.0

=====

lib/unistring/*

Author: Bruno Haible <bruno@clisp.org>

Copyright (C) 2009-2020 Free Software Foundation, Inc.

Comment: Debian package is built against libunistring-dev package.

License: LGPLv3+_or_GPLv2+

Files: fuzz/gnutls_base64_decoder_fuzzer.c
fuzz/gnutls_base64_encoder_fuzzer.c
fuzz/gnutls_ocsp_req_parser_fuzzer.c
fuzz/gnutls_ocsp_resp_parser_fuzzer.c fuzz/gnutls_server_fuzzer.c
fuzz/gnutls_set_trust_file_fuzzer.c fuzz/gnutls_handshake_server_fuzzer.c

Copyright: 2017 Red Hat, Inc.

License: Apache-2.0

On Debian systems the complete text of the license can be found in
/usr/share/common-licenses/Apache-2.0

fuzz/gnutls_dn_parser_fuzzer.c fuzz/gnutls_idna_parser_fuzzer.c
fuzz/gnutls_pkcs12_key_parser_fuzzer.c fuzz/gnutls_pkcs8_key_parser_fuzzer.c
fuzz/gnutls_reverse_idna_parser_fuzzer.c

Copyright 2016 Nikos Mavrogiannopoulos

Comment: On Debian systems the complete license text is available in
/usr/share/common-licenses/Apache-2.0

License

```
# Licensed under the Apache License, Version 2.0 (the "License");
# you may not use this file except in compliance with the License.
# You may obtain a copy of the License at
#
#   http://www.apache.org/licenses/LICENSE-2.0
#
# Unless required by applicable law or agreed to in writing, software
# distributed under the License is distributed on an "AS IS" BASIS,
# WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
# See the License for the specific language governing permissions and
# limitations under the License.
```

fuzz/gnutls_pkcs7_parser_fuzzer.c fuzz/gnutls_private_key_parser_fuzzer.c
fuzz/gnutls_x509_parser_fuzzer.c

Copyright 2016 Google Inc.

Comment: On Debian systems the complete license text is available in
/usr/share/common-licenses/Apache-2.0

License

```
# Licensed under the Apache License, Version 2.0 (the "License");
# you may not use this file except in compliance with the License.
# You may obtain a copy of the License at
#
#   http://www.apache.org/licenses/LICENSE-2.0
#
# Unless required by applicable law or agreed to in writing, software
# distributed under the License is distributed on an "AS IS" BASIS,
# WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
# See the License for the specific language governing permissions and
# limitations under the License.
```

Files: fuzz/gnutls_client_fuzzer.c fuzz/gnutls_handshake_client_fuzzer.c

Copyright: 2016 Google Inc.

2017 Red Hat, Inc.

Comment: On Debian systems the complete license text is available in
/usr/share/common-licenses/Apache-2.0

License: Apache-2.0

On Debian systems the complete text of the license can be found in
/usr/share/common-licenses/Apache-2.0

Files: fuzz/main.c

Copyright: 2017 Tim Ruehsen

License: Expat

- * Permission is hereby granted, free of charge, to any person obtaining a
- * copy of this software and associated documentation files (the "Software"),
- * to deal in the Software without restriction, including without limitation
- * the rights to use, copy, modify, merge, publish, distribute, sublicense,
- * and/or sell copies of the Software, and to permit persons to whom the
- * Software is furnished to do so, subject to the following conditions:
- *
- * The above copyright notice and this permission notice shall be included in
- * all copies or substantial portions of the Software.
- *
- * THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR
- * IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,
- * FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE
- * AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER
- * LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING
- * FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER
- * DEALINGS IN THE SOFTWARE.

Files: fuzz/mem.h fuzz/psk.h fuzz/srp.h fuzz/certs.h

fuzz/gnutls_psk_server_fuzzer.c

fuzz/gnutls_psk_client_fuzzer.c fuzz/gnutls_srp_client_fuzzer.c

fuzz/gnutls_srp_server_fuzzer.c

fuzz/handshake.h

Copyright: 2017 Nikos Mavrogiannopoulos

License: Expat

- * Permission is hereby granted, free of charge, to any person obtaining a
- * copy of this software and associated documentation files (the "Software"),
- * to deal in the Software without restriction, including without limitation
- * the rights to use, copy, modify, merge, publish, distribute, sublicense,
- * and/or sell copies of the Software, and to permit persons to whom the
- * Software is furnished to do so, subject to the following conditions:
- *

* The above copyright notice and this permission notice shall be included in
* all copies or substantial portions of the Software.

*

* THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR
* IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,
* FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE
* AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER
* LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING
* FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER
* DEALINGS IN THE SOFTWARE.

Files: fuzz/gnutls_client_rawpk_fuzzer.c fuzz/gnutls_server_rawpk_fuzzer.c

Copyright: 2017 Nikos Mavrogiannopoulos

2019 Tom Vrancken (dev@tomvrancken.nl)

License: Expat

* Permission is hereby granted, free of charge, to any person obtaining a
* copy of this software and associated documentation files (the "Software"),
* to deal in the Software without restriction, including without limitation
* the rights to use, copy, modify, merge, publish, distribute, sublicense,
* and/or sell copies of the Software, and to permit persons to whom the
* Software is furnished to do so, subject to the following conditions:

*

* The above copyright notice and this permission notice shall be included in
* all copies or substantial portions of the Software.

*

* THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR
* IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,
* FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE
* AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER
* LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING
* FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER
* DEALINGS IN THE SOFTWARE.

Files: fuzz/gnutls_x509_crq_parser_fuzzer.c

Copyright: 2020 Dmitry Baryshkov

License: LGPLv2.1+

Files: lib/nettle/backport/block-internal.h

Copyright: 2011 Katholieke Universiteit Leuven

2011, 2013, 2018 Niels Mller

2018 Red Hat, Inc.

2019 Dmitry Eremin-Solenikov

License: LGPLv3+_or_GPLv2+

Files: lib/nettle/gost/acpkm.c lib/nettle/gost/acpkm.h

Copyright: 2018 Dmitry Eremin-Solenikov

License: LGPLv3+_or_GPLv2+

Files: lib/nettle/gost/cmac-kuznyechik.c lib/nettle/gost/cmac-magma.c
lib/nettle/gost/magma.c
Copyright: 2017 Dmitry Eremin-Solenikov <dbaryshkov@gmail.com>
License: Expat

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Files: lib/nettle/int/drbg-aes.h lib/nettle/int/dsa-fips.h
lib/nettle/int/dsa-keygen-fips186.c lib/nettle/int/dsa-validate.c
lib/nettle/int/provable-prime.c
Copyright: 2013 Red Hat | Copyright 2013, 2014 Red Hat
License: LGPLv3+_or_GPLv2+

Files: lib/nettle/int/drbg-aes-self-test.c lib/nettle/gost/cmac.h
Copyright: 2013 2017 Red Hat
2008 Free Software Foundation, Inc.
License: LGPLv3+_or_GPLv2+

Files: lib/nettle/int/rsa-keygen-fips186.c
Copyright: 2002 Niels Miller
2014 Red Hat
License: LGPLv3+_or_GPLv2+

Files: lib/nettle/gost/bignum-le.c lib/nettle/gost/bignum-le.h
Copyright: 2001 Niels Miller
License: LGPLv3+_or_GPLv2+

Files: lib/nettle/gost/write-le32.c
Copyright: 2001, 2011 Niels Miller

License: LGPLv3+_or_GPLv2+

Files: lib/nettle/int/block8.h

Copyright: 2005, 2014 Niels Mller

License: LGPLv3+_or_GPLv2+

Files: lib/nettle/int/mpn-base256.c

lib/nettle/int/mpn-base256.h

Copyright: 2013 Niels Mller

2013 Red Hat

License: LGPLv3+_or_GPLv2+

Files: lib/nettle/gost/gost28147.h

Copyright: 2015 Dmitry Eremin-Solenikov

2012 Nikos Mavrogiannopoulos, Niels Mller

License: LGPLv3+_or_GPLv2+

Files: lib/nettle/gost/streebog-meta.c

Copyright: 2012 Nikos Mavrogiannopoulos, Niels Mller

License: LGPLv3+_or_GPLv2+

Files: lib/nettle/gost/hmac-gost.h

Copyright: 2001, 2002 Niels Mller

License: LGPLv3+_or_GPLv2+

Files: lib/nettle/gost/hmac-streebog.c

Copyright: 2016 Dmitry Eremin-Solenikov

License: LGPLv3+_or_GPLv2+

Files: lib/nettle/gost/nettle-write.h

Copyright: 2010 Niels Mller

License: LGPLv3+_or_GPLv2+

Files: lib/nettle/gost/streebog.c

Copyright: 2013-2015 Dmitry Eremin-Solenikov

Comment: Based on my code in libgrypt.

License: LGPLv3+_or_GPLv2+

Files: lib/nettle/gost/streebog.h

Copyright: 2015 Dmitry Eremin-Solenikov

License: LGPLv3+_or_GPLv2+

Files: lib/nettle/gost/kuznyechik.c lib/nettle/gost/kuznyechik.h

lib/nettle/gost/magma.h

Copyright: 2017 Dmitry Eremin-Solenikov <dbaryshkov@gmail.com>

License: LGPLv3+_or_GPLv2+

Files: lib/nettle/gost/gostdsa2.h

Copyright: 2015 Dmitry Eremin-Solenikov

2013 Niels Mller

License: LGPLv3+_or_GPLv2+

Files: lib/nettle/gost/gostdsa-mask.c

Copyright: 2018 Dmitry Eremin-Solenikov

License: LGPLv3+_or_GPLv2+

Files: lib/nettle/gost/gost-wrap.c

Copyright: 2015, 2016 Dmitry Eremin-Solenikov <dbaryshkov@gmail.com>

2009-2012 Aleksey Kravchenko <rhash.admin@gmail.com>

License: LGPLv3+_or_GPLv2+

- * Permission is hereby granted, free of charge, to any person obtaining a
- * copy of this software and associated documentation files (the
- * "Software"), to deal in the Software without restriction, including
- * without limitation the rights to use, copy, modify, merge, publish,
- * distribute, sublicense, and/or sell copies of the Software, and to
- * permit persons to whom the Software is furnished to do so, subject to
- * the following conditions:
- *
- * The above copyright notice and this permission notice shall be included
- * in all copies or substantial portions of the Software.
- *
- * THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS
- * OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF
- * MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.
- * IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY
- * CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT,
- * TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE
- * SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Files: lib/nettle/gost/gost28147.c

Copyright: 2015-2015 Dmitry Eremin-Solenikov <dbaryshkov@gmail.com>

Copyright: 2009-2012 Aleksey Kravchenko <rhash.admin@gmail.com>

License:

based on Russian standard GOST 28147-89

- * For English description, check RFC 5830.
- * S-Boxes are expanded from the tables defined in RFC4357:
- * <https://tools.ietf.org/html/rfc4357>
- *
- * Permission is hereby granted, free of charge, to any person obtaining a
- * copy of this software and associated documentation files (the
- * "Software"), to deal in the Software without restriction, including
- * without limitation the rights to use, copy, modify, merge, publish,
- * distribute, sublicense, and/or sell copies of the Software, and to
- * permit persons to whom the Software is furnished to do so, subject to
- * the following conditions:

*
* The above copyright notice and this permission notice shall be included
* in all copies or substantial portions of the Software.
*
* THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS
* OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF
* MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.
* IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY
* CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT,
* TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE
* SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Files: lib/nettle/rnd-fuzzer.c

Copyright 2017 Red Hat

Copyright 1995-2017 Free Software Foundation, Inc.

License

* This file is part of the GNU C Library.
* Contributed by Ulrich Drepper <drepper@gnu.ai.mit.edu>, August 1995.
*
* This file is part of GnuTLS.
*
* Libgcrypt is free software; you can redistribute it and/or modify
* it under the terms of the GNU Lesser General Public License as
* published by the Free Software Foundation; either version 2.1 of
* the License, or (at your option) any later version.
*
* Libgcrypt is distributed in the hope that it will be useful,
* but WITHOUT ANY WARRANTY; without even the implied warranty of
* MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
* GNU Lesser General Public License for more details.
*
* You should have received a copy of the GNU Lesser General Public
* License along with this program; if not, see <<http://www.gnu.org/licenses/>>.

Files: lib/name_val_array.h

License: LGPLv3+_or_GPLv2+

Copyright: 2011-2019 Free Software Foundation, Inc.

2019 Red Hat, Inc

License: LGPLv3+_or_GPLv2+

* This program is free software: you can redistribute it and/or
* modify it under the terms of either:
*
* * the GNU Lesser General Public License as published by the Free
* Software Foundation; either version 3 of the License, or (at your
* option) any later version.
*
* or

- *
 - * * the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.
- *
 - * or both in parallel, as here.
- *
 - * This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.
- *
 - * You should have received copies of the GNU General Public License and the GNU Lesser General Public License along with this program. If not, see <http://www.gnu.org/licenses/>.

Files: tests/no-extensions.c tests/system-override-curves.sh
 tests/system-override-hash.c tests/resume-lifetime.c
 tests/system-override-kx.sh tests/system-override-profiles.sh
 tests/system-override-sig.c tests/system-override-sig-hash.sh
 tests/system-override-tls.sh tests/system-override-versions.sh
 tests/iov.c tests/tls13-without-timeout-func.c
 tests/cert-tests/certtool-crl-decoding.sh
 tests/cert-tests/certtool-long-cn.sh tests/cert-tests/certtool-long-oids.sh
 tests/cert-tests/certtool-subca.sh tests/cert-tests/certtool-utf8.sh
 tests/cert-tests/crq.sh tests/cert-tests/inhibit-anypolicy.sh
 tests/cert-tests/pkcs12-utf8.s tests/cert-tests/pkcs7-broken-sigs.sh
 tests/cert-tests/pkcs7-constraints2.sh tests/cert-tests/pkcs7-constraints.sh
 tests/cert-tests/pkcs7-eddsa.sh tests/cert-tests/privkey-import.sh
 tests/cert-tests/provable-dh-default.sh tests/cert-tests/provable-dh.sh
 tests/ocsp-tests/ocsp-load-chain.sh
 tests/ocsp-tests/ocsp-must-staple-connection.sh
 tests/ocsp-tests/ocsptool.sh
 tests/tls13/hello_retry_request_resume.c
 License: GPLv3+
 Copyright: 2014-2020 Red Hat, Inc

Files: tests/server-weak-keys.sh tests/cert-tests/alt-chain.sh
 tests/cert-tests/cert-critical.sh tests/cert-tests/certtool-ecdsa.sh
 tests/cert-tests/certtool-eddsa.sh tests/cert-tests/certtool-rsa-pss.sh
 tests/cert-tests/certtool-verify-profiles.sh tests/cert-tests/crl.sh
 tests/cert-tests/illegal-rsa.sh tests/cert-tests/invalid-sig.sh
 tests/cert-tests/pkcs7-cat.sh tests/cert-tests/pkcs8.sh
 tests/cert-tests/provable-privkey-dsa2048.sh
 tests/cert-tests/provable-privkey-gen-default.sh
 tests/cert-tests/provable-privkey-rsa2048.sh
 tests/cert-tests/provable-privkey.sh tests/ocsp-tests/ocsp-test.sh
 License: GPLv3+

Copyright: 2014-2018 Nikos Mavrogiannopoulos

Files: tests/openconnect-dtls12.c tests/system-override-invalid.sh
tests/system-override-sig-hash.sh tests/cert-tests/x509-duplicate-ext.sh
License: GPLv3+
Copyright: 2019 Nikos Mavrogiannopoulos

Files: tests/rfc7633-ok.c
License: GPLv3+
Copyright: 2016-2019 Tim Kosse
2019 Nikos Mavrogiannopoulos

Files: tests/rfc7633-missing.c
License: GPLv3+
Copyright: 2016 Tim Kosse

Files: tests/sign-verify-data-newapi.c tests/cert-tests/cert-non-digits-time.sh
tests/cert-tests/reject-invalid-time.sh
tests/cert-tests/tolerate-invalid-time.sh
tests/gnutls-ids.c tests/cert-tests/cert-sanity.sh
tests/cert-tests/cert-time.sh tests/pkcs11/list-objects.c
tests/cert-tests/smime.sh tests/cert-tests/tlsfeature-test.sh
tests/dtls/dtls-resume.sh
License: GPLv3+
Copyright: 2016-2017 Red Hat, Inc.

Files: tests/kdf-api.c lib/fipshmac.c
License: LGPLv2.1+
Copyright: 2020 Red Hat, Inc.

Files: tests/missingissuer_aia.c tests/missingissuer.c
License: GPLv3+
Copyright: 2008-2014 Free Software Foundation, Inc.

Files: tests/test-chains-issuer-aia.h tests/test-chains-issuer.h
tests/cert-tests/key-invalid.sh tests/cert-tests/md5-test.sh
tests/cert-tests/pkcs12-encode.sh
License: GPLv3+
Copyright: 2004-2016 Free Software Foundation, Inc.
2016 2017 Red Hat, Inc.

Files: tests/set_x509_ocsp_multi_cli.c tests/handshake-write.c
License: GPLv3+
Copyright: 2020 Red Hat, Inc.

Files: tests/status-request-revoked.c tests/cert-tests/certtool.sh
tests/cert-tests/pkcs7.sh
License: GPLv3+

Copyright: 2014-2018 Nikos Mavrogiannopoulos
2018 2020 Red Hat, Inc.

Files: tests/resume-with-record-size-limit.c
License: GPLv3+
Copyright: 2004-2016 Free Software Foundation, Inc.
2013 Adam Sampson <ats@offog.org>
2016-2019 Red Hat, Inc.

Files: tests/cipher-alignment.c
License: GPLv3+
Copyright: 2004-2015 Free Software Foundation, Inc.
2013 Adam Sampson <ats@offog.org>
2015 Red Hat, Inc

Files: tests/x509-server-verify.c tests/cert-tests/krb5-test.sh
tests/cert-tests/name-constraints.sh tests/cert-tests/othername-test.sh
License: GPLv3+
Copyright: 2015 Red Hat, Inc.
2019 Nikos Mavrogiannopoulos

Files: tests/tls13/key_update_multiple.c tests/sign-verify-deterministic.c
License: GPLv3+
Copyright: 2017-2019 Red Hat, Inc.

Files: tests/tls13/no-auto-send-ticket.c
License: GPLv3+
Copyright: 2017-2020 Red Hat, Inc.

Files: tests/sign-verify-newapi.c
License: GPLv3+
Copyright: 2004-2012 Free Software Foundation, Inc.
2017-2019 Red Hat, Inc.

Files: tests/buffer.c
License: GPLv3+
Copyright: 2019 Tim Rhsen

Files: tests/gnutls-cli-rawpk.sh
License: GPLv3+
Copyright: 2019 Tom Vrancken (dev@tomvrancken.nl)

Files: tests/system-override-default-priority-string.sh
License: GPLv3+
Copyright: 2019 Canonical, Ltd.

Files: tests/x509cert-dntypes.c
License: GPLv3+

Copyright: 2020 Pierre Ossman for Cendio AB

Files: fuzz/gnutls_ext_raw_parse_fuzzer.c tests/keylog-func.c

License: LGPLv2.1+

Copyright: 2019 Red Hat, Inc.

Files: tests/psksself2.c

Copyright: 2004-2012 Free Software Foundation, Inc.

2013 Adam Sampson <ats@offog.org>

2019 Free Software Foundation, Inc.

License: GPLv3+

Files: tests/cert-tests/pkcs12-gost.sh

Copyright: 2018 Dmitry Eremin-Solenikov

2016 Red Hat, Inc.

License: GPLv3+

Files: tests/cert-tests/pkcs7-list-sign.sh

Copyright: 2017 Karl Tarbe

License: GPLv3+

Files: tests/cert-tests/pkcs8-gost.sh

Copyright: 2018 Dmitry Eremin-Solenikov

2004-2006, 2010, 2012 Free Software Foundation, Inc.

License: GPLv3+

Files: tests/id-on-xmppAddr.c

Copyright: 2021 Steffen Jaeckel

License: GPLv3+

Files: tests/ocsp-tests/ocsp-tls-connection.sh

Copyright: 2016 Thomas Klute

License: GPLv3+

Files: lib/inih/*

Copyright: 2009-2019, Ben Hoyt

License: BSD-3-Clause

All rights reserved.

.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of Ben Hoyt nor the names of its contributors

may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY BEN HOYT "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL BEN HOYT BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Comment: <https://github.com/benhoyt/inih>

~

Apache Xalan v2.7.2

Apache Xalan Notice

<pre>

```
=====
====
== NOTICE file corresponding to the section 4d of the Apache License, Version 2.0, ==
== in this case for the Apache Xalan distribution. ==
=====
=====
```

This product includes software developed by
The Apache Software Foundation (<http://www.apache.org/>).

Specifically, we only include the XSLTC portion of the source from the Xalan distribution.
The Xalan project has two processors: an interpretive one (Xalan Interpretive) and a
compiled one (The XSLT Compiler (XSLTC)). We *only* use the XSLTC part of Xalan; We use
the source from the packages that are part of the XSLTC sources.

Portions of this software was originally based on the following:

- software copyright (c) 1999-2002, Lotus Development Corporation., <http://www.lotus.com>.
- software copyright (c) 2001-2002, Sun Microsystems., <http://www.sun.com>.
- software copyright (c) 2003, IBM Corporation., <http://www.ibm.com>.
- voluntary contributions made by Ovidiu Predescu (ovidiu@cup.hp.com) on behalf of the Apache Software Foundation and was originally developed at Hewlett Packard Company.

</pre>

Apache 2.0 License

<pre>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including

the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

(a) You must give any other recipients of the Work or Derivative Works a copy of this License; and

- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each

Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License.

You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

JLEX COPYRIGHT NOTICE, LICENSE AND DISCLAIMER.

Copyright 1996-2003 by Elliot Joel Berk and C. Scott Ananian
Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both the copyright notice and this permission notice and warranty disclaimer appear in supporting documentation, and that the name of the authors or their employers not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

The authors and their employers disclaim all warranties with regard to this software, including all implied warranties of merchantability and fitness. In no event shall the authors or their employers be liable for any special, indirect or consequential damages or any damages whatsoever resulting from loss of use, data or profits, whether in an action of contract, negligence or other tortious action, arising out of or in connection with the use or performance of this software. The portions of JLex output which are hard-coded into the JLex source code are (naturally) covered by this same license.

```
</pre>  
## jopt-simple v5.0.4
```

```
### MIT License  
<pre>
```

Copyright (c) 2004-2015 Paul R. Holser, Jr.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be

included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

</pre>

OPENJDK ASSEMBLY EXCEPTION

The OpenJDK source code made available by Oracle America, Inc. (Oracle) at openjdk.java.net ("OpenJDK Code") is distributed under the terms of the GNU General Public License <<http://www.gnu.org/copyleft/gpl.html>> version 2 only ("GPL2"), with the following clarification and special exception.

Linking this OpenJDK Code statically or dynamically with other code is making a combined work based on this library. Thus, the terms and conditions of GPL2 cover the whole combination.

As a special exception, Oracle gives you permission to link this OpenJDK Code with certain code licensed by Oracle as indicated at <http://openjdk.java.net/legal/exception-modules-2007-05-08.html> ("Designated Exception Modules") to produce an executable, regardless of the license terms of the Designated Exception Modules, and to copy and distribute the resulting executable under GPL2, provided that the Designated Exception Modules continue to be governed by the licenses under which they were offered by Oracle.

As such, it allows licensees and sublicensees of Oracle's GPL2 OpenJDK Code to build an executable that includes those portions of necessary code that Oracle could not provide under GPL2 (or that Oracle has provided under GPL2 with the Classpath exception). If you modify or add to the OpenJDK code, that new GPL2 code may still be combined with Designated Exception Modules if the new code is made subject to this exception by its copyright holder.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: grep

Upstream-Contact: bug-grep@gnu.org

Source: <https://savannah.gnu.org/projects/grep>

[git://git.savannah.gnu.org/grep.git](https://git.savannah.gnu.org/grep.git)

Files: *

Copyright: 1992, 1997-2002, 2004-2012 Free Software Foundation, Inc.

2004, Stepan Kasal <kasal@ucw.cz>

2007, Tony Abou-Assaleh <taa@acm.org>

2009-2012, Jim Meyering <jim@meyering.net> and Paolo Bonzini <bonzini@gnu.org>

License: GPL-3+

Files: debian/*

Copyright: 2005-2013 Anibal Monsalve Salazar <anibal@debian.org> and Santiago Ruano Rincón <santiago@debian.org>

2003-2004 Ryan M. Golbeck <rmgolbeck@debian.org>

2003, Jeff Bailey <jbailey@nisa.net>

2003, Clint Adams <schizo@debian.org> Mon, 10 Mar 2003 02:10:32 -0500

2001 Robert van der Meulen <rvidm@debian.org>

1996-2000 Wichert Akkerman <>wakkerma@debian.org>

License: GPL-3+

License: GPL-3+

Copyright (C) 1992, 1997, 1998, 1999, 2000, 2001, 2002, 2004, 2005, 2006, 2007, 2008, 2009 Free Software Foundation, Inc.

.

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street - Fifth Floor, Boston, MA 02110-1301, USA.

.

Comment:

.

On a Debian system you can find a copy of this license in /usr/share/common-licenses/GPL-3.

This is the Debian package for libselinux, and it is built from sources obtained from: <http://userspace.selinuxproject.org/trac/wiki/Releases>

This package was debianized by Colin Walters <walters@debian.org> on Thu, 3 Jul 2003 17:10:57 -0400.

This library (libselinux) is public domain software, i.e. not copyrighted.

Warranty Exclusion

You agree that this software is a non-commercially developed program that may contain "bugs" (as that

term is used in the industry) and that it may not function as intended. The software is licensed "as is". NSA makes no, and hereby expressly disclaims all, warranties, express, implied, statutory, or otherwise with respect to the software, including noninfringement and the implied warranties of merchantability and fitness for a particular purpose.

Limitation of Liability

In no event will NSA be liable for any damages, including loss of data, lost profits, cost of cover, or other special, incidental, consequential, direct or indirect damages arising from the software or the use thereof, however caused and on any theory of liability. This limitation will apply even if NSA has been advised of the possibility of such damage. You acknowledge that this is a reasonable allocation of risk.

However, one file (utils/avcstat.c) is
Copyright: 2004 Red Hat, Inc., James Morris <jmorris@redhat.com>
and is distributed under the terms of the GNU General Public License, version 2.

In addition, The Debian specific package was modified to include an excerpt from the GNU libc package in the file
utils/ia64-inline-syscall.h. The GNU C Library is distributed under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

You should have received a copy of the GNU Lesser General Public License along with the GNU C Library; if not, write to
Free Software Foundation, Inc., 51 Franklin St, Fifth Floor,
Boston, MA 02110-1301, USA.

On Debian systems, the complete text of the GNU Library
General Public License can be found in ``/usr/share/common-licenses/LGPL-2.1'``.

This package is maintained by Manoj Srivastava <srivasta@debian.org>.

The Debian specific changes are 2005, 2006, Manoj Srivastava
<srivasta@debian.org>, and distributed under the terms of the GNU
General Public License, version 2.

On Debian GNU/Linux systems, the complete text of the GNU General
Public License can be found in ``/usr/share/common-licenses/GPL-2'``.

A copy of the GNU General Public License is also available at <http://www.gnu.org/copyleft/gpl.html>. You may also obtain it by writing to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301, USA.

Manoj Srivastava <srivasta@debian.org>

arch-tag: d4250e44-a0e0-4ee0-adb9-2bd74f6eeb27

This is the Debian GNU/Linux prepackaged version of the GNU compiler collection, containing Ada, C, C++, D, Fortran 95, Go, Objective-C, Objective-C++, and Modula-2 compilers, documentation, and support libraries. In addition, Debian provides the gm2 compiler, either in the same source package, or built from a separate same source package.

Packaging is done by the Debian GCC Maintainers <debian-gcc@lists.debian.org>, with sources obtained from:

<ftp://gcc.gnu.org/pub/gcc/releases/> (for full releases)

<svn://gcc.gnu.org/svn/gcc/> (for prereleases)

<ftp://sourceware.org/pub/newlib/> (for newlib)

<git://git.savannah.gnu.org/gm2.git> (for Modula-2)

The current gcc-10 source package is taken from the SVN gcc-10-branch.

Changes: See changelog.Debian.gz

Debian splits the GNU Compiler Collection into packages for each language, library, and documentation as follows:

| Language | Compiler package | Library package | Documentation |
|---------------|------------------|-----------------|-------------------|
| Ada | gnat-10 | libgnat-10 | gnat-10-doc |
| BRIG | gccbrig-10 | libhsail-rt0 | |
| C | gcc-10 | gcc-10-doc | |
| C++ | g++-10 | libstdc++6 | libstdc++6-10-doc |
| D | gdc-10 | | |
| Fortran 95 | gfortran-10 | libgfortran5 | gfortran-10-doc |
| Go | gccgo-10 | libgo0 | |
| Objective C | gobjc-10 | libobjc4 | |
| Objective C++ | gobjc++-10 | | |
| Modula-2 | gm2-10 | libgm2 | |

For some language run-time libraries, Debian provides source files, development files, debugging symbols and libraries containing position-independent code in separate packages:

| Language | Sources | Development | Debugging | Position-Independent |
|----------|---------|-------------------|-------------------|----------------------|
| C++ | | libstdc++6-10-dbg | libstdc++6-10-pic | |

D libphobos-10-dev

Additional packages include:

All languages:

| | |
|---------------------------|-------------------------------------|
| libgcc1, libgcc2, libgcc4 | GCC intrinsics (platform-dependent) |
| gcc-10-base | Base files common to all compilers |
| gcc-10-soft-float | Software floating point (ARM only) |
| gcc-10-source | The sources with patches |

Ada:

libgnat-util10-dev, libgnat-util10 GNAT version library

C:

| | |
|----------------------|---------------------------------------|
| cpp-10, cpp-10-doc | GNU C Preprocessor |
| libssp0-dev, libssp0 | GCC stack smashing protection library |
| libquadmath0 | Math routines for the __float128 type |
| fixincludes | Fix non-ANSI header files |

C, C++ and Fortran 95:

libgomp1-dev, libgomp1 GCC OpenMP (GOMP) support library
libitm1-dev, libitm1 GNU Transactional Memory Library

Biarch support: On some 64-bit platforms which can also run 32-bit code, Debian provides additional packages containing 32-bit versions of some libraries. These packages have names beginning with 'lib32' instead of 'lib', for example lib32stdc++6. Similarly, on some 32-bit platforms which can also run 64-bit code, Debian provides additional packages with names beginning with 'lib64' instead of 'lib'. These packages contain 64-bit versions of the libraries. (At this time, not all platforms and not all libraries support biarch.) The license terms for these lib32 or lib64 packages are identical to the ones for the lib packages.

COPYRIGHT STATEMENTS AND LICENSING TERMS

GCC is Copyright (C) 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019
Free Software Foundation, Inc.

GCC is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3, or (at your option) any later version.

GCC is distributed in the hope that it will be useful, but WITHOUT ANY

WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

Files that have exception clauses are licensed under the terms of the GNU General Public License; either version 3, or (at your option) any later version.

On Debian GNU/Linux systems, the complete text of the GNU General Public License is in ``usr/share/common-licenses/GPL'`, version 3 of this license in ``usr/share/common-licenses/GPL-3'`.

The following runtime libraries are licensed under the terms of the GNU General Public License (v3 or later) with version 3.1 of the GCC Runtime Library Exception (included in this file):

- libgcc (libgcc/, gcc/libgcc2.[ch], gcc/unwind*, gcc/gthr*, gcc/coretypes.h, gcc/crtstuff.c, gcc/defaults.h, gcc/dwarf2.h, gcc/emults.c, gcc/gbl-ctors.h, gcc/gcov-io.h, gcc/libgcov.c, gcc/tsystem.h, gcc/typeclass.h).
- libatomic
- libdecnumber
- libgomp
- libitm
- libssp
- libstdc++-v3
- libobjc
- libgfortran
- The libgnat-10 Ada support library and libgnat-util10 library.
- Various config files in gcc/config/ used in runtime libraries.
- libvtv

The libbacktrace library is licensed under the following terms:

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- (1) Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- (2) Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- (3) The name of the author may not be used to endorse or promote products derived from this software without

specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The libsanitizer libraries (libasan, liblsan, libtsan, libubsan) are licensed under the following terms:

Copyright (c) 2009-2019 by the LLVM contributors.

All rights reserved.

Developed by:

LLVM Team

University of Illinois at Urbana-Champaign

<http://llvm.org>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal with the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimers.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimers in the documentation and/or other materials provided with the distribution.
- * Neither the names of the LLVM Team, University of Illinois at Urbana-Champaign, nor the names of its contributors may be used to endorse or promote products derived from this Software without specific prior written permission.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE CONTRIBUTORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS WITH THE SOFTWARE.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

The libffi library is licensed under the following terms:

libffi - Copyright (c) 1996-2003 Red Hat, Inc.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL CYGNUS SOLUTIONS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE,

ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

The documentation is licensed under the GNU Free Documentation License (v1.2). On Debian GNU/Linux systems, the complete text of this license is in `~/usr/share/common-licenses/GFDL-1.2'`.

GCC RUNTIME LIBRARY EXCEPTION

Version 3.1, 31 March 2009

Copyright (C) 2009 Free Software Foundation, Inc. <<http://fsf.org/>>

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

This GCC Runtime Library Exception ("Exception") is an additional permission under section 7 of the GNU General Public License, version 3 ("GPLv3"). It applies to a given file (the "Runtime Library") that bears a notice placed by the copyright holder of the file stating that the file is governed by GPLv3 along with this Exception.

When you use GCC to compile a program, GCC may combine portions of certain GCC header files and runtime libraries with the compiled program. The purpose of this Exception is to allow compilation of non-GPL (including proprietary) programs to use, in this way, the header files and runtime libraries covered by this Exception.

0. Definitions.

A file is an "Independent Module" if it either requires the Runtime Library for execution after a Compilation Process, or makes use of an interface provided by the Runtime Library, but is not otherwise based on the Runtime Library.

"GCC" means a version of the GNU Compiler Collection, with or without modifications, governed by version 3 (or a specified later version) of the GNU General Public License (GPL) with the option of using any subsequent versions published by the FSF.

"GPL-compatible Software" is software whose conditions of propagation, modification and use would permit combination with GCC in accord with the license of GCC.

"Target Code" refers to output from any compiler for a real or virtual target processor architecture, in executable form or suitable for

input to an assembler, loader, linker and/or execution phase. Notwithstanding that, Target Code does not include data in any format that is used as a compiler intermediate representation, or used for producing a compiler intermediate representation.

The "Compilation Process" transforms code entirely represented in non-intermediate languages designed for human-written code, and/or in Java Virtual Machine byte code, into Target Code. Thus, for example, use of source code generators and preprocessors need not be considered part of the Compilation Process, since the Compilation Process can be understood as starting with the output of the generators or preprocessors.

A Compilation Process is "Eligible" if it is done using GCC, alone or with other GPL-compatible software, or if it is done without using any work based on GCC. For example, using non-GPL-compatible Software to optimize any GCC intermediate representations would not qualify as an Eligible Compilation Process.

1. Grant of Additional Permission.

You have permission to propagate a work of Target Code formed by combining the Runtime Library with Independent Modules, even if such propagation would otherwise violate the terms of GPLv3, provided that all Target Code was generated by Eligible Compilation Processes. You may then convey such a combination under terms of your choice, consistent with the licensing of the Independent Modules.

2. No Weakening of GCC Copyleft.

The availability of this Exception does not imply any general presumption that third-party software is unaffected by the copyleft requirements of the license of GCC.

libquadmath/*.[\[hc\]](#):

Copyright (C) 2010 Free Software Foundation, Inc.
Written by Francois-Xavier Coudert <fxcoudert@gcc.gnu.org>
Written by Tobias Burnus <burnus@net-b.de>

This file is part of the libiberty library.
Libiberty is free software; you can redistribute it and/or modify it under the terms of the GNU Library General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

Libiberty is distributed in the hope that it will be useful,

but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Library General Public License for more details.

libquadmath/math:

atanq.c, expm1q.c, j0q.c, j1q.c, log1pq.c, logq.c:

Copyright 2001 by Stephen L. Moshier <moshier@na-net.ornl.gov>

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

coshq.c, erfq.c, jnq.c, lgammaq.c, powq.c, roundq.c:

Changes for 128-bit __float128 are

Copyright (C) 2001 Stephen L. Moshier <moshier@na-net.ornl.gov>

and are incorporated herein by permission of the author. The author reserves the right to distribute this material elsewhere under different copying permissions. These modifications are distributed here under the following terms:

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

ldexpq.c:

- * Conversion to long double by Ulrich Drepper,
- * Cygnus Support, drepper@cygnus.com.

cosq_kernel.c, expq.c, sincos_table.c, sincosq.c, sincosq_kernel.c, sinq_kernel.c, truncq.c:

Copyright (C) 1997, 1999 Free Software Foundation, Inc.

The GNU C Library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either

version 2.1 of the License, or (at your option) any later version.

The GNU C Library is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU
Lesser General Public License for more details.

isinfq.c:

- * Written by J.T. Conklin <jtc@netbsd.org>.
- * Change for long double by Jakub Jelinek <jj@ultra.linux.cz>
- * Public domain.

llroundq.c, lroundq.c, tgammaq.c:

Copyright (C) 1997, 1999, 2002, 2004 Free Software Foundation, Inc.

This file is part of the GNU C Library.

Contributed by Ulrich Drepper <drepper@cygnus.com>, 1997 and
Jakub Jelinek <jj@ultra.linux.cz>, 1999.

The GNU C Library is free software; you can redistribute it and/or
modify it under the terms of the GNU Lesser General Public
License as published by the Free Software Foundation; either
version 2.1 of the License, or (at your option) any later version.

The GNU C Library is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU
Lesser General Public License for more details.

log10q.c:

Cephes Math Library Release 2.2: January, 1991

Copyright 1984, 1991 by Stephen L. Moshier

Adapted for glibc November, 2001

This library is free software; you can redistribute it and/or
modify it under the terms of the GNU Lesser General Public
License as published by the Free Software Foundation; either
version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU
Lesser General Public License for more details.

remaining files:

- * Copyright (C) 1993 by Sun Microsystems, Inc. All rights reserved.
- *
- * Developed at SunPro, a Sun Microsystems, Inc. business.

- * Permission to use, copy, modify, and distribute this
- * software is freely granted, provided that this notice
- * is preserved.

gcc/go/gofrontend, libgo:

Copyright (c) 2009 The Go Authors. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of Google Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

D:

gdc-10 GNU D Compiler
libphobos-10-dev D standard runtime library

The D source package is made up of the following components.

The D front-end for GCC:

- d/*

Copyright (C) 2004-2007 David Friedman

Modified by Vincenzo Ampolo, Michael Parrot, Iain Buclaw, (C) 2009, 2010

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

On Debian GNU/Linux systems, the complete text of the GNU General Public License is in ``usr/share/common-licenses/GPL'`, version 2 of this license in ``usr/share/common-licenses/GPL-2'`.

The DMD Compiler implementation of the D programming language:
- d/dmd/*

Copyright (c) 1999-2010 by Digital Mars
All Rights Reserved
written by Walter Bright
<http://www.digitalmars.com>
License for redistribution is by either the Artistic License or the GNU General Public License (v1).

On Debian GNU/Linux systems, the complete text of the GNU General Public License is in ``usr/share/common-licenses/GPL'`, the Artistic license in ``usr/share/common-licenses/Artistic'`.

The Zlib data compression library:
- d/phobos/etc/c/zlib/*

(C) 1995-2004 Jean-loup Gailly and Mark Adler

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

The Phobos standard runtime library:

- d/phobos/*

Unless otherwise marked within the file, each file in the source is under the following licenses:

Copyright (C) 2004-2005 by Digital Mars, www.digitalmars.com
Written by Walter Bright

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, in both source and binary form, subject to the following restrictions:

- o The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
- o Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
- o This notice may not be removed or altered from any source distribution.

By plainly marking modifications, something along the lines of adding to each file that has been changed a "Modified by Foo Bar" line underneath the "Written by" line would be adequate.

The libhsail-rt library is licensed under the following terms:

Copyright (C) 2015-2017 Free Software Foundation, Inc.
Contributed by Pekka Jaaskelainen <pekka.jaaskelainen@parmance.com>
for General Processor Tech.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS

OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

libhsail-rt/rt/fp16.c is licensed under the following terms:

Copyright (C) 2008-2017 Free Software Foundation, Inc.
Contributed by CodeSourcery.

This file is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3, or (at your option) any later version.

This file is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

Under Section 7 of GPL version 3, you are granted additional permissions described in the GCC Runtime Library Exception, version 3.1, as published by the Free Software Foundation.

You should have received a copy of the GNU General Public License and a copy of the GCC Runtime Library Exception along with this program; see the files COPYING3 and COPYING.RUNTIME respectively. If not, see <http://www.gnu.org/licenses/>.

gcc/m2:
gcc/m2/gm2-libiberty:
gcc/m2/mc-boot/
gcc/m2/mc-boot-ch/
Copyright (C) 2001-2019 Free Software Foundation, Inc.
Contributed by Gaius Mulley <gaius@glam.ac.uk>.

This file is part of GNU Modula-2.

GNU Modula-2 is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3, or (at your option) any later version.

GNU Modula-2 is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU

General Public License for more details.

gcc/m2/**/*/.texi:

Copyright (C) 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2012, 2013 Free Software Foundation, Inc.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts.

gcc/m2/gm2-coroutines:

gcc/m2/gm2-libs:

gcc/m2/gm2-libs-min:

gcc/m2/gm2-libs-pim:

gcc/m2/gm2-libs-ch:

Copyright (C) 2002-2019 Free Software Foundation, Inc.

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

Under Section 7 of GPL version 3, you are granted additional permissions described in the GCC Runtime Library Exception, version 3.1, as published by the Free Software Foundation.

gcc/m2/gm2-libs-iso/:

This has a mix of licenses, most as GPL-3+ plus GCC Runtime Library Exception, version 3.1.

gcc/m2/gm2-libs-iso/*/.def:

Library module defined by the International Standard Information technology - programming languages
BS ISO/IEC 10514-1:1996E Part 1: Modula-2, Base Language.

Copyright ISO/IEC (International Organization for Standardization and International Electrotechnical Commission) 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010

Copyright (C) 2001-2019 Free Software Foundation, Inc.
mix of GPL-3.0 and LGPL-2.1/3

Copyright (C) 2001-2019 Free Software Foundation, Inc.
mix of GPL-3.0 and LGPL-2.1/3

gcc/m2/examples:

Copyright (C) 2005-2015 Free Software Foundation, Inc.
Mix of LGPL-2.1 and GPL-3.0.

gcc/m2/images:

GPL-3+

gcc/m2/el/gm2-mode.el:

```
:: Everyone is granted permission to copy, modify and redistribute
:: GNU Emacs, but only under the conditions described in the
:: GNU Emacs General Public License. A copy of this license is
:: supposed to have been given to you along with GNU Emacs so you
:: can know your rights and responsibilities. It should be in a
:: file named COPYING. Among other things, the copyright notice
:: and this notice must be preserved on all copies.
```

Copyright (C) 2001-2018 Free Software Foundation, Inc.
Contributed by Gaius Mulley <gaius@glam.ac.uk>.
Mix of GPL-3 and LGPL-2.1.

gcc/testsuite/gm2/:

Copyright (C) 2001-2019 Free Software Foundation, Inc.
Mix of GPL-2+ and GPL-3+

libgm2:

libgm2/libiso/:

libgm2/libpim/:

libgm2/liblog/:

libgm2/libcor/:

libgm2/libmin/:

Copyright (C) 2002-2019 Free Software Foundation, Inc.

This library is free software; you can redistribute it and/or
modify it under the terms of the GNU Lesser General Public
License as published by the Free Software Foundation; either
version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU
Lesser General Public License for more details.

Under Section 7 of GPL version 3, you are granted additional
permissions described in the GCC Runtime Library Exception, version

3.1, as published by the Free Software Foundation.

newlib-X.Y.Z/:

Upstream Authors:

newlib@sources.redhat.com

Jeff Johnston <jjohnstn@redhat.com>

Tom Fitzsimmons <fitzsim@redhat.com>

The newlib subdirectory is a collection of software from several sources. Each file may have its own copyright/license that is embedded in the source file.

This list documents those licenses which are more restrictive than a BSD-like license or require the copyright notice to be duplicated in documentation and/or other materials associated with the distribution. Certain licenses documented here only apply to specific targets. Certain clauses only apply if you are building the code as part of your binary.

Note that this list may omit certain licenses that only pertain to the copying/modifying of the individual source code. If you are distributing the source code, then you do not need to worry about these omitted licenses, so long as you do not modify the copyright information already in place.

Parts of this work are licensed under the terms of the GNU General Public License. On Debian systems, the complete text of this license can be found in /usr/share/common-licenses/GPL.

Parts of this work are licensed under the terms of the GNU Library General Public License. On Debian systems, the complete text of this license be found in /usr/share/common-licenses/LGPL.

(1) University of California, Berkeley

[1a]

Copyright (c) 1990 The Regents of the University of California.
All rights reserved.

Redistribution and use in source and binary forms are permitted provided that the above copyright notice and this paragraph are duplicated in all such forms and that any documentation, and other materials related to such distribution and use acknowledge that the software was developed by the University of California, Berkeley. The name of the University may not be used to endorse or promote products derived

from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

[1b]

Copyright (c) 1990 The Regents of the University of California.
All rights reserved.

Redistribution and use in source and binary forms are permitted provided that the above copyright notice and this paragraph are duplicated in all such forms and that any documentation, advertising materials, and other materials related to such distribution and use acknowledge that the software was developed by the University of California, Berkeley. The name of the University may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

[1c]

Copyright (c) 1981, 1983, 1986, 1988, 1989, 1991, 1992, 1993, 1994
The Regents of the University of California.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:
This product includes software developed by the University of California, Berkeley and its contributors.
4. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE

FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

[1d]

Copyright (c) 1988, 1990, 1993 Regents of the University of California.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

[1e]

Copyright (c) 1982, 1986, 1989, 1991, 1993, 1994
The Regents of the University of California. All rights reserved.
(c) UNIX System Laboratories, Inc.

All or some portions of this file are derived from material licensed to the University of California by American Telephone and Telegraph Co. or Unix System Laboratories, Inc. and are reproduced herein with the permission of UNIX System Laboratories, Inc.

Redistribution and use in source and binary forms, with or without

modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:
This product includes software developed by the University of California, Berkeley and its contributors.
4. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

[1f]

Copyright (c) 1987, 1988, 2000 Regents of the University of California.
All rights reserved.

Redistribution and use in source and binary forms are permitted provided that: (1) source distributions retain this entire copyright notice and comment, and (2) distributions including binaries display the following acknowledgement: ``This product includes software developed by the University of California, Berkeley and its contributors" in the documentation or other materials provided with the distribution and in all advertising materials mentioning features or use of this software. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Please note that in some of the above alternate licenses, there is a

statement regarding that acknowledgement must be made in any advertising materials for products using the code. This restriction no longer applies due to the following license change:

<ftp://ftp.cs.berkeley.edu/pub/4bsd/README.Impt.License.Change>

In some cases the defunct clause has been removed in modified newlib code and in some cases, the clause has been left as-is.

(2) Cygwin (cygwin targets only)

Copyright 2001 Red Hat, Inc.

This software is a copyrighted work licensed under the terms of the Cygwin license. Please consult the file "CYGWIN_LICENSE" for details.

(3) David M. Gay at AT&T

The author of this software is David M. Gay.

Copyright (c) 1991 by AT&T.

Permission to use, copy, modify, and distribute this software for any purpose without fee is hereby granted, provided that this entire notice is included in all copies of any software which is or includes a copy or modification of this software and in all copies of the supporting documentation for such software.

THIS SOFTWARE IS BEING PROVIDED "AS IS", WITHOUT ANY EXPRESS OR IMPLIED WARRANTY. IN PARTICULAR, NEITHER THE AUTHOR NOR AT&T MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND CONCERNING THE MERCHANTABILITY OF THIS SOFTWARE OR ITS FITNESS FOR ANY PARTICULAR PURPOSE.

(4) Advanced Micro Devices

Copyright 1989, 1990 Advanced Micro Devices, Inc.

This software is the property of Advanced Micro Devices, Inc (AMD) which specifically grants the user the right to modify, use and distribute this software provided this notice is not removed or altered. All other rights are reserved by AMD.

AMD MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, WITH REGARD TO THIS SOFTWARE. IN NO EVENT SHALL AMD BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING FROM THE FURNISHING, PERFORMANCE, OR USE OF THIS SOFTWARE.

So that all may benefit from your experience, please report any problems or suggestions about this software to the 29K Technical Support Center at 800-29-29-AMD (800-292-9263) in the USA, or 0800-89-1131 in the UK, or 0031-11-1129 in Japan, toll free. The direct dial number is 512-462-4118.

Advanced Micro Devices, Inc.
29K Support Products
Mail Stop 573
5900 E. Ben White Blvd.
Austin, TX 78741
800-292-9263

(5) C.W. Sandmann

Copyright (C) 1993 C.W. Sandmann

This file may be freely distributed as long as the author's name remains.

(6) Eric Backus

(C) Copyright 1992 Eric Backus

This software may be used freely so long as this copyright notice is left intact. There is no warranty on this software.

(7) Sun Microsystems

Copyright (C) 1993 by Sun Microsystems, Inc. All rights reserved.

Developed at SunPro, a Sun Microsystems, Inc. business.
Permission to use, copy, modify, and distribute this software is freely granted, provided that this notice is preserved.

(8) Hewlett Packard

(c) Copyright 1986 HEWLETT-PACKARD COMPANY

To anyone who acknowledges that this file is provided "AS IS" without any express or implied warranty:

permission to use, copy, modify, and distribute this file for any purpose is hereby granted without fee, provided that the above copyright notice and this notice appears in all copies, and that the name of Hewlett-Packard Company not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. Hewlett-Packard Company makes no representations about the

suitability of this software for any purpose.

(9) Hans-Peter Nilsson

Copyright (C) 2001 Hans-Peter Nilsson

Permission to use, copy, modify, and distribute this software is freely granted, provided that the above copyright notice, this notice and the following disclaimer are preserved with no changes.

THIS SOFTWARE IS PROVIDED ``AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

(10) Stephane Carrez (m68hc11-elf/m68hc12-elf targets only)

Copyright (C) 1999, 2000, 2001, 2002 Stephane Carrez (stcarrez@nerim.fr)

The authors hereby grant permission to use, copy, modify, distribute, and license this software and its documentation for any purpose, provided that existing copyright notices are retained in all copies and that this notice is included verbatim in any distributions. No written agreement, license, or royalty fee is required for any of the authorized uses. Modifications to this software may be copyrighted by their authors and need not follow the licensing terms described here, provided that the new terms are clearly indicated on the first page of each file where they apply.

(11) Christopher G. Demetriou

Copyright (c) 2001 Christopher G. Demetriou
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED.

IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(12) SuperH, Inc.

Copyright 2002 SuperH, Inc. All rights reserved

This software is the property of SuperH, Inc (SuperH) which specifically grants the user the right to modify, use and distribute this software provided this notice is not removed or altered. All other rights are reserved by SuperH.

SUPERH MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, WITH REGARD TO THIS SOFTWARE. IN NO EVENT SHALL SUPERH BE LIABLE FOR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING FROM THE FURNISHING, PERFORMANCE, OR USE OF THIS SOFTWARE.

So that all may benefit from your experience, please report any problems or suggestions about this software to the SuperH Support Center via e-mail at softwaresupport@superh.com .

SuperH, Inc.
405 River Oaks Parkway
San Jose
CA 95134
USA

(13) Royal Institute of Technology

Copyright (c) 1999 Kungliga Tekniska Hgskolan
(Royal Institute of Technology, Stockholm, Sweden).
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. Neither the name of KTH nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY KTH AND ITS CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL KTH OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(14) Alexey Zelkin

Copyright (c) 2000, 2001 Alexey Zelkin <phantom@FreeBSD.org>
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(15) Andrey A. Chernov

Copyright (C) 1997 by Andrey A. Chernov, Moscow, Russia.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(16) FreeBSD

Copyright (c) 1997-2002 FreeBSD Project.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(17) S. L. Moshier

Author: S. L. Moshier.

Copyright (c) 1984,2000 S.L. Moshier

Permission to use, copy, modify, and distribute this software for any purpose without fee is hereby granted, provided that this entire notice is included in all copies of any software which is or includes a copy or modification of this software and in all copies of the supporting documentation for such software.

THIS SOFTWARE IS BEING PROVIDED "AS IS", WITHOUT ANY EXPRESS OR IMPLIED WARRANTY. IN PARTICULAR, THE AUTHOR MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND CONCERNING THE MERCHANTABILITY OF THIS SOFTWARE OR ITS FITNESS FOR ANY PARTICULAR PURPOSE.

(18) Citrus Project

Copyright (c)1999 Citrus Project,
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(19) Todd C. Miller

Copyright (c) 1998 Todd C. Miller <Todd.Miller@courtesan.com>
All rights reserved.

Redistribution and use in source and binary forms, with or without

modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(20) DJ Delorie (i386)

Copyright (C) 1991 DJ Delorie
All rights reserved.

Redistribution and use in source and binary forms is permitted provided that the above copyright notice and following paragraph are duplicated in all such forms.

This file is distributed WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

(21) Free Software Foundation LGPL License (*-linux* targets only)

Copyright (C) 1990-1999, 2000, 2001
Free Software Foundation, Inc.
This file is part of the GNU C Library.
Contributed by Mark Kettenis <kettenis@phys.uva.nl>, 1997.

The GNU C Library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

The GNU C Library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU

Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with the GNU C Library; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA

(22) Xavier Leroy LGPL License (i[3456]86-*-linux* targets only)

Copyright (C) 1996 Xavier Leroy (Xavier.Leroy@inria.fr)

This program is free software; you can redistribute it and/or modify it under the terms of the GNU Library General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Library General Public License for more details.

(23) Intel (i960)

Copyright (c) 1993 Intel Corporation

Intel hereby grants you permission to copy, modify, and distribute this software and its documentation. Intel grants this permission provided that the above copyright notice appears in all copies and that both the copyright notice and this permission notice appear in supporting documentation. In addition, Intel grants this permission provided that you prominently mark as "not part of the original" any modifications made to this software or documentation, and that the name of Intel Corporation not be used in advertising or publicity pertaining to distribution of the software or the documentation without specific, written prior permission.

Intel Corporation provides this AS IS, WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Intel makes no guarantee or representations regarding the use of, or the results of the use of, the software and documentation in terms of correctness, accuracy, reliability, currentness, or otherwise; and you rely on the software, documentation and results solely at your own risk.

IN NO EVENT SHALL INTEL BE LIABLE FOR ANY LOSS OF USE, LOSS OF BUSINESS, LOSS OF PROFITS, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY KIND. IN NO EVENT SHALL INTEL'S TOTAL LIABILITY EXCEED THE SUM PAID TO INTEL FOR THE PRODUCT LICENSED HEREUNDER.

(24) Hewlett-Packard (hppa targets only)

(c) Copyright 1986 HEWLETT-PACKARD COMPANY

To anyone who acknowledges that this file is provided "AS IS" without any express or implied warranty:

permission to use, copy, modify, and distribute this file for any purpose is hereby granted without fee, provided that the above copyright notice and this notice appears in all copies, and that the name of Hewlett-Packard Company not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. Hewlett-Packard Company makes no representations about the suitability of this software for any purpose.

(25) Henry Spencer (only *-linux targets)

Copyright 1992, 1993, 1994 Henry Spencer. All rights reserved. This software is not subject to any license of the American Telephone and Telegraph Company or of the Regents of the University of California.

Permission is granted to anyone to use this software for any purpose on any computer system, and to alter it and redistribute it, subject to the following restrictions:

1. The author is not responsible for the consequences of use of this software, no matter how awful, even if they arise from flaws in it.
2. The origin of this software must not be misrepresented, either by explicit claim or by omission. Since few users ever read sources, credits must appear in the documentation.
3. Altered versions must be plainly marked as such, and must not be misrepresented as being the original software. Since few users ever read sources, credits must appear in the documentation.
4. This notice may not be removed or altered.

(26) Mike Barcroft

Copyright (c) 2001 Mike Barcroft <mike@FreeBSD.org>
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright

notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(27) Konstantin Chuguev (--enable-newlib-iconv)

Copyright (c) 1999, 2000

Konstantin Chuguev. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

iconv (Charset Conversion Library) v2.0

(27) Artem Bityuckiy (--enable-newlib-iconv)

Copyright (c) 2003, Artem B. Bityuckiy, SoftMine Corporation.

Rights transferred to Franklin Electronic Publishers.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(28) Red Hat Incorporated

Unless otherwise stated in each remaining newlib file, the remaining files in the newlib subdirectory default to the following copyright. It should be noted that Red Hat Incorporated now owns copyrights belonging to Cygnus Solutions and Cygnus Support.

Copyright (c) 1994, 1997, 2001, 2002, 2003, 2004 Red Hat Incorporated.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

The name of Red Hat Incorporated may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS"

AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL RED HAT INCORPORATED BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

contrib/unicode:

UNICODE, INC. LICENSE AGREEMENT - DATA FILES AND SOFTWARE

Unicode Data Files include all data files under the directories <http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>, and <http://www.unicode.org/cldr/data/>. Unicode Data Files do not include PDF online code charts under the directory <http://www.unicode.org/Public/>. Software includes any source code published in the Unicode Standard or under the directories <http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>, and <http://www.unicode.org/cldr/data/>.

NOTICE TO USER: Carefully read the following legal agreement. BY DOWNLOADING, INSTALLING, COPYING OR OTHERWISE USING UNICODE INC.'S DATA FILES ("DATA FILES"), AND/OR SOFTWARE ("SOFTWARE"), YOU UNEQUIVOCALLY ACCEPT, AND AGREE TO BE BOUND BY, ALL OF THE TERMS AND CONDITIONS OF THIS AGREEMENT. IF YOU DO NOT AGREE, DO NOT DOWNLOAD, INSTALL, COPY, DISTRIBUTE OR USE THE DATA FILES OR SOFTWARE.

COPYRIGHT AND PERMISSION NOTICE

Copyright 1991-2013 Unicode, Inc. All rights reserved. Distributed under the Terms of Use in <http://www.unicode.org/copyright.html>.

Permission is hereby granted, free of charge, to any person obtaining a copy of the Unicode data files and any associated documentation (the "Data Files") or Unicode software and any associated documentation (the "Software") to deal in the Data Files or Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Data Files or Software, and to permit persons to whom the Data Files or Software are furnished to do so, provided that (a) the above copyright notice(s) and this permission notice appear with all copies of the Data Files or Software, (b) both the above copyright notice(s) and this permission notice appear in associated documentation, and (c) there is clear notice in each modified Data File or in the Software as well as in the documentation associated with the Data File(s) or Software that the data or software has been modified.

THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in these Data Files or Software without prior written authorization of the copyright holder.

contrib/unicode/from_glibc:

```
# Copyright (C) 2014-2019 Free Software Foundation, Inc.
# This file is part of the GNU C Library.
#
# The GNU C Library is free software; you can redistribute it and/or
# modify it under the terms of the GNU Lesser General Public
# License as published by the Free Software Foundation; either
# version 2.1 of the License, or (at your option) any later version.
#
# The GNU C Library is distributed in the hope that it will be useful,
# but WITHOUT ANY WARRANTY; without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU
# Lesser General Public License for more details.
#
# You should have received a copy of the GNU Lesser General Public
# License along with the GNU C Library; if not, see
# <https://www.gnu.org/licenses/>.
Format: https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/
Upstream-Name: systemd
Upstream-Contact: systemd-devel@lists.freedesktop.org
Source: https://www.freedesktop.org/wiki/Software/systemd/
```

Files: *

```
Copyright: 2008-2015 Kay Sievers <kay@vrfy.org>
          2010-2015 Lennart Poettering
          2012-2015 Zbigniew Jdrzejewski-Szmek <zbyszek@in.waw.pl>
          2013-2015 Tom Gundersen <teg@jklm.no>
          2013-2015 Daniel Mack
          2010-2015 Harald Hoyer
          2013-2015 David Herrmann
          2013, 2014 Thomas H.P. Andersen
```

2013, 2014 Daniel Buch
2014 Susant Sahani
2009-2015 Intel Corporation
2000, 2005 Red Hat, Inc.
2009 Alan Jenkins <alan-jenkins@tuffmail.co.uk>
2010 ProFUSION embedded systems
2010 Maarten Lankhorst
1995-2004 Miquel van Smoorenburg
1999 Tom Tromey
2011 Michal Schmidt
2012 B. Poettering
2012 Holger Hans Peter Freyther
2012 Dan Walsh
2012 Roberto Sassu
2013 David Strauss
2013 Marius Vollmer
2013 Jan Janssen
2013 Simon Peeters

License: LGPL-2.1+

Files: src/basic/siphash24.h
src/basic/siphash24.c

Copyright: 2012 Jean-Philippe Aumasson <jeanphilippe.aumasson@gmail.com>
2012 Daniel J. Bernstein <djb@cr.yp.to>

License: CC0-1.0

Files: src/basic/ioprio.h

Copyright: Jens Axboe <axboe@suse.de>

License: GPL-2

Files: src/shared/linux/*
src/basic/linux/*

Copyright: 2004-2009 Red Hat, Inc.

2011-2014 PLUMgrid
2001-2003 Sistina Software (UK) Limited.
2008 Ian Kent <raven@themaw.net>
1998 David S. Miller >davem@redhat.com>
2001 Jeff Garzik <jgarzik@pobox.com>
2006-2010 Johannes Berg <johannes@sipsolutions.net>
2008 Michael Wu <flamingice@sourmilk.net>
2008 Luis Carlos Cobo <luisca@cozybit.com>
2008 Michael Buesch <m@bues.ch>
2008, 2009 Luis R. Rodriguez <lrodriguez@atheros.com>
2008 Jouni Malinen <jouni.malinen@atheros.com>
2008 Colin McCabe <colin@cozybit.com>
2018-2019 Intel Corporation
2007 Oracle.
2009 Wolfgang Grandegger <wg@grandegger.com>

1999 Thomas Davis <tadavis@lbl.gov>
2015 Sabrina Dubroca <sd@queasynail.net>
1999-2000 Maxim Krasnyansky <max_mk@yahoo.com>
2015-2019 Jason A. Donenfeld <Jason@zx2c4.com>

License: GPL-2 with Linux-syscall-note exception

Files: src/basic/sparse-endian.h
Copyright: 2012 Josh Triplett <josh@joshtriplett.org>
License: Expat

Files: src/journal/lookup3.c
src/journal/lookup3.h
Copyright: none
License: public-domain
You can use this free for any purpose. It's in the public domain. It has no warranty.

Files: src/udev/ata_id/ata_id.c
src/udev/cdrom_id/cdrom_id.c
src/udev/mtd_probe/mtd_probe.c
src/udev/mtd_probe/mtd_probe.h
src/udev/mtd_probe/probe_smartmedia.c
src/udev/scsi_id/scsi.h
src/udev/scsi_id/scsi_id.c
src/udev/scsi_id/scsi_id.h
src/udev/scsi_id/scsi_serial.c
src/udev/udevadm.c
src/udev/udevadm-control.c
src/udev/udevadm.h
src/udev/udevadm-info.c
src/udev/udevadm-monitor.c
src/udev/udevadm-settle.c
src/udev/udevadm-test-builtin.c
src/udev/udevadm-test.c
src/udev/udevadm-trigger.c
src/udev/udevadm-util.c
src/udev/udevadm-util.h
src/udev/udev-builtin-blkid.c
src/udev/udev-builtin.h
src/udev/udev-builtin-input_id.c
src/udev/udev-builtin-kmod.c
src/udev/udev-builtin-path_id.c
src/udev/udev-builtin-uaccess.c
src/udev/udev-builtin-usb_id.c
src/udev/udev-ctrl.h
src/udev/udev.c
src/udev/udev-event.c
src/udev/udev-event.h

src/udev/udev-node.c
src/udev/udev-node.h
src/udev/udev-rules.c
src/udev/udev-rules.h
src/udev/udev-watch.c
src/udev/udev-watch.h
src/udev/v4l_id/v4l_id.c

Copyright: 2003-2012 Kay Sievers <kay@vrfy.org>

2003-2004 Greg Kroah-Hartman <greg@kroah.com>

2004 Chris Friesen <chris_friesen@sympatico.ca>

2004, 2009, 2010 David Zeuthen <david@fubar.dk>

2005, 2006 SUSE Linux Products GmbH

2003 IBM Corp.

2007 Hannes Reinecke <hare@suse.de>

2009 Canonical Ltd.

2009 Scott James Remnant <scott@netsplit.com>

2009 Martin Pitt <martin.pitt@ubuntu.com>

2009 Piter Punk <piterpunk@slackware.com>

2009, 2010 Lennart Poettering

2009 Filippo Argiolas <filippo.argiolas@gmail.com>

2010 Maxim Levitsky

2011 ProFUSION embedded systems

2011 Karel Zak <kzak@redhat.com>

2014 Zbigniew Jdrzejewski-Szmek <zbyszek@in.waw.pl>

2014 David Herrmann <dh.herrmann@gmail.com>

2014 Carlos Garnacho <carlosg@gnome.org>

License: GPL-2+

Files: src/udev/scsi_id/*

Copyright: 2003 IBM Corp.

License: GPL-2+

Files: debian/*

Copyright: 2010-2013 Tollef Fog Heen <tfheen@debian.org>

2013-2018 Michael Biebl <biebl@debian.org>

2013 Michael Stapelberg <stapelberg@debian.org>

License: LGPL-2.1+

License: Expat

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.
THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

License: GPL-2

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; version 2 of the License.

.
This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.
You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301, USA.

.
On Debian and systems the full text of the GNU General Public License version 2 can be found in the file
`/usr/share/common-licenses/GPL-2`

License: GPL-2 with Linux-syscall-note exception

NOTE! This copyright does *not* cover user programs that use kernel services by normal system calls - this is merely considered normal use of the kernel, and does *not* fall under the heading of "derived work". Also note that the GPL below is copyrighted by the Free Software Foundation, but the instance of code that it refers to (the Linux kernel) is copyrighted by me and others who actually wrote it.

.
Also note that the only valid version of the GPL as far as the kernel is concerned is _this_ particular version of the license (ie v2, not v2.2 or v3.x or whatever), unless explicitly otherwise stated.

.
Linus Torvalds

.
This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; version 2 of the License.

.
This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the

GNU General Public License for more details.

.
You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301, USA.

.
On Debian and systems the full text of the GNU General Public License version 2 can be found in the file
`/usr/share/common-licenses/GPL-2`

License: GPL-2+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2, or (at your option) any later version.

.
This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.
You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

.
On Debian systems, the complete text of the GNU General Public License version 2 can be found in /usr/share/common-licenses/GPL-2.

License: LGPL-2.1+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1, or (at your option) any later version.

.
This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

.
You should have received a copy of the GNU Lesser General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

.
On Debian systems, the complete text of the GNU Lesser General Public License version 2.1 can be found in /usr/share/common-licenses/LGPL-2.1.

License: CC0-1.0

To the extent possible under law, the author(s) have dedicated all copyright

and related and neighboring rights to this software to the public domain worldwide. This software is distributed without any warranty.

You should have received a copy of the CC0 Public Domain Dedication along with this software. If not, see <<http://creativecommons.org/publicdomain/zero/1.0/>>.

On Debian systems, the complete text of the CC0 1.0 Universal license can be found in /usr/share/common-licenses/CC0-1.0.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: nhttp2

Upstream-Contact: Tatsuhiro Tsujikawa <t-tujikawa@users.sourceforge.net>

Source: <https://github.com/tatsuhiro-t/nhttp2>

Files: *

Copyright: 2012, 2013, 2014 Tatsuhiro Tsujikawa

License: Expat

Files: third-party/http-parser/http_parser.h

Copyright: Joyent, Inc. and other Node contributors. All rights reserved.

License: Expat

Files: third-party/http-parser/http_parser.c

Copyright: 2002-2013 Igor Sysoev

2011-2013 Nginx, Inc.

License: MIT

Comment: Based on src/http/nginx_http_parse.c from NGINX copyright Igor Sysoev.

Additional changes are licensed under the same terms as NGINX and copyright Joyent, Inc. and other Node contributors. All rights reserved.

Files: third-party/mruby/*

Copyright: 2015 mruby developers

License: MIT

Comment: This code is not used by the Debian package, but is kept nevertheless.

Files: tests/nhttp2_npn_test.*

Copyright: 2012, Twist Inc.

License: Expat

Files: m4/ax_cxx_compile_stdcxx_11.m4

Copyright: 2008, Benjamin Kosnik <bkoz@redhat.com>,

2012, Zack Weinberg <zackw@panix.com>,

2013, Roy Stogner <roystgnr@ices.utexas.edu>

License: all-permissive

Files: m4/ax_python_devel.m4

Copyright: 2009 Sebastian Huber <sebastian-huber@web.de>,

2009 Alan W. Irwin,

2009 Rafael Laboissiere <rafael@laboissiere.net>,

2009 Andrew Collier,
2009 Matteo Settenvini <matteo@member.fsf.org>,
2009 Horst Knorr <hk_classes@knoda.org>,
2013 Daniel Mullner <muellner@math.stanford.edu>

License: GPL-3+ with autoconf exception

Files: doc/_themes/sphinx_rtd_theme/*

Copyright: 2013 Dave Snider

License: MIT

Files: doc/_themes/sphinx_rtd_theme/layout_old.html doc/_themes/sphinx_rtd_theme/search.html

Copyright: 2007-2013 by the Sphinx team

License: BSD-2-clause

Comment: License details from <https://bitbucket.org/birkenfeld/sphinx/src> file LICENSE

Files: doc/_themes/sphinx_rtd_theme/static/fonts/FontAwesome.otf

Copyright: Dave Gandy

License: SIL-OFL-1.1

Comment: Font Awesome by Dave Gandy - <http://fontawesome.io>

License: Expat

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

License: MIT

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.
The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.
THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

License: GPL-3+ with autoconf exception

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

.
This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.
You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

.
As a special exception, the respective Autoconf Macro's copyright owner gives unlimited permission to copy, distribute and modify the configure scripts that are the output of Autoconf when processing the Macro. You need not follow the terms of the GNU General Public License when using or distributing such scripts, even though portions of the text of the Macro appear in them. The GNU General Public License (GPL) does govern all other use of the material that constitutes the Autoconf Macro.

.
This special exception to the GPL applies to versions of the Autoconf Macro released by the Autoconf Archive. When you make and distribute a modified version of the Autoconf Macro, you may extend this special exception to the GPL to apply to your modified version as well.

.
On Debian systems, the full text of the GNU General Public License version 3 can be found in the file
`/usr/share/common-licenses/GPL-3'.

License: all-permissive

Copying and distribution of this file, with or without modification, are permitted in any medium without royalty provided the copyright notice and this notice are preserved. This file is offered as-is, without any warranty.

License: BSD-2-clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- .
* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- .
* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- .

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: SIL-OFL-1.1

SIL Open Font License 1.1

.
License details from <http://fontawesome.github.io/Font-Awesome/>

.
This Font Software is licensed under the SIL Open Font License, Version 1.1.
This license is copied below, and is also available with a FAQ at:
<http://scripts.sil.org/OFL>

.

SIL OPEN FONT LICENSE Version 1.1 - 26 February 2007

.

PREAMBLE

The goals of the Open Font License (OFL) are to stimulate worldwide development of collaborative font projects, to support the font creation efforts of academic and linguistic communities, and to provide a free and open framework in which fonts may be shared and improved in partnership with others.

.
The OFL allows the licensed fonts to be used, studied, modified and redistributed freely as long as they are not sold by themselves. The fonts, including any derivative works, can be bundled, embedded,

redistributed and/or sold with any software provided that any reserved names are not used by derivative works. The fonts and derivatives, however, cannot be released under any other type of license. The requirement for fonts to remain under this license does not apply to any document created using the fonts or their derivatives.

.

DEFINITIONS

"Font Software" refers to the set of files released by the Copyright Holder(s) under this license and clearly marked as such. This may include source files, build scripts and documentation.

.

"Reserved Font Name" refers to any names specified as such after the copyright statement(s).

.

"Original Version" refers to the collection of Font Software components as distributed by the Copyright Holder(s).

.

"Modified Version" refers to any derivative made by adding to, deleting, or substituting -- in part or in whole -- any of the components of the Original Version, by changing formats or by porting the Font Software to a new environment.

.

"Author" refers to any designer, engineer, programmer, technical writer or other person who contributed to the Font Software.

.

PERMISSION & CONDITIONS

Permission is hereby granted, free of charge, to any person obtaining a copy of the Font Software, to use, study, copy, merge, embed, modify, redistribute, and sell modified and unmodified copies of the Font Software, subject to the following conditions:

.

1) Neither the Font Software nor any of its individual components, in Original or Modified Versions, may be sold by itself.

.

2) Original or Modified Versions of the Font Software may be bundled, redistributed and/or sold with any software, provided that each copy contains the above copyright notice and this license. These can be included either as stand-alone text files, human-readable headers or in the appropriate machine-readable metadata fields within text or binary files as long as those fields can be easily viewed by the user.

.

3) No Modified Version of the Font Software may use the Reserved Font Name(s) unless explicit written permission is granted by the corresponding Copyright Holder. This restriction only applies to the primary font name as presented to the users.

.

4) The name(s) of the Copyright Holder(s) or the Author(s) of the Font Software shall not be used to promote, endorse or advertise any

Modified Version, except to acknowledge the contribution(s) of the Copyright Holder(s) and the Author(s) or with their explicit written permission.

5) The Font Software, modified or unmodified, in part or in whole, must be distributed entirely under this license, and must not be distributed under any other license. The requirement for fonts to remain under this license does not apply to any document created using the Font Software.

TERMINATION

This license becomes null and void if any of the above conditions are not met.

DISCLAIMER

THE FONT SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF COPYRIGHT, PATENT, TRADEMARK, OR OTHER RIGHT. IN NO EVENT SHALL THE COPYRIGHT HOLDER BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, INCLUDING ANY GENERAL, SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF THE USE OR INABILITY TO USE THE FONT SOFTWARE OR FROM OTHER DEALINGS IN THE FONT SOFTWARE.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Files:

*

Copyright:

Copyright 2004-2006, 2008-2021 Guillem Jover <guillem@hadrons.org>

License: BSD-3-clause

Files:

man/arc4random.3bsd

man/tree.3bsd

Copyright:

Copyright 1997 Niels Provos <provos@physnet.uni-hamburg.de>

All rights reserved.

License: BSD-4-clause-Niels-Provos

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software

must display the following acknowledgement:

This product includes software developed by Niels Provos.

4. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Files:

man/getprogname.3bsd

Copyright:

Copyright 2001 Christopher G. Demetriou

All rights reserved.

License: BSD-4-clause-Christopher-G-Demetriou

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:

This product includes software developed for the NetBSD Project. See <http://www.netbsd.org/> for information about NetBSD.

4. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Files:

include/bsd/err.h
include/bsd/stdlib.h
include/bsd/sys/param.h
include/bsd/unistd.h
src/bsd_getopt.c
src/err.c
src/fgetln.c
src/progname.c

Copyright:

Copyright 2005, 2008-2012, 2019 Guillem Jover <guillem@hadrons.org>

Copyright 2005 Hector Garcia Alvarez

Copyright 2005 Aurelien Jarno

Copyright 2006 Robert Millan

Copyright 2018 Facebook, Inc.

License: BSD-3-clause

Files:

include/bsd/netinet/ip_icmp.h
include/bsd/sys/bitstring.h
include/bsd/sys/queue.h
include/bsd/sys/time.h
include/bsd/timeconv.h
include/bsd/vis.h
man/bitstring.3bsd
man/errc.3bsd
man/explicit_bzero.3bsd
man/fgetln.3bsd
man/fgetwln.3bsd
man/fpurge.3bsd
man/funopen.3bsd
man/getbsize.3bsd
man/heapsort.3bsd
man/nlist.3bsd
man/pwcache.3bsd
man/queue.3bsd
man/radixsort.3bsd
man/reallocarray.3bsd
man/reallocf.3bsd
man/setmode.3bsd
man/strmode.3bsd
man/strnstr.3bsd
man/strtoi.3bsd
man/strtou.3bsd
man/unvis.3bsd
man/vis.3bsd
man/wcsncpy.3bsd

src/getbsize.c
src/heapsort.c
src/merge.c
src/nlist.c
src/pwcache.c
src/radixsort.c
src/setmode.c
src/strmode.c
src/strnstr.c
src/strtoi.c
src/strtou.c
src/unvis.c

Copyright:

Copyright 1980, 1982, 1986, 1989-1994

The Regents of the University of California. All rights reserved.

Copyright 1992 Keith Muller.

Copyright 2001 Mike Barcroft <mike@FreeBSD.org>

.

Some code is derived from software contributed to Berkeley by the American National Standards Committee X3, on Information Processing Systems.

.

Some code is derived from software contributed to Berkeley by Peter McIlroy.

.

Some code is derived from software contributed to Berkeley by Ronnie Kon at Mindcraft Inc., Kevin Lew and Elmer Yglesias.

.

Some code is derived from software contributed to Berkeley by Dave Borman at Cray Research, Inc.

.

Some code is derived from software contributed to Berkeley by Paul Vixie.

.

Some code is derived from software contributed to Berkeley by Chris Torek.

.

Copyright UNIX System Laboratories, Inc.

All or some portions of this file are derived from material licensed to the University of California by American Telephone and Telegraph Co. or Unix System Laboratories, Inc. and are reproduced herein with the permission of UNIX System Laboratories, Inc.

License: BSD-3-clause-Regents

Files:

src/vis.c

Copyright:

Copyright 1989, 1993

The Regents of the University of California. All rights reserved.

Copyright 1999, 2005 The NetBSD Foundation, Inc.

All rights reserved.

License: BSD-3-clause-Regents and BSD-2-clause-NetBSD

Files:

include/bsd/libutil.h

Copyright:

Copyright 1996 Peter Wemm <peter@FreeBSD.org>.

All rights reserved.

Copyright 2002 Networks Associates Technology, Inc.

All rights reserved.

License: BSD-3-clause-author

Files:

man/timeradd.3bsd

Copyright:

Copyright 2009 Jukka Ruohonen <jruohonen@iki.fi>

Copyright 1999 Kelly Yancey <kbyanc@posi.net>

All rights reserved.

License: BSD-3-clause-John-Birrell

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the author nor the names of any co-contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY JOHN BIRRELL AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Files:

man/setproctitle.3bsd

Copyright:

Copyright 1995 Peter Wemm <peter@FreeBSD.org>

All rights reserved.

License: BSD-5-clause-Peter-Wemm

Redistribution and use in source and binary forms, with or without modification, is permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice immediately at the beginning of the file, without modification, this list of conditions, and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. This work was done expressly for inclusion into FreeBSD. Other use is permitted provided this notation is included.
4. Absolutely no warranty of function or purpose is made by the author Peter Wemm.
5. Modifications may be freely made to this file providing the above conditions are met.

Files:

include/bsd/stringlist.h

man/fmtcheck.3bsd

man/humanize_number.3bsd

man/stringlist.3bsd

man/timeval.3bsd

src/fmtcheck.c

src/humanize_number.c

src/stringlist.c

src/strtonum.c

Copyright:

Copyright 1994, 1997-2000, 2002, 2008, 2010, 2014

The NetBSD Foundation, Inc.

Copyright 2013 John-Mark Gurney <jmg@FreeBSD.org>

All rights reserved.

.

Some code was contributed to The NetBSD Foundation by Allen Briggs.

.

Some code was contributed to The NetBSD Foundation by Luke Mewburn.

.

Some code is derived from software contributed to The NetBSD Foundation by Jason R. Thorpe of the Numerical Aerospace Simulation Facility, NASA Ames Research Center, by Luke Mewburn and by Tomas Svensson.

.

Some code is derived from software contributed to The NetBSD Foundation by Julio M. Merino Vidal, developed as part of Google's Summer of Code 2005 program.

.

Some code is derived from software contributed to The NetBSD Foundation
by Christos Zoulas.

.

Some code is derived from software contributed to The NetBSD Foundation
by Jukka Ruohonen.

License: BSD-2-clause-NetBSD

Files:

include/bsd/sys/endian.h

man/byteorder.3bsd

man/closefrom.3bsd

man/expand_number.3bsd

man/flopen.3bsd

man/getpeereid.3bsd

man/pidfile.3bsd

src/expand_number.c

src/pidfile.c

src/reallocf.c

src/timeconv.c

Copyright:

Copyright 1998, M. Warner Losh <imp@freebsd.org>

All rights reserved.

.

Copyright 2001 Dima Dorfman.

All rights reserved.

.

Copyright 2001 FreeBSD Inc.

All rights reserved.

.

Copyright 2002 Thomas Moestl <tm@FreeBSD.org>

All rights reserved.

.

Copyright 2002 Mike Barcroft <mike@FreeBSD.org>

All rights reserved.

.

Copyright 2005 Pawel Jakub Dawidek <pjd@FreeBSD.org>

All rights reserved.

.

Copyright 2005 Colin Percival

All rights reserved.

.

Copyright 2007 Eric Anderson <anderson@FreeBSD.org>

Copyright 2007 Pawel Jakub Dawidek <pjd@FreeBSD.org>

All rights reserved.

.

Copyright 2007 Dag-Erling Codan Smrgrav

All rights reserved.

.

Copyright 2009 Advanced Computing Technologies LLC

Written by: John H. Baldwin <jhb@FreeBSD.org>

All rights reserved.

.

Copyright 2011 Guillem Jover <guillem@hadrons.org>

License: BSD-2-clause

Files:

src/flopen.c

Copyright:

Copyright 2007-2009 Dag-Erling Codan Smrgrav

All rights reserved.

License: BSD-2-clause-verbatim

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer in this position and unchanged.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Files:

include/bsd/sys/tree.h

man/fparseln.3bsd

src/fparseln.c

Copyright:

Copyright 1997 Christos Zoulas.

All rights reserved.

.

Copyright 2002 Niels Provos <provos@citi.umich.edu>

All rights reserved.

License: BSD-2-clause-author

Files:

include/bsd/readpassphrase.h
man/readpassphrase.3bsd
man/strncpy.3bsd
man/strtonum.3bsd
src/arc4random.c
src/arc4random_linux.h
src/arc4random_openbsd.h
src/arc4random_uniform.c
src/arc4random_unix.h
src/arc4random_win.h
src/closefrom.c
src/freezero.c
src/getentropy_aix.c
src/getentropy_bsd.c
src/getentropy_hpux.c
src/getentropy_hurd.c
src/getentropy_linux.c
src/getentropy_osx.c
src/getentropy_solaris.c
src/getentropy_win.c
src/readpassphrase.c
src/reallocarray.c
src/reallocarray.c
src/strlcat.c
src/strncpy.c

Copyright:

Copyright 2004 Ted Unangst and Todd Miller

All rights reserved.

.

Copyright 1996 David Mazieres <dm@uun.org>

Copyright 1998, 2000-2002, 2004-2005, 2007, 2010, 2012-2015

Todd C. Miller <Todd.Miller@courtesan.com>

Copyright 2004 Ted Unangst

Copyright 2008 Damien Miller <djm@openbsd.org>

Copyright 2008, 2010-2011, 2016-2017 Otto Moerbeek <otto@drijf.net>

Copyright 2013 Markus Friedl <markus@openbsd.org>

Copyright 2014 Bob Beck <beck@obtuse.com>

Copyright 2014 Brent Cook <bcook@openbsd.org>

Copyright 2014 Pawel Jakub Dawidek <pjd@FreeBSD.org>

Copyright 2014 Theo de Raadt <deraadt@openbsd.org>

Copyright 2015 Michael Felt <aixtools@gmail.com>

Copyright 2015 Guillem Jover <guillem@hadrons.org>

License: ISC

Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

.

THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES

WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Files:

src/inet_net_pton.c

Copyright:

Copyright 1996 by Internet Software Consortium.

License: ISC-Original

Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

.
THE SOFTWARE IS PROVIDED "AS IS" AND INTERNET SOFTWARE CONSORTIUM DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL INTERNET SOFTWARE CONSORTIUM BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Files:

src/setproctitle.c

Copyright:

Copyright 2010 William Ahern

Copyright 2012 Guillem Jover <guillem@hadrons.org>

License: Expat

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.
The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.
THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE

USE OR OTHER DEALINGS IN THE SOFTWARE.

Files:

src/explicit_bzero.c

src/chacha_private.h

Copyright:

None

License: public-domain

Public domain.

Files:

man/mdX.3bsd

Copyright:

None

License: Beerware

"THE BEER-WARE LICENSE" (Revision 42):

<phk@login.dkuug.dk> wrote this file. As long as you retain this notice you can do whatever you want with this stuff. If we meet some day, and you think this stuff is worth it, you can buy me a beer in return. Poul-Henning Kamp

License: BSD-3-clause-Regents

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: BSD-3-clause-author

Redistribution and use in source and binary forms, with or without modification, is permitted provided that the following conditions

are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: BSD-3-clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: BSD-2-clause-NetBSD

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions

are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE NETBSD FOUNDATION, INC. AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE FOUNDATION OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: BSD-2-clause-author

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: BSD-2-clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the

documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This is the Debian prepackaged version of the Time Zone and Daylight Saving Time Data.

It was downloaded from <https://www.iana.org/time-zones>

Upstream Author: The Internet Assigned Numbers Authority (IANA)
Commentary should be addressed to tz@iana.org

Copyright: This database is in the public domain.
The GNU General Public License (GPL)

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you

can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it.

However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In

such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

One line to give the program's name and a brief idea of what it does.

Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) year name of author Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type 'show w'. This is free software, and you are welcome to redistribute it under certain conditions; type 'show c' for details.
```

The hypothetical commands 'show w' and 'show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than 'show w' and 'show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program 'Gnomovision' (which makes passes at compilers) written by James Hacker.
```

signature of Ty Coon, 1 April 1989

Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

"CLASSPATH" EXCEPTION TO THE GPL

Certain source files distributed by Oracle America and/or its affiliates are subject to the following clarification and special exception to the GPL, but only where Oracle has expressly included in the particular source file's header the words "Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code."

Linking this library statically or dynamically with other modules is making a combined work based on this library. Thus, the terms and conditions of the GNU General Public License cover the whole combination.

As a special exception, the copyright holders of this library give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent modules, and to copy and distribute the resulting executable under terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module. An independent module is a module which is not derived from or based on this library. If you modify this library, you may extend this exception to your version of the library, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version.

Apache Commons Byte Code Engineering Library (BCEL) Version 6.5.0

Apache Commons BCEL Notice

<pre>

Apache Commons BCEL
Copyright 2004-2020 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<https://www.apache.org/>).

</pre>

Apache 2.0 License

<pre>

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or

Derivative Works a copy of this License; and

- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software
distributed under the License is distributed on an "AS IS" BASIS,
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
See the License for the specific language governing permissions and
limitations under the License.

```
</pre>  
## Dynalink v.5
```

```
### Dynalink License
```

```
<pre>
```

Copyright (c) 2009-2013, Attila Szegedi

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions are
met:

- * Redistributions of source code must retain the above copyright
notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright
notice, this list of conditions and the following disclaimer in the
documentation and/or other materials provided with the distribution.
- * Neither the name of the copyright holder nor the names of
contributors may be used to endorse or promote products derived from
this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS
IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED
TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A
PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL COPYRIGHT HOLDER
BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR
CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF
SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR
BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY,
WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR
OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF
ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

```
</pre>
```

GNU LIBRARY GENERAL PUBLIC LICENSE
Version 2, June 1991

Copyright (C) 1991 Free Software Foundation, Inc.
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA
Everyone is permitted to copy and distribute verbatim copies
of this license document, but changing it is not allowed.

[This is the first released version of the library GPL. It is
numbered 2 because it goes with version 2 of the ordinary GPL.]

Preamble

The licenses for most software are designed to take away your
freedom to share and change it. By contrast, the GNU General Public
Licenses are intended to guarantee your freedom to share and change
free software--to make sure the software is free for all its users.

This license, the Library General Public License, applies to some
specially designated Free Software Foundation software, and to any
other libraries whose authors decide to use it. You can use it for
your libraries, too.

When we speak of free software, we are referring to freedom, not
price. Our General Public Licenses are designed to make sure that you
have the freedom to distribute copies of free software (and charge for
this service if you wish), that you receive source code or can get it
if you want it, that you can change the software or use pieces of it
in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid
anyone to deny you these rights or to ask you to surrender the rights.
These restrictions translate to certain responsibilities for you if
you distribute copies of the library, or if you modify it.

For example, if you distribute copies of the library, whether gratis
or for a fee, you must give the recipients all the rights that we gave
you. You must make sure that they, too, receive or can get the source
code. If you link a program with the library, you must provide
complete object files to the recipients so that they can relink them
with the library, after making changes to the library and recompiling
it. And you must show them these terms so they know their rights.

Our method of protecting your rights has two steps: (1) copyright
the library, and (2) offer you this license which gives you legal
permission to copy, distribute and/or modify the library.

Also, for each distributor's protection, we want to make certain
that everyone understands that there is no warranty for this free
library. If the library is modified by someone else and passed on, we
want its recipients to know that what they have is not the original

version, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that companies distributing free software will individually obtain patent licenses, thus in effect transforming the program into proprietary software. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License, which was designed for utility programs. This license, the GNU Library General Public License, applies to certain designated libraries. This license is quite different from the ordinary one; be sure to read it in full, and don't assume that anything in it is the same as in the ordinary license.

The reason we have a separate public license for some libraries is that they blur the distinction we usually make between modifying or adding to a program and simply using it. Linking a program with a library, without changing the library, is in some sense simply using the library, and is analogous to running a utility program or application program. However, in a textual and legal sense, the linked executable is a combined work, a derivative of the original library, and the ordinary General Public License treats it as such.

Because of this blurred distinction, using the ordinary General Public License for libraries did not effectively promote software sharing, because most developers did not use the libraries. We concluded that weaker conditions might promote sharing better.

However, unrestricted linking of non-free programs would deprive the users of those programs of all benefit from the free status of the libraries themselves. This Library General Public License is intended to permit developers of non-free programs to use free libraries, while preserving your freedom as a user of such programs to change the free libraries that are incorporated in them. (We have not seen how to achieve this as regards changes in header files, but we have achieved it as regards changes in the actual functions of the Library.) The hope is that this will lead to faster development of free libraries.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, while the latter only works together with the library.

Note that it is possible for a library to be covered by the ordinary

General Public License rather than by this special one.

GNU LIBRARY GENERAL PUBLIC LICENSE
TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Library General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.
- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under

the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The

threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also compile or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

c) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above

specified materials from the same place.

d) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by

modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries,

so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Library General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief idea of what it does.>
Copyright (C) <year> <name of author>

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Library General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Library General Public License for more details.

You should have received a copy of the GNU Library General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice

That's all there is to it!

This package was created by Peter Tobias tobias@et-inf.fho-empden.de on Wed, 24 Aug 1994 21:33:28 +0200 and maintained by Anthony Towns

<ajt@debian.org> until 2001.

It is currently maintained by Marco d'Itri <md@linux.it>.

Copyright 1994-2010 Peter Tobias, Anthony Towns and Marco d'Itri

The programs in this package are distributed under the terms of the GNU General Public License, version 2 as distributed by the Free Software Foundation. On Debian systems, a copy of this license may be found in /usr/share/common-licenses/GPL-2.

CDebConf was initially written by Randolph Chung <tausq@debian.org>

Other contributors include:

Anthony Towns <ajt@debian.org>

David Whedon <dwhedon@gordian.com>

Dan Jacobowitz <dan@debian.org>

Tollef Fog Heen <tfheen@debian.org>

Attilio Fiandrotti <fiandro@tiscali.it>

Colin Watson <cjwatson@debian.org>

Regis Boudin <regis@debian.org>

CDebConf includes ideas and code from:

debconf - The original, de facto, perl implementation

(c) Joey Hess <joeyh@debian.org>

apt - The Debian Advanced Package Tool

(c) Jason Gunthorpe <jgg@debian.org>

(derived portions are public domain)

CDebConf is copyrighted (c) 2000-2009 by Randolph Chung <tausq@debian.org>, the d-i team (see above), and Canonical Ltd. under the following license:

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHORS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY

OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

GNU GENERAL PUBLIC LICENSE

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.,
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA
Everyone is permitted to copy and distribute verbatim copies
of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so

that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

- b) Accompany it with a written offer, valid for at least three

years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the

original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will

be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>
Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program
'Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: sensible-utils

Source: <https://salsa.debian.org/debian/sensible-utils>

Files: *

Copyright: 2002-2009, Clint Adams <schizo@debian.org>

2010- Anibal Monsalve Salazar <anibal@debian.org>

2012, David Prvot <taffit@debian.org>

2013, Thorsten Glaser

2017, Jrmmy Bobbio

2017, Ximin Luo

2017- Bastien Roucaris <rouca@debian.org>

License: GPL-2+

Files: sensible-editor*

Copyright: 1997, Guy Maor

2002, 2004, 2006, Clint Adams

2010- Anibal Monsalve Salazar <anibal@debian.org>

License: GPL-2+

Files: sensible-pager*

Copyright: 1997, 1998, Guy Maor

2004, Clint Adams

2010- Anibal Monsalve Salazar <anibal@debian.org>

License: GPL-2+

Files: sensible-browser*

Copyright: 2002, Joey Hess

2003, 2007, 2008, Clint Adams

2010- Anibal Monsalve Salazar <anibal@debian.org>

License: GPL-2+

Files: select-editor*

Copyright: 2009, Dustin Kirkland <kirkland@canonical.com>.

2010- Anibal Monsalve Salazar <anibal@debian.org>

License: GPL-2+

Files: man/Makefile.am

man/utf8toman.sed

Copyright: 2012-2017, Guillaume Jover

License: GPL-2+

Comment: Part of this are copied from dpkg

Files: man/po4a/cs*
Copyright: 2012, Michal Simunek
License: GPL-2+

Files: man/po4a/de*
Copyright: 2011, Helge Kreuzmann <debian@helgefjell.de>
License: GPL-2+

Files: man/po4a/fr*
Copyright: Nicolas Francois <nicolas.francois@centraliens.net>
License: GPL-2+

Files: man/po4a/es*
Copyright: 2010-2012, Omar Campagne
License: GPL-2+

Files: man/po4a/it*
Copyright: 2012, Beatrice Torracca
License: GPL-2+

Files: man/po4a/ja*
Copyright: 2010, Kurasawa Nozomu
License: GPL-2+

Files: man/po4a/pl*
Copyright: 2004, 2010, Robert Luberda <robert@debian.org>.
License: GPL-2+

Files: man/po4a/pt*
Copyright: 2014, Amrico Monteiro <a_monteiro@gmx.com>
License: GPL-2+

Files: aclocal.m4
Copyright: 1996-2017, Free Software Foundation, Inc.
License: All-permissive

Files: *Makefile.in
Copyright: 1994-2017, Free Software Foundation, Inc.
License: All-permissive

Files: configure
Copyright: 1992-1996, 1998-2012, Free Software Foundation, Inc.
License: configure
This configure script is free software; the Free Software Foundation gives unlimited permission to copy, distribute and modify it.

Files: build-aux/missing
Copyright: 1996-2014, Free Software Foundation, Inc.

License: GPL-2+

Files: build-aux/install-sh

Copyright: 1994 X Consortium

License: installsh

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE X CONSORTIUM BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

.

Except as contained in this notice, the name of the X Consortium shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from the X Consortium.

.

FSF changes to this file are in the public domain.

License: GPL-2+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

.

On Debian systems, the full text of the GNU General Public License version 2 can be found in the file `~/usr/share/common-licenses/GPL-2'`.

License: All-permissive

This file is free software; the Free Software Foundation gives unlimited permission to copy and/or distribute it, with or without modifications, as long as this notice is preserved.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY, to the extent permitted by law; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

Format: <http://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: libcbor

Source: <https://github.com/PJK/libcbor>

Files-Excluded: docs/doxygen

Files: *

Copyright: Copyright (c) Pavel Kalvoda, 2014-2017

License: Expat

Files: src/cbor/internal/unicode.c

Copyright: (c) Pavel Kalvoda, 2014, 2015

(c) 2008-2009 Bjoern Hoehrmann <bjoern@hoehrmann.de>

License: Expat

Files: docs/stylesheets/github-light.css

Copyright: 2014 GitHub Inc

License: Apache-2.0

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License.

You may obtain a copy of the License at

.

<http://www.apache.org/licenses/LICENSE-2.0>

.

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

See the License for the specific language governing permissions and limitations under the License.

.

On Debian systems, the full license can be found in </usr/share/common-licenses/Apache-2.0>.

Files: debian/*

Copyright: 2015 Vincent Bernat <bernat@debian.org>

License: Expat

License: Expat

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal

in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: FreeType

Upstream-Contact: freetype-devel@nongnu.org

Source: <https://www.freetype.org/download.html>

Files-Excluded: docs/reference/assets/javascripts

Comment: The files in this path have been removed because they are minified JavaScript files and are incompatible with the DFSG.

Files: *

Copyright: 1996-2020 David Turner, Robert Wilhelm and Werner Lemberg

1996-2020 Just van Rossum

2002-2020 Roberto Alameda

2003 Huw D M Davies for Codeweavers

2003-2020 Masatake Yamato, Redhat K.K.

2004-2020 Albert Chin-A-Young

2004-2020 Suzuki Toshiya

2007 Dmitry Timoshkov for Codeweavers

2007-2020 Rahul Bhalerao <rahul.bhalerao@redhat.com>

2007-2020 Derek Clegg, Michael Toftdal

2009-2020 Oran Agra, Mickey Gabel

2010-2020 Joel Klinghed

License: GPL-2+ or FTL

Files: vms_make.com

Copyright: 1996-2020 David Turner, Robert Wilhelm and Werner Lemberg

2001, 2002 Francesco Zappa Nardelli

2010-2020 Joel Klinghed

License: FTL and MIT

Files: builds/amiga/*

Copyright: 2005-2020 Werner Lemberg and Detlef Wrkner

License: FTL

Files: builds/amiga/src/base/*

Copyright: 1996-2020 David Turner, Robert Wilhelm, Werner Lemberg and Detlef Wrkner

License: FTL

Files: builds/cmake/FindHarfBuzz.cmake

Copyright: 2012 Intel Corporation

License: BSD-3-Clause

Files: builds/mac/ftmac.c

include/freetype/ftmac.h

src/base/ftmac.c

Copyright: 1996-2020 Just van Rossum, David Turner, Robert Wilhelm and Werner Lemberg

License: FTL

Files: builds/mac/README

Copyright: 2013 Suzuki Toshiya, Leonard Rosenthol, Just van Rossum

License: FTL

Files: builds/unix/aclocal.m4

Copyright: 1992-2018 Free Software Foundation, Inc.

License: FSFULLR and GPL-2+

Files: builds/unix/ax_compare_version.m4

Copyright: 2008 Tim Toolan

License: FSFAP

Files: builds/unix/ax_prog_python_version.m4

Copyright: 2009 Francesco Salvestrini

License: FSFAP

Files: builds/unix/config.guess builds/unix/config.sub

Copyright: 1992-2020 Free Software Foundation, Inc.

License: Permissive and GPL-3+

Files: builds/unix/configure

Copyright: 1992-2018 Free Software Foundation, Inc.

License: FSFUL and GPL-2+

Files: builds/unix/install-sh

Copyright: 1994 X Consortium

License: MIT

Files: builds/unix/ltmain.sh

Copyright: 1996-2015 Free Software Foundation, Inc.

License: GPL-2+ and GPL-3+

Files: builds/unix/pkg.m4

Copyright: 2004 Scott James Remnant <scott@netsplit.com>

License: GPL-2+

Files: debian/*

Copyright: 1996-2019 Christoph Lameter <clameter@waterf.org>,
Anthony Fok <foka@debian.org>,
Steve Langasek <vorlon@debian.org>, et al.
2018-2020 Hugh McMaster <hugh.mcmaster@outlook.com>

License: GPL-2+

Files: docs/DOCGUIDE

src/sfnt/sfwoff2.c
src/sfnt/woff2tags.c src/sfnt/woff2tags.h

Copyright: 1996-2020 Nikhil Ramakrishnan, David Turner, Robert Wilhelm and Werner Lemberg
License: FTL

Files: docs/INSTALL.CROSS

Copyright: 2006-2020 Suzuki Toshiya, David Turner, Robert Wilhelm and Werner Lemberg
License: FTL

Files: docs/reference/*

Copyright: The FreeType Project
License: FTL

Files: docs/reference/assets/fonts/font-awesome.css

Copyright: 2016 Dave Gandy
License: MIT

Files: docs/reference/assets/fonts/material-icons.css

docs/reference/assets/fonts/specimen/MaterialIcons-Regular.ttf
docs/reference/assets/fonts/specimen/MaterialIcons-Regular.woff
docs/reference/assets/fonts/specimen/MaterialIcons-Regular.woff2

Copyright: 2015 Google, Inc.
License: Apache-2.0

Files: docs/reference/assets/fonts/specimen/FontAwesome.ttf

docs/reference/assets/fonts/specimen/FontAwesome.woff
docs/reference/assets/fonts/specimen/FontAwesome.woff2

Copyright: Dave Gandy
License: OFL-1.1

Files: ft2demos/graph/gblender.h

Copyright: 2001-2020 David Turner
License: FTL

Files: ft2demos/graph/beos/grbeos.cpp

Copyright: 2001-2020 Michael Pfeiffer
License: FTL

Files: ft2demos/graph/mac/grmac.c
Copyright: 1999-2020 Just van Rossum, Antoine Leca,
David Turner, Robert Wilhelm and Werner Lemberg
License: FTL

Files: ft2demos/graph/win32/grwin32.c ft2demos/graph/win32/grwin32.h
ft2demos/graph/x11/grx11.c ft2demos/graph/x11/grx11.h
Copyright: 1999-2020 Antoine Leca, David Turner, Robert Wilhelm and Werner Lemberg
License: FTL

Files: ft2demos/graph/graph.h
ft2demos/graph/grdevice.h
ft2demos/graph/grobjs.h
ft2demos/graph/grtypes.h
Copyright: 1999-2020 The FreeType Development Team
License: FTL

Files: ft2demos/graph/grswizzle.c
Copyright: None
License: Public-Domain
"this filtering code is explicitly placed in the public domain !!"

Files: ft2demos/mac/ftoldmac.c
Copyright: 1996-2020 Suzuki Toshiya, David Turner, Robert Wilhelm and Werner Lemberg
License: FTL

Files: ft2demos/mac/getargv.c
Copyright: 1991-2020 Stichting Mathematisch Centrum
License: MIT

Files: ft2demos/src/mlgetopt.c ft2demos/src/mlgetopt.h
Copyright: None
License: Public-Domain
"This code is hereby expressly placed in the public domain."

Files: ft2demos/src/ftinspect/*
Copyright: 2016-2020 Werner Lemberg
License: FTL

Files: ft2docs/docs/js/jquery.ba-resize.min.js
Copyright: 2010 Ben Alman
License: MIT or GPL-2+

Files: ft2docs/docs/js/jquery-1.11.0.min.js
Copyright: 2005, 2014 jQuery Foundation, Inc.
License: MIT

Files: ft2docs/docs/tutorial/example2.cpp

ft2docs/docs/tutorial/example3.cpp

ft2docs/docs/tutorial/example4.cpp

Copyright: None

License: Public-Domain

"Public domain."

Files: ft2docs/docs/tutorial/example5.cpp

Copyright: 2016-2018 Static Jobs LLC

License: MIT

Files: include/freetype/ftbzip2.h

src/bzip2/*

Copyright: 2010-2020 Joel Klinghed

License: FTL

Files: include/freetype/ftcid.h

include/freetype/internal/services/svcid.h

src/base/ftcid.c

Copyright: 2007-2020 Derek Clegg and Michael Toftdal

License: FTL

Files: include/freetype/ftgxval.h

include/freetype/internal/services/svgxval.h

include/freetype/internal/services/svttcmap.h

src/base/ftgxval.c

Copyright: 2003-2020 Masatake Yamato, Red Hat K.K.,

David Turner, Robert Wilhelm and Werner Lemberg

License: FTL

Files: include/freetype/internal/fthash.h

src/base/fthash.c

Copyright: 2000 Computing Research Labs, New Mexico State University

2001-2015 Francesco Zappa Nardelli

License: MIT

Files: include/freetype/internal/ftfork.h

src/base/ftfork.c

Copyright: 2004-2020 Masatake Yamato, Redhat K.K.

License: FTL

Files: src/sfnt/ttcmapc.h

Copyright: 2009-2020 Oran Agra and Mickey Gabel

License: FTL

Files: include/freetype/internal/services/svttglyf.h

src/base/ftpatent.c

src/lzw/ftzopen.c src/lzw/ftzopen.h

Copyright: 2002-2020 David Turner

License: FTL

Files: src/autofit/afindic.c src/autofit/afindic.h

Copyright: 2007-2020 Rahul Bhalerao

License: FTL

Files: src/base/ftbase.h

Copyright: 2008-2020 David Turner, Robert Wilhelm, Werner Lemberg and Suzuki Toshiya

License: FTL

Files: src/base/fterrors.c

Copyright: 2018-2020 Armin Hasitzka, David Turner, Robert Wilhelm and Werner Lemberg

License: FTL

Files: src/base/md5.c src/base/md5.h

Copyright: None

License: Public-Domain

"No copyright is claimed, and the software is hereby placed in the public domain."

Files: src/bdf/bdf.c

src/bdf/bdfdrivr.c src/bdf/bdfdrivr.h

src/bdf/bdferror.h

src/bdf/module.mk

src/bdf/README

src/bdf/rules.mk

src/pcf/module.mk

src/pcf/pcf.c src/pcf/pcf.h

src/pcf/pcfdrivr.c src/pcf/pcfdrivr.h

src/pcf/pcfread.c src/pcf/pcfread.h

src/pcf/pcfutil.h

src/pcf/README

src/pcf/rules.mk

Copyright: 2000-2014 Francesco Zappa Nardelli

License: MIT

Files: src/bdf/bdf.h src/bdf/bdflib.c

Copyright: 2000 Computing Research Labs, New Mexico State University

2001-2014 Francesco Zappa Nardelli

License: MIT

Files: src/gxvalid/*

Copyright: 2004-2020 Suzuki Toshiya, Masatake Yamato, Red Hat K.K.,

David Turner, Robert Wilhelm and Werner Lemberg

License: FTL

Files: src/gxvalid/gxvfgenc.c

Copyright: 2004-2020 Masatake Yamato, Redhat K.K.

License: FTL

Files: src/gzip/adler32.c
src/gzip/infblock.c src/gzip/infblock.h
src/gzip/infcodes.c src/gzip/infcodes.h
src/gzip/inflate.c
src/gzip/inftrees.c src/gzip/inftrees.h
src/gzip/infutil.c src/gzip/infutil.h

Copyright: 1995-2002 Mark Adler

License: Zlib

Files: src/gzip/ftzconf.h

src/gzip/zutil.c src/gzip/zutil.h

Copyright: 1995-2002 Jean-loup Gailly

License: Zlib

Files: src/gzip/zlib.h

Copyright: 1995-2002 Jean-loup Gailly and Mark Adler

License: Zlib

Files: src/lzw/ftlzw.c src/lzw/rules.mk

Copyright: 2004-2020 Albert Chin-A-Young

License: FTL

Files: src/pcf/pcfutil.c

Copyright: 1990, 1994, 1998 The Open Group

License: OpenGroup-BSD-like

Files: src/psaux/psarrst.c src/psaux/psarrst.h

src/psaux/psblues.c src/psaux/psblues.h

src/psaux/pserror.c src/psaux/pserror.h

src/psaux/psfixed.h

src/psaux/psfont.c src/psaux/psfont.h

src/psaux/psft.c src/psaux/psft.h

src/psaux/psglue.h

src/psaux/pshints.c src/psaux/pshints.h

src/psaux/psintrap.c src/psaux/psintrap.h

src/psaux/psread.c src/psaux/psread.h

src/psaux/psstack.c src/psaux/psstack.h

src/psaux/pstypes.h

Copyright: 2006-2014 Adobe Systems Incorporated

License: FTL

Files: src/sfnt/pngshim.c src/sfnt/pngshim.h

Copyright: 2013-2020 Google, Inc.

License: FTL

Files: src/sfnt/ttsbit.c

Copyright: 2005-2020 David Turner, Robert Wilhelm and Werner Lemberg

2013 Google, Inc.

License: FTL

Files: src/tools/apinames.c src/tools/chktrcmp.py

Copyright: None

License: Public-Domain

"This code is explicitly placed into the public domain."

Files: src/tools/update-copyright-year

Copyright: 2015-2020 Werner Lemberg

License: FTL

Files: src/tools/ftrandom/ftrandom.c

Copyright: 2005, 2007, 2008, 2013 George Williams

License: BSD-3-Clause

Files: src/truetype/ttgxvar.c src/truetype/ttgxvar.h

Copyright: 2004-2020 David Turner, Robert Wilhelm, Werner Lemberg and George Williams

License: FTL

Files: src/type42/t42drivr.c src/type42/t42drivr.h

src/type42/t42objs.c src/type42/t42objs.h

src/type42/t42parse.c src/type42/t42parse.h

src/type42/t42types.h

Copyright: 2002-2020 Roberto Alameda

License: FTL

Files: src/winfonts/winfont.c

Copyright: 1996-2020 David Turner, Robert Wilhelm and Werner Lemberg

2003 Huw D M Davies for Codeweavers

2007 Dmitry Timoshkov for Codeweavers

License: FTL

Files: src/winfonts/winfont.h

Copyright: 1996-2020 David Turner, Robert Wilhelm and Werner Lemberg

2007 Dmitry Timoshkov for Codeweavers

License: FTL

License: Apache-2.0

Licensed under the Apache License, Version 2.0 (the "License");

you may not use this file except in compliance with the License.

You may obtain a copy of the License at

.

<http://www.apache.org/licenses/LICENSE-2.0>

.

Unless required by applicable law or agreed to in writing, software

distributed under the License is distributed on an "AS IS" BASIS,

WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

See the License for the specific language governing permissions and limitations under the License.

On Debian GNU/Linux systems, the complete text of the Apache License Version 2.0 can be found in ``usr/share/common-licenses/Apache-2.0'`.

License: BSD-3-Clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the copyright holder nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: FSFAP

Copying and distribution of this file, with or without modification, are permitted in any medium without royalty provided the copyright notice and this notice are preserved. This file is offered as-is, without any warranty.

License: FSFUL

This file is free software; the Free Software Foundation gives unlimited permission to copy, distribute and modify it.

License: FSFULLR

This file is free software; the Free Software Foundation gives unlimited permission to copy and/or distribute it, with or without modifications, as long as this notice is preserved.

License: FTL

The FreeType Project LICENSE

2006-Jan-27

Copyright 1996-2002, 2006 by
David Turner, Robert Wilhelm, and Werner Lemberg

Introduction

=====

The FreeType Project is distributed in several archive packages; some of them may contain, in addition to the FreeType font engine, various tools and contributions which rely on, or relate to, the FreeType Project.

This license applies to all files found in such packages, and which do not fall under their own explicit license. The license affects thus the FreeType font engine, the test programs, documentation and makefiles, at the very least.

This license was inspired by the BSD, Artistic, and IJG (Independent JPEG Group) licenses, which all encourage inclusion and use of free software in commercial and freeware products alike. As a consequence, its main points are that:

- o We don't promise that this software works. However, we will be interested in any kind of bug reports. (^ as is' distribution)
- o You can use this software for whatever you want, in parts or full form, without having to pay us. (^ royalty-free' usage)
- o You may not pretend that you wrote this software. If you use it, or only parts of it, in a program, you must acknowledge somewhere in your documentation that you have used the FreeType code. (^ credits')

We specifically permit and encourage the inclusion of this software, with or without modifications, in commercial products. We disclaim all warranties covering The FreeType Project and assume no liability related to The FreeType Project.

Finally, many people asked us for a preferred form for a credit/disclaimer to use in compliance with this license. We thus

encourage you to use the following text:

```
.
""""
Portions of this software are copyright <year> The FreeType
Project (www.freetype.org). All rights reserved.
""""
.
```

Please replace <year> with the value from the FreeType version you actually use.

```
.
.
```

Legal Terms

=====

```
.
.
```

0. Definitions

```
.
.
```

Throughout this license, the terms `package', `FreeType Project', and `FreeType archive' refer to the set of files originally distributed by the authors (David Turner, Robert Wilhelm, and Werner Lemberg) as the `FreeType Project', be they named as alpha, beta or final release.

```
.
.
```

`You' refers to the licensee, or person using the project, where `using' is a generic term including compiling the project's source code as well as linking it to form a `program' or `executable'. This program is referred to as `a program using the FreeType engine'.

```
.
.
```

This license applies to all files distributed in the original FreeType Project, including all source code, binaries and documentation, unless otherwise stated in the file in its original, unmodified form as distributed in the original archive. If you are unsure whether or not a particular file is covered by this license, you must contact us to verify this.

```
.
.
```

The FreeType Project is copyright (C) 1996-2000 by David Turner, Robert Wilhelm, and Werner Lemberg. All rights reserved except as specified below.

```
.
.
```

1. No Warranty

```
.
.
```

THE FREETYPE PROJECT IS PROVIDED `AS IS' WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL ANY OF THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY DAMAGES CAUSED BY THE USE OR THE INABILITY TO

USE, OF THE FREETYPE PROJECT.

2. Redistribution

This license grants a worldwide, royalty-free, perpetual and irrevocable right and license to use, execute, perform, compile, display, copy, create derivative works of, distribute and sublicense the FreeType Project (in both source and object code forms) and derivative works thereof for any purpose; and to authorize others to exercise some or all of the rights granted herein, subject to the following conditions:

- o Redistribution of source code must retain this license file ('FTL.TXT') unaltered; any additions, deletions or changes to the original files must be clearly indicated in accompanying documentation. The copyright notices of the unaltered, original files must be preserved in all copies of source files.
- o Redistribution in binary form must provide a disclaimer that states that the software is based in part of the work of the FreeType Team, in the distribution documentation. We also encourage you to put an URL to the FreeType web page in your documentation, though this isn't mandatory.

These conditions apply to any software derived from or based on the FreeType Project, not just the unmodified files. If you use our work, you must acknowledge us. However, no fee need be paid to us.

3. Advertising

Neither the FreeType authors and contributors nor you shall use the name of the other for commercial, advertising, or promotional purposes without specific prior written permission.

We suggest, but do not require, that you use one or more of the following phrases to refer to this software in your documentation or advertising materials: 'FreeType Project', 'FreeType Engine', 'FreeType library', or 'FreeType Distribution'.

As you have not signed this license, you are not required to accept it. However, as the FreeType Project is copyrighted material, only this license, or another one contracted with the authors, grants you the right to use, distribute, and modify it. Therefore, by using, distributing, or modifying the FreeType

Project, you indicate that you understand and accept all the terms of this license.

4. Contacts

There are two mailing lists related to FreeType:

- o freetype@nongnu.org

Discusses general use and applications of FreeType, as well as future and wanted additions to the library and distribution.

If you are looking for support, start in this list if you haven't found anything to help you in the documentation.

- o freetype-devel@nongnu.org

Discusses bugs, as well as engine internals, design issues, specific licenses, porting, etc.

Our home page can be found at

<https://www.freetype.org>

License: GPL-2+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301, USA.

On Debian GNU/Linux systems, the complete text of the GNU General Public License version 2 can be found in `"/usr/share/common-licenses/GPL-2"`.

License: GPL-3+

This program is free software: you can redistribute it and/or modify

it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

On Debian GNU/Linux systems, the complete text of the GNU General Public License version 3 can be found in
`/usr/share/common-licenses/GPL-3'.

License: MIT

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

License: OFL-1.1

SIL OPEN FONT LICENSE Version 1.1 - 26 February 2007

PREAMBLE

The goals of the Open Font License (OFL) are to stimulate worldwide development of collaborative font projects, to support the font creation efforts of academic and linguistic communities, and to provide a free and open framework in which fonts may be shared and improved in partnership with others.

The OFL allows the licensed fonts to be used, studied, modified and

redistributed freely as long as they are not sold by themselves. The fonts, including any derivative works, can be bundled, embedded, redistributed and/or sold with any software provided that any reserved names are not used by derivative works. The fonts and derivatives, however, cannot be released under any other type of license. The requirement for fonts to remain under this license does not apply to any document created using the fonts or their derivatives.

DEFINITIONS

"Font Software" refers to the set of files released by the Copyright Holder(s) under this license and clearly marked as such. This may include source files, build scripts and documentation.

"Reserved Font Name" refers to any names specified as such after the copyright statement(s).

"Original Version" refers to the collection of Font Software components as distributed by the Copyright Holder(s).

"Modified Version" refers to any derivative made by adding to, deleting, or substituting -- in part or in whole -- any of the components of the Original Version, by changing formats or by porting the Font Software to a new environment.

"Author" refers to any designer, engineer, programmer, technical writer or other person who contributed to the Font Software.

PERMISSION & CONDITIONS

Permission is hereby granted, free of charge, to any person obtaining a copy of the Font Software, to use, study, copy, merge, embed, modify, redistribute, and sell modified and unmodified copies of the Font Software, subject to the following conditions:

- 1) Neither the Font Software nor any of its individual components, in Original or Modified Versions, may be sold by itself.
- 2) Original or Modified Versions of the Font Software may be bundled, redistributed and/or sold with any software, provided that each copy contains the above copyright notice and this license. These can be included either as stand-alone text files, human-readable headers or in the appropriate machine-readable metadata fields within text or binary files as long as those fields can be easily viewed by the user.
- 3) No Modified Version of the Font Software may use the Reserved Font Name(s) unless explicit written permission is granted by the corresponding Copyright Holder. This restriction only applies to the primary font name as presented to the users.

4) The name(s) of the Copyright Holder(s) or the Author(s) of the Font Software shall not be used to promote, endorse or advertise any Modified Version, except to acknowledge the contribution(s) of the Copyright Holder(s) and the Author(s) or with their explicit written permission.

5) The Font Software, modified or unmodified, in part or in whole, must be distributed entirely under this license, and must not be distributed under any other license. The requirement for fonts to remain under this license does not apply to any document created using the Font Software.

TERMINATION

This license becomes null and void if any of the above conditions are not met.

DISCLAIMER

THE FONT SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF COPYRIGHT, PATENT, TRADEMARK, OR OTHER RIGHT. IN NO EVENT SHALL THE COPYRIGHT HOLDER BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, INCLUDING ANY GENERAL, SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF THE USE OR INABILITY TO USE THE FONT SOFTWARE OR FROM OTHER DEALINGS IN THE FONT SOFTWARE.

License: OpenGroup-BSD-like

Permission to use, copy, modify, distribute, and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE OPEN GROUP BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of The Open Group shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from The Open Group.

License: Permissive

This is free software; see the source for copying conditions. There is NO warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

License: Zlib

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Source: <http://ftp.debian.org/debian/pool/main/c/ca-certificates/>

Files: debian/*

examples/*

Makefile

mozilla/*

sbin/*

Copyright: 2003 Fumitoshi UKAI <ukai@debian.or.jp>

2009 Philipp Kern <pkern@debian.org>

2011 Michael Shuler <michael@pbandjelly.org>

Various Debian Contributors

License: GPL-2+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301, USA.

On Debian GNU/Linux systems, the complete text of the GNU General Public License can be found in '/usr/share/common-licenses/GPL-2'.

Files: mozilla/certdata.txt
mozilla/nssckbi.h

Copyright: Mozilla Contributors

Comment: Original Copyright: 1994-2000 Netscape Communications Corporation
(certdata.txt <= CVS Revision: 1.82)

NSS no longer contains explicit copyright. Upstream indicates that "Mozilla Contributors" is an appropriate attribution for the required Copyright: field in Debian's machine-readable format.

https://bugzilla.mozilla.org/show_bug.cgi?id=850003

License: MPL-2.0

Mozilla Public License Version 2.0

=====

.
1. Definitions

.
1.1. "Contributor"

means each individual or legal entity that creates, contributes to the creation of, or owns Covered Software.

.
1.2. "Contributor Version"

means the combination of the Contributions of others (if any) used by a Contributor and that particular Contributor's Contribution.

.
1.3. "Contribution"

means Covered Software of a particular Contributor.

.
1.4. "Covered Software"

means Source Code Form to which the initial Contributor has attached the notice in Exhibit A, the Executable Form of such Source Code Form, and Modifications of such Source Code Form, in each case including portions thereof.

.
1.5. "Incompatible With Secondary Licenses"

means

.
(a) that the initial Contributor has attached the notice described in Exhibit B to the Covered Software; or

.
(b) that the Covered Software was made available under the terms of version 1.1 or earlier of the License, but not also under the terms of a Secondary License.

.
1.6. "Executable Form"

means any form of the work other than Source Code Form.

.
1.7. "Larger Work"

means a work that combines Covered Software with other material, in a separate file or files, that is not Covered Software.

.
1.8. "License"

means this document.

.
1.9. "Licensable"

means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently, any and all of the rights conveyed by this License.

.
1.10. "Modifications"

means any of the following:

.
(a) any file in Source Code Form that results from an addition to, deletion from, or modification of the contents of Covered Software; or

.
(b) any new file in Source Code Form that contains any Covered Software.

.
1.11. "Patent Claims" of a Contributor

means any patent claim(s), including without limitation, method, process, and apparatus claims, in any patent Licensable by such Contributor that would be infringed, but for the grant of the License, by the making, using, selling, offering for sale, having made, import, or transfer of either its Contributions or its Contributor Version.

.
1.12. "Secondary License"

means either the GNU General Public License, Version 2.0, the GNU Lesser General Public License, Version 2.1, the GNU Affero General Public License, Version 3.0, or any later versions of those licenses.

.
1.13. "Source Code Form"

means the form of the work preferred for making modifications.

.
1.14. "You" (or "Your")

means an individual or a legal entity exercising rights under this License. For legal entities, "You" includes any entity that controls, is controlled by, or is under common control with You. For purposes of this definition, "control" means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial

ownership of such entity.

.
2. License Grants and Conditions

.
2.1. Grants
.

Each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license:

.
(a) under intellectual property rights (other than patent or trademark) Licensable by such Contributor to use, reproduce, make available, modify, display, perform, distribute, and otherwise exploit its Contributions, either on an unmodified basis, with Modifications, or as part of a Larger Work; and

.
(b) under Patent Claims of such Contributor to make, use, sell, offer for sale, have made, import, and otherwise transfer either its Contributions or its Contributor Version.
.

2.2. Effective Date
.

The licenses granted in Section 2.1 with respect to any Contribution become effective for each Contribution on the date the Contributor first distributes such Contribution.
.

2.3. Limitations on Grant Scope
.

The licenses granted in this Section 2 are the only rights granted under this License. No additional rights or licenses will be implied from the distribution or licensing of Covered Software under this License. Notwithstanding Section 2.1(b) above, no patent license is granted by a Contributor:

.
(a) for any code that a Contributor has removed from Covered Software;
or

.
(b) for infringements caused by: (i) Your and any other third party's modifications of Covered Software, or (ii) the combination of its Contributions with other software (except as part of its Contributor Version); or

.
(c) under Patent Claims infringed by Covered Software in the absence of its Contributions.
.

This License does not grant any rights in the trademarks, service marks, or logos of any Contributor (except as may be necessary to comply with the notice requirements in Section 3.4).

.

2.4. Subsequent Licenses

.

No Contributor makes additional grants as a result of Your choice to distribute the Covered Software under a subsequent version of this License (see Section 10.2) or under the terms of a Secondary License (if permitted under the terms of Section 3.3).

.

2.5. Representation

.

Each Contributor represents that the Contributor believes its Contributions are its original creation(s) or it has sufficient rights to grant the rights to its Contributions conveyed by this License.

.

2.6. Fair Use

.

This License is not intended to limit any rights You have under applicable copyright doctrines of fair use, fair dealing, or other equivalents.

.

2.7. Conditions

.

Sections 3.1, 3.2, 3.3, and 3.4 are conditions of the licenses granted in Section 2.1.

.

3. Responsibilities

.

3.1. Distribution of Source Form

.

All distribution of Covered Software in Source Code Form, including any Modifications that You create or to which You contribute, must be under the terms of this License. You must inform recipients that the Source Code Form of the Covered Software is governed by the terms of this License, and how they can obtain a copy of this License. You may not attempt to alter or restrict the recipients' rights in the Source Code Form.

.

3.2. Distribution of Executable Form

.

If You distribute Covered Software in Executable Form then:

.

- (a) such Covered Software must also be made available in Source Code Form, as described in Section 3.1, and You must inform recipients of the Executable Form how they can obtain a copy of such Source Code Form by reasonable means in a timely manner, at a charge no more than the cost of distribution to the recipient; and
- .

(b) You may distribute such Executable Form under the terms of this License, or sublicense it under different terms, provided that the license for the Executable Form does not attempt to limit or alter the recipients' rights in the Source Code Form under this License.

3.3. Distribution of a Larger Work

You may create and distribute a Larger Work under terms of Your choice, provided that You also comply with the requirements of this License for the Covered Software. If the Larger Work is a combination of Covered Software with a work governed by one or more Secondary Licenses, and the Covered Software is not Incompatible With Secondary Licenses, this License permits You to additionally distribute such Covered Software under the terms of such Secondary License(s), so that the recipient of the Larger Work may, at their option, further distribute the Covered Software under the terms of either this License or such Secondary License(s).

3.4. Notices

You may not remove or alter the substance of any license notices (including copyright notices, patent notices, disclaimers of warranty, or limitations of liability) contained within the Source Code Form of the Covered Software, except that You may alter any license notices to the extent required to remedy known factual inaccuracies.

3.5. Application of Additional Terms

You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Software. However, You may do so only on Your own behalf, and not on behalf of any Contributor. You must make it absolutely clear that any such warranty, support, indemnity, or liability obligation is offered by You alone, and You hereby agree to indemnify every Contributor for any liability incurred by such Contributor as a result of warranty, support, indemnity or liability terms You offer. You may include additional disclaimers of warranty and limitations of liability specific to any jurisdiction.

4. Inability to Comply Due to Statute or Regulation

If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Covered Software due to statute, judicial order, or regulation then You must: (a) comply with the terms of this License to the maximum extent possible; and (b) describe the limitations and the code they affect. Such description must be placed in a text file included with all distributions of the Covered

Software under this License. Except to the extent prohibited by statute or regulation, such description must be sufficiently detailed for a recipient of ordinary skill to be able to understand it.

5. Termination

5.1. The rights granted under this License will terminate automatically if You fail to comply with any of its terms. However, if You become compliant, then the rights granted under this License from a particular Contributor are reinstated (a) provisionally, unless and until such Contributor explicitly and finally terminates Your grants, and (b) on an ongoing basis, if such Contributor fails to notify You of the non-compliance by some reasonable means prior to 60 days after You have come back into compliance. Moreover, Your grants from a particular Contributor are reinstated on an ongoing basis if such Contributor notifies You of the non-compliance by some reasonable means, this is the first time You have received notice of non-compliance with this License from such Contributor, and You become compliant prior to 30 days after Your receipt of the notice.

5.2. If You initiate litigation against any entity by asserting a patent infringement claim (excluding declaratory judgment actions, counter-claims, and cross-claims) alleging that a Contributor Version directly or indirectly infringes any patent, then the rights granted to You by any and all Contributors for the Covered Software under Section 2.1 of this License shall terminate.

5.3. In the event of termination under Sections 5.1 or 5.2 above, all end user license agreements (excluding distributors and resellers) which have been validly granted by You or Your distributors under this License prior to termination shall survive termination.

* 6. Disclaimer of Warranty *
* ----- *
* Covered Software is provided under this License on an "as is" *
* basis, without warranty of any kind, either expressed, implied, or *
* statutory, including, without limitation, warranties that the *
* Covered Software is free of defects, merchantable, fit for a *
* particular purpose or non-infringing. The entire risk as to the *
* quality and performance of the Covered Software is with You. *
* Should any Covered Software prove defective in any respect, You *
* (not any Contributor) assume the cost of any necessary servicing, *
* repair, or correction. This disclaimer of warranty constitutes an *
* essential part of this License. No use of any Covered Software is *

* authorized under this License except under this disclaimer. *

.

* 7. Limitation of Liability *

----- *

* Under no circumstances and under no legal theory, whether tort *

* (including negligence), contract, or otherwise, shall any *

* Contributor, or anyone who distributes Covered Software as *

* permitted above, be liable to You for any direct, indirect, *

* special, incidental, or consequential damages of any character *

* including, without limitation, damages for lost profits, loss of *

* goodwill, work stoppage, computer failure or malfunction, or any *

* and all other commercial damages or losses, even if such party *

* shall have been informed of the possibility of such damages. This *

* limitation of liability shall not apply to liability for death or *

* personal injury resulting from such party's negligence to the *

* extent applicable law prohibits such limitation. Some *

* jurisdictions do not allow the exclusion or limitation of *

* incidental or consequential damages, so this exclusion and *

* limitation may not apply to You. *

8. Litigation

.

Any litigation relating to this License may be brought only in the courts of a jurisdiction where the defendant maintains its principal place of business and such litigation shall be governed by laws of that jurisdiction, without reference to its conflict-of-law provisions. Nothing in this Section shall prevent a party's ability to bring cross-claims or counter-claims.

9. Miscellaneous

.

This License represents the complete agreement concerning the subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not be used to construe this License against a Contributor.

10. Versions of the License

.
10.1. New Versions

Mozilla Foundation is the license steward. Except as provided in Section 10.3, no one other than the license steward has the right to modify or publish new versions of this License. Each version will be given a distinguishing version number.

10.2. Effect of New Versions

You may distribute the Covered Software under the terms of the version of the License under which You originally received the Covered Software, or under the terms of any subsequent version published by the license steward.

10.3. Modified Versions

If you create software not governed by this License, and you want to create a new license for such software, you may create and use a modified version of this License if you rename the license and remove any references to the name of the license steward (except to note that such modified license differs from this License).

10.4. Distributing Source Code Form that is Incompatible With Secondary Licenses

If You choose to distribute Source Code Form that is Incompatible With Secondary Licenses under the terms of this version of the License, the notice described in Exhibit B of this License must be attached.

Exhibit A - Source Code Form License Notice

.
This Source Code Form is subject to the terms of the Mozilla Public License, v. 2.0. If a copy of the MPL was not distributed with this file, You can obtain one at <http://mozilla.org/MPL/2.0/>.

If it is not possible or desirable to put the notice in a particular file, then You may include the notice in a location (such as a LICENSE file in a relevant directory) where a recipient would be likely to look for such a notice.

You may add additional accurate notices of copyright ownership.

Exhibit B - "Incompatible With Secondary Licenses" Notice

This Source Code Form is "Incompatible With Secondary Licenses", as defined by the Mozilla Public License, v. 2.0.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: curl

Source: <http://curl.haxx.se>

Files: *

Copyright: 1996-2015, Daniel Stenberg <daniel@haxx.se>

License: curl

Files: lib/vtls/sectransp.*

Copyright: 2012-2014, Nick Zitzmann <nickzman@gmail.com>

2012-2019, Daniel Stenberg <daniel@haxx.se>

License: curl

Files: lib/curl_rtmp.*

Copyright: 2010, Howard Chu <hyc@highlandsun.com>

License: curl

Files: lib/vtls/schannel.*

Copyright: 2012-2014, Marc Hoersken <info@marc-hoersken.de>

2012, Mark Salisbury <mark.salisbury@hp.com>

2012-2015, Daniel Stenberg <daniel@haxx.se>

License: curl

Files: lib/inet_pton.c

lib/inet_ntop.c

Copyright: 1996-2001 Internet Software Consortium

License: ISC

Files: lib/krb5.c

Copyright: 2004-2015 Daniel Stenberg

1995-1999 Kungliga Tekniska Hgskolan

License: BSD-3-Clause

Files: lib/md4.c

Copyright: 2001, Solar Designer <solar@openwall.com>

License: public-domain

Files: lib/openldap.*

Copyright: 2011-2015, Daniel Stenberg <daniel@haxx.se>

2010, Howard Chu <hyc@openldap.org>

License: curl

Files: lib/vtls/mbedtls.*

Copyright: 2010-2011, Hoi-Ho Chan <hoiho.chan@gmail.com>

2012-2020, Daniel Stenberg <daniel@haxx.se>

License: curl

Files: lib/socks_gssapi.c
lib/socks_ssapi.*
Copyright: 2009, 2011, Markus Moeller, <markus_moeller@compuserve.com>
2012-2015, Daniel Stenberg, <daniel@haxx.se>
License: curl

Files: tests/certs/scripts/genroot.sh
tests/certs/scripts/genserv.sh
Copyright: 2000-2009, EdelWeb for EdelKey and OpenEvidence
License: curl

Files: tests/server/tftpd.c
Copyright: 1983 Regents of the University of California
License: BSD-4-Clause

Files: tests/server/fake_ntlm.c
Copyright: 2010, Mandy Wu <mandy.wu@intel.com>
2011-2013, Daniel Stenberg <daniel@haxx.se>
License: curl

Files: docs/examples/fopen.c
Copyright: 2003, Simtec Electronics
License: BSD-3-Clause

Files: docs/examples/rtsp.c
Copyright: 2011, Jim Hollinger
License: BSD-3-Clause

Files: docs/examples/curlgtk.c
Copyright: 2003, The OpenEvidence Project
License: curl

Files: docs/examples/curlx.c
Copyright: 2003, The OpenEvidence Project
License: other

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- .
- 1. Redistributions of source code must retain the above copyright notice, this list of conditions, the following disclaimer, and the original OpenSSL and SSLeay Licences below.
- .
- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions, the following disclaimer and the original OpenSSL and SSLeay Licences below in the documentation and/or other materials provided with the

distribution.

3. All advertising materials mentioning features or use of this software must display the following acknowledgments:
"This product includes software developed by the OpenEvidence Project for use in the OpenEvidence Toolkit. (<http://www.openevidence.org/>)"
This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>)"
This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com)."
4. The names "OpenEvidence Toolkit" and "OpenEvidence Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openevidence-core@openevidence.org.
5. Products derived from this software may not be called "OpenEvidence" nor may "OpenEvidence" appear in their names without prior written permission of the OpenEvidence Project.
6. Redistributions of any form whatsoever must retain the following acknowledgments:
"This product includes software developed by the OpenEvidence Project for use in the OpenEvidence Toolkit (<http://www.openevidence.org/>)"
This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>)"
This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com)."

THIS SOFTWARE IS PROVIDED BY THE OpenEvidence PROJECT ``AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenEvidence PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Files: src/macos/src/macos_main.cpp

Copyright: 2001, Eric Lavigne

License: other

Permission is granted to anyone to use this software for any purpose on any computer system, and to redistribute it

freely, subject to the following restrictions: - The author is not responsible for the consequences of use of this software, no matter how awful, even if they arise from defects in it. - The origin of this software must not be misrepresented, either by explicit claim or by omission. - You are allowed to distributed modified copies of the software, in source and binary form, provided they are marked plainly as altered versions, and are not misrepresented as being the original software.

Files: debian/*

Copyright: 2000-2010, Domenico Andreoli <cavok@debian.org>

2010-2011, Ramakrishnan Muthukrishnan <rkrishnan@debian.org>

2011, Alessandro Ghedini <ghedo@debian.org>

License: curl

License: curl

All rights reserved.

.

Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization of the copyright holder.

License: BSD-3-Clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

.

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the Institute nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

.

THIS SOFTWARE IS PROVIDED BY THE INSTITUTE AND CONTRIBUTORS ``AS IS'' AND

ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE INSTITUTE OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: BSD-4-Clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- .
1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- .
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- .
3. Neither the name of the Institute nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.
- .
4. Neither the name of the <organization> nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.
- .

THIS SOFTWARE IS PROVIDED BY THE INSTITUTE AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE INSTITUTE OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: ISC

Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

This package was debianized by Sam Hartman <hartmans@permabit.com> on Thu, 19 Oct 2000 16:05:06 -0400.

It was downloaded from:

<<http://web.mit.edu/kerberos/>>

Upstream Maintainers:

MIT Kerberos Team <krbdev@mit.edu>

Copyright:

Copyright (C) 1985-2018 by the Massachusetts Institute of Technology.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Downloading of this software may constitute an export of cryptographic

software from the United States of America that is subject to the United States Export Administration Regulations (EAR), 15 CFR 730-774. Additional laws or regulations may apply. It is the responsibility of the person or entity contemplating export to comply with all applicable export laws and regulations, including obtaining any required license from the U.S. government.

The U.S. government prohibits export of encryption source code to certain countries and individuals, including, but not limited to, the countries of Cuba, Iran, North Korea, Sudan, Syria, and residents and nationals of those countries.

Documentation components of this software distribution are licensed under a Creative Commons Attribution-ShareAlike 3.0 Unported License. (<http://creativecommons.org/licenses/by-sa/3.0/>)

Individual source code files are copyright MIT, Cygnus Support, Novell, OpenVision Technologies, Oracle, Red Hat, Sun Microsystems, FundsXpress, and others.

Project Athena, Athena, Athena MUSE, Discuss, Hesiod, Kerberos, Moira, and Zephyr are trademarks of the Massachusetts Institute of Technology (MIT). No commercial use of these trademarks may be made without prior written permission of MIT.

"Commercial use" means use of a name in a product or other for-profit manner. It does NOT prevent a commercial firm from referring to the MIT trademarks in order to convey information (although in doing so, recognition of their trademark status should be given).

=====

The following copyright and permission notice applies to the OpenVision Kerberos Administration system located in "kadmin/create", "kadmin/dbutil", "kadmin/passwd", "kadmin/server", "lib/kadm5", and portions of "lib/rpc":

Copyright, OpenVision Technologies, Inc., 1993-1996, All Rights Reserved

WARNING: Retrieving the OpenVision Kerberos Administration system source code, as described below, indicates your acceptance of the following terms. If you do not agree to the following terms, do not retrieve the OpenVision Kerberos administration system.

You may freely use and distribute the Source Code and Object Code compiled from it, with or without modification, but this Source Code is provided to you "AS IS" EXCLUSIVE OF ANY WARRANTY,

INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ANY OTHER WARRANTY, WHETHER EXPRESS OR IMPLIED. IN NO EVENT WILL OPENVISION HAVE ANY LIABILITY FOR ANY LOST PROFITS, LOSS OF DATA OR COSTS OF PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES, OR FOR ANY SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THIS AGREEMENT, INCLUDING, WITHOUT LIMITATION, THOSE RESULTING FROM THE USE OF THE SOURCE CODE, OR THE FAILURE OF THE SOURCE CODE TO PERFORM, OR FOR ANY OTHER REASON.

OpenVision retains all copyrights in the donated Source Code. OpenVision also retains copyright to derivative works of the Source Code, whether created by OpenVision or by a third party. The OpenVision copyright notice must be preserved if derivative works are made based on the donated Source Code.

OpenVision Technologies, Inc. has donated this Kerberos Administration system to MIT for inclusion in the standard Kerberos 5 distribution. This donation underscores our commitment to continuing Kerberos technology development and our gratitude for the valuable work which has been performed by MIT and the Kerberos community.

=====
Portions contributed by Matt Crawford "crawd@fnl.gov" were work performed at Fermi National Accelerator Laboratory, which is operated by Universities Research Association, Inc., under contract DE-AC02-76CHO3000 with the U.S. Department of Energy.

=====
Portions of "src/lib/crypto" have the following copyright:

Copyright (C) 1998 by the FundsXpress, INC.

All rights reserved.

Export of this software from the United States of America may require a specific license from the United States Government. It is the responsibility of any person or organization contemplating export to obtain such a license before exporting.

WITHIN THAT CONSTRAINT, permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that

the name of FundsXpress. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. FundsXpress makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

THIS SOFTWARE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

=====
The implementation of the AES encryption algorithm in "src/lib/crypto/builtin/aes" has the following copyright:

Copyright (C) 2001, Dr Brian Gladman "brg@gladman.uk.net", Worcester, UK.
All rights reserved.

LICENSE TERMS

The free distribution and use of this software in both source and binary form is allowed (with or without changes) provided that:

1. distributions of this source code include the above copyright notice, this list of conditions and the following disclaimer;
2. distributions in binary form include the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other associated materials;
3. the copyright holder's name is not used to endorse products built using this software without specific written permission.

DISCLAIMER

This software is provided 'as is' with no explicit or implied warranties in respect of any properties, including, but not limited to, correctness and fitness for purpose.

=====
Portions contributed by Red Hat, including the pre-authentication plug-in framework and the NSS crypto implementation, contain the following copyright:

Copyright (C) 2006 Red Hat, Inc.
Portions copyright (C) 2006 Massachusetts Institute of Technology
All Rights Reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of Red Hat, Inc., nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

=====

The bundled verto source code is subject to the following license:

Copyright 2011 Red Hat, Inc.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND,

EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

The MS-KKDCP client implementation has the following copyright:

Copyright 2013,2014 Red Hat, Inc.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The implementations of GSSAPI mechglue in GSSAPI-SPNEGO in "src/lib/gssapi", including the following files:

lib/gssapi/generic/gssapi_err_generic.et
lib/gssapi/mechglue/g_accept_sec_context.c
lib/gssapi/mechglue/g_acquire_cred.c

lib/gssapi/mechglue/g_canon_name.c
lib/gssapi/mechglue/g_compare_name.c
lib/gssapi/mechglue/g_context_time.c
lib/gssapi/mechglue/g_delete_sec_context.c
lib/gssapi/mechglue/g_dsp_name.c
lib/gssapi/mechglue/g_dsp_status.c
lib/gssapi/mechglue/g_dup_name.c
lib/gssapi/mechglue/g_exp_sec_context.c
lib/gssapi/mechglue/g_export_name.c
lib/gssapi/mechglue/g_glue.c
lib/gssapi/mechglue/g_imp_name.c
lib/gssapi/mechglue/g_imp_sec_context.c
lib/gssapi/mechglue/g_init_sec_context.c
lib/gssapi/mechglue/g_initialize.c
lib/gssapi/mechglue/g_inquire_context.c
lib/gssapi/mechglue/g_inquire_cred.c
lib/gssapi/mechglue/g_inquire_names.c
lib/gssapi/mechglue/g_process_context.c
lib/gssapi/mechglue/g_rel_buffer.c
lib/gssapi/mechglue/g_rel_cred.c
lib/gssapi/mechglue/g_rel_name.c
lib/gssapi/mechglue/g_rel_oid_set.c
lib/gssapi/mechglue/g_seal.c
lib/gssapi/mechglue/g_sign.c
lib/gssapi/mechglue/g_store_cred.c
lib/gssapi/mechglue/g_unseal.c
lib/gssapi/mechglue/g_userok.c
lib/gssapi/mechglue/g_utils.c
lib/gssapi/mechglue/g_verify.c
lib/gssapi/mechglue/gssd_pname_to_uid.c
lib/gssapi/mechglue/mglueP.h
lib/gssapi/mechglue/oid_ops.c
lib/gssapi/spnego/gssapiP_spnego.h
lib/gssapi/spnego/spnego_mech.c

and the initial implementation of incremental propagation, including the following new or changed files:

include/iprop_hdr.h
kadmin/server/ipropd_svc.c
lib/kdb/iprop.x
lib/kdb/kdb_convert.c
lib/kdb/kdb_log.c
lib/kdb/kdb_log.h
lib/krb5/error_tables/kdb5_err.et
slave/kpropd_rpc.c
slave/kproplog.c

are subject to the following license:

Copyright (C) 2004 Sun Microsystems, Inc.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

=====
Kerberos V5 includes documentation and software developed at the University of California at Berkeley, which includes this copyright notice:

Copyright (C) 1983 Regents of the University of California.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Portions contributed by Novell, Inc., including the LDAP database backend, are subject to the following license:

Copyright (C) 2004-2005, Novell, Inc.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * The copyright holder's name is not used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)

ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

=====
Portions funded by Sandia National Laboratory and developed by the University of Michigan's Center for Information Technology Integration, including the PKINIT implementation, are subject to the following license:

COPYRIGHT (C) 2006-2007
THE REGENTS OF THE UNIVERSITY OF MICHIGAN
ALL RIGHTS RESERVED

Permission is granted to use, copy, create derivative works and redistribute this software and such derivative works for any purpose, so long as the name of The University of Michigan is not used in any advertising or publicity pertaining to the use of distribution of this software without specific, written prior authorization. If the above copyright notice or any other identification of the University of Michigan is included in any copy of any portion of this software, then the disclaimer below must also be included.

THIS SOFTWARE IS PROVIDED AS IS, WITHOUT REPRESENTATION FROM THE UNIVERSITY OF MICHIGAN AS TO ITS FITNESS FOR ANY PURPOSE, AND WITHOUT WARRANTY BY THE UNIVERSITY OF MICHIGAN OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE REGENTS OF THE UNIVERSITY OF MICHIGAN SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WITH RESPECT TO ANY CLAIM ARISING OUT OF OR IN CONNECTION WITH THE USE OF THE SOFTWARE, EVEN IF IT HAS BEEN OR IS HEREAFTER ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

=====
The pkcs11.h file included in the PKINIT code has the following license:

Copyright 2006 g10 Code GmbH
Copyright 2006 Andreas Jellinghaus

This file is free software; as a special exception the author gives unlimited permission to copy and/or distribute it, with or without modifications, as long as this notice is preserved.

This file is distributed in the hope that it will be useful, but

WITHOUT ANY WARRANTY, to the extent permitted by law; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

=====
Portions contributed by Apple Inc. are subject to the following license:

Copyright 2004-2008 Apple Inc. All Rights Reserved.

Export of this software from the United States of America may require a specific license from the United States Government. It is the responsibility of any person or organization contemplating export to obtain such a license before exporting.

WITHIN THAT CONSTRAINT, permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Apple Inc. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. Apple Inc. makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

THIS SOFTWARE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

=====
The implementations of UTF-8 string handling in src/util/support and src/lib/krb5/unicode are subject to the following copyright and permission notice:

The OpenLDAP Public License
Version 2.8, 17 August 2003

Redistribution and use of this software and associated documentation ("Software"), with or without modification, are permitted provided that the following conditions are met:

1. Redistributions in source form must retain copyright statements and notices,
2. Redistributions in binary form must reproduce applicable

copyright statements and notices, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution, and

3. Redistributions must contain a verbatim copy of this document.

The OpenLDAP Foundation may revise this license from time to time. Each revision is distinguished by a version number. You may use this Software under terms of this license revision or under the terms of any subsequent revision of the license.

THIS SOFTWARE IS PROVIDED BY THE OPENLDAP FOUNDATION AND ITS CONTRIBUTORS "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OPENLDAP FOUNDATION, ITS CONTRIBUTORS, OR THE AUTHOR(S) OR OWNER(S) OF THE SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The names of the authors and copyright holders must not be used in advertising or otherwise to promote the sale, use or other dealing in this Software without specific, written prior permission. Title to copyright in this Software shall at all times remain with copyright holders.

OpenLDAP is a registered trademark of the OpenLDAP Foundation.

Copyright 1999-2003 The OpenLDAP Foundation, Redwood City, California, USA. All Rights Reserved. Permission to copy and distribute verbatim copies of this document is granted.

=====

Marked test programs in src/lib/krb5/krb have the following copyright:

Copyright (C) 2006 Kungliga Tekniska Hgskola
(Royal Institute of Technology, Stockholm, Sweden).
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions

are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of KTH nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY KTH AND ITS CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL KTH OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

=====

The KCM Mach RPC definition file used on OS X has the following copyright:

Copyright (C) 2009 Kungliga Tekniska Hgskola
(Royal Institute of Technology, Stockholm, Sweden).
All rights reserved.

Portions Copyright (C) 2009 Apple Inc. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following

disclaimer in the documentation and/or other materials provided with the distribution.

3. Neither the name of the Institute nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE INSTITUTE AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE INSTITUTE OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

=====

Portions of the RPC implementation in src/lib/rpc and src/include/gssrpc have the following copyright and permission notice:

Copyright (C) 2010, Oracle America, Inc.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the "Oracle America, Inc." nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT

LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

=====
Copyright (C) 2006,2007,2009 NTT (Nippon Telegraph and Telephone Corporation). All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer as the first lines of this file unmodified.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY NTT "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL NTT BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

=====
Copyright 2000 by Carnegie Mellon University

All Rights Reserved

Permission to use, copy, modify, and distribute this software and

its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Carnegie Mellon University not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

CARNEGIE MELLON UNIVERSITY DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL CARNEGIE MELLON UNIVERSITY BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

=====

Copyright (C) 2002 Naval Research Laboratory (NRL/CCS)

Permission to use, copy, modify and distribute this software and its documentation is hereby granted, provided that both the copyright notice and this permission notice appear in all copies of the software, derivative works or modified versions, and any portions thereof.

NRL ALLOWS FREE USE OF THIS SOFTWARE IN ITS "AS IS" CONDITION AND DISCLAIMS ANY LIABILITY OF ANY KIND FOR ANY DAMAGES WHATSOEVER RESULTING FROM THE USE OF THIS SOFTWARE.

=====

Portions extracted from Internet RFCs have the following copyright notice:

Copyright (C) The Internet Society (2006).

This document is subject to the rights, licenses and restrictions contained in BCP 78, and except as set forth therein, the authors retain all their rights.

This document and the information contained herein are provided on an "AS IS" basis and THE CONTRIBUTOR, THE ORGANIZATION HE/SHE REPRESENTS OR IS SPONSORED BY (IF ANY), THE INTERNET SOCIETY AND THE INTERNET ENGINEERING TASK FORCE DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY RIGHTS OR

ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Copyright (C) 1991, 1992, 1994 by Cygnus Support.

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. Cygnus Support makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

Copyright (C) 2006 Secure Endpoints Inc.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Portions of the implementation of the Fortuna-like PRNG are subject to the following notice:

Copyright (C) 2005 Marko Kreen
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright (C) 1994 by the University of Southern California

EXPORT OF THIS SOFTWARE from the United States of America may require a specific license from the United States Government. It is the responsibility of any person or organization contemplating export to obtain such a license before exporting.

WITHIN THAT CONSTRAINT, permission to copy, modify, and distribute this software and its documentation in source and binary forms is hereby granted, provided that any documentation or other materials related to such distribution or use acknowledge that the software was developed by the University of Southern California.

DISCLAIMER OF WARRANTY. THIS SOFTWARE IS PROVIDED "AS IS". The University of Southern California MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. By way of example, but not limitation, the University of Southern California MAKES NO REPRESENTATIONS OR WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. The University of Southern California shall not be held liable for any liability nor for any direct, indirect, or consequential damages with respect to any claim by the user or distributor of the ksu software.

Copyright (C) 1995
The President and Fellows of Harvard University

This code is derived from software contributed to Harvard by Jeremy Rassen.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:

This product includes software developed by the University of California, Berkeley and its contributors.

4. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright (C) 2008 by the Massachusetts Institute of Technology.
Copyright 1995 by Richard P. Basch. All Rights Reserved.
Copyright 1995 by Lehman Brothers, Inc. All Rights Reserved.

Export of this software from the United States of America may require a specific license from the United States Government. It is the responsibility of any person or organization contemplating export to obtain such a license before exporting.

WITHIN THAT CONSTRAINT, permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Richard P. Basch, Lehman Brothers and M.I.T. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. Richard P. Basch, Lehman Brothers and M.I.T. make no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

=====
The following notice applies to "src/lib/krb5/krb/strptime.c" and "src/include/k5-queue.h".

Copyright (C) 1997, 1998 The NetBSD Foundation, Inc.
All rights reserved.

This code was contributed to The NetBSD Foundation by Klaus Klein.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:

This product includes software developed by the NetBSD Foundation, Inc. and its contributors.

4. Neither the name of The NetBSD Foundation nor the names of its contributors may be used to endorse or promote products derived

from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE NETBSD FOUNDATION, INC. AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE FOUNDATION OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

=====

The following notice applies to Unicode library files in "src/lib/krb5/unicode":

Copyright 1997, 1998, 1999 Computing Research Labs,
New Mexico State University

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE COMPUTING RESEARCH LAB OR NEW MEXICO STATE UNIVERSITY BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

=====

The following notice applies to "src/util/support/strncpy.c":

Copyright (C) 1998 Todd C. Miller "Todd.Miller@courtesan.com"

Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

=====

The following notice applies to "src/util/profile/argv_parse.c" and "src/util/profile/argv_parse.h":

Copyright 1999 by Theodore Ts'o.

Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies. THE SOFTWARE IS PROVIDED "AS IS" AND THEODORE TS'O (THE AUTHOR) DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. (Isn't it sick that the U.S. culture of lawsuit-happy lawyers requires this kind of disclaimer?)

=====

The following notice applies to SWIG-generated code in "src/util/profile/profile_tcl.c":

Copyright (C) 1999-2000, The University of Chicago

This file may be freely redistributed without license or fee provided this copyright message remains intact.

=====

The following notice applies to portions of "src/lib/rpc" and "src/include/gssrpc":

Copyright (C) 2000 The Regents of the University of Michigan. All rights reserved.

Copyright (C) 2000 Dug Song "dugsong@UMICH.EDU". All rights reserved, all wrongs reversed.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

=====

Implementations of the MD4 algorithm are subject to the following notice:

Copyright (C) 1990, RSA Data Security, Inc. All rights reserved.

License to copy and use this software is granted provided that it is identified as the "RSA Data Security, Inc. MD4 Message Digest

Algorithm" in all material mentioning or referencing this software or this function.

License is also granted to make and use derivative works provided that such works are identified as "derived from the RSA Data Security, Inc. MD4 Message Digest Algorithm" in all material mentioning or referencing the derived work.

RSA Data Security, Inc. makes no representations concerning either the merchantability of this software or the suitability of this software for any particular purpose. It is provided "as is" without express or implied warranty of any kind.

These notices must be retained in any copies of any part of this documentation and/or software.

=====

Implementations of the MD5 algorithm are subject to the following notice:

Copyright (C) 1990, RSA Data Security, Inc. All rights reserved.

License to copy and use this software is granted provided that it is identified as the "RSA Data Security, Inc. MD5 Message- Digest Algorithm" in all material mentioning or referencing this software or this function.

License is also granted to make and use derivative works provided that such works are identified as "derived from the RSA Data Security, Inc. MD5 Message-Digest Algorithm" in all material mentioning or referencing the derived work.

RSA Data Security, Inc. makes no representations concerning either the merchantability of this software or the suitability of this software for any particular purpose. It is provided "as is" without express or implied warranty of any kind.

These notices must be retained in any copies of any part of this documentation and/or software.

=====

The following notice applies to
"src/lib/crypto/crypto_tests/t_md driver.c":

Copyright (C) 1990-2, RSA Data Security, Inc. Created 1990. All rights reserved.

RSA Data Security, Inc. makes no representations concerning either the merchantability of this software or the suitability of this software for any particular purpose. It is provided "as is" without express or implied warranty of any kind.

These notices must be retained in any copies of any part of this documentation and/or software.

=====

Portions of "src/lib/krb5" are subject to the following notice:

Copyright (C) 1994 CyberSAFE Corporation.
Copyright 1990,1991,2007,2008 by the Massachusetts Institute of Technology.
All Rights Reserved.

Export of this software from the United States of America may require a specific license from the United States Government. It is the responsibility of any person or organization contemplating export to obtain such a license before exporting.

WITHIN THAT CONSTRAINT, permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of M.I.T. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. Furthermore if you modify this software you must label your software as modified software and not distribute it in such a fashion that it might be confused with the original M.I.T. software. Neither M.I.T., the Open Computing Security Group, nor CyberSAFE Corporation make any representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

=====

Portions contributed by PADL Software are subject to the following license:

Copyright (c) 2011, PADL Software Pty Ltd. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of PADL Software nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY PADL SOFTWARE AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL PADL SOFTWARE OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

=====
The bundled libev source code is subject to the following license:

All files in libev are Copyright (C)2007,2008,2009 Marc Alexander Lehmann.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE

COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Alternatively, the contents of this package may be used under the terms of the GNU General Public License ("GPL") version 2 or any later version, in which case the provisions of the GPL are applicable instead of the above. If you wish to allow the use of your version of this package only under the terms of the GPL and not to allow others to use your version of this file under the BSD license, indicate your decision by deleting the provisions above and replace them with the notice and other provisions required by the GPL in this and the other files of this package. If you do not delete the provisions above, a recipient may use your version of this file under either the BSD or the GPL.

On Debian systems, the complete text of the GNU General Public License version 2 can be found in `~/usr/share/common-licenses/GPL-2'`.

=====

Files copied from the Intel AESNI Sample Library are subject to the following license:

Copyright (C) 2010, Intel Corporation
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of Intel Corporation nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

=====

The following notice applies to
"src/ccapi/common/win/OldCC/autolock.hxx":

Copyright (C) 1998 by Danilo Almeida. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

=====

The Debian Packaging is licensed under the same terms as MIT Kerberos.

Copyright (c) The Regents of the University of California.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Mozilla Elliptic Curve Cryptography (ECC)

Mozilla ECC Notice

This notice is provided with respect to Elliptic Curve Cryptography, which is included with JRE, JDK, and OpenJDK.

You are receiving a

[copy](<http://hg.openjdk.java.net/jdk9/jdk9/jdk/file/tip/src/jdk.crypto.ec/share/native/libsunec/impl>) of the Elliptic Curve Cryptography library in source form with the JDK and OpenJDK source distributions, and as object code in the JRE & JDK runtimes.

<pre>

In the case of the JRE & JDK runtimes, the terms of the Oracle license do NOT apply to the Elliptic Curve Cryptography library; it is licensed under the following license, separately from Oracle's JDK & JRE. If you do not wish to install the Elliptic Curve Cryptography library, you may delete the Elliptic Curve Cryptography library:

- On Solaris and Linux systems: delete \$(JAVA_HOME)/lib/libsunec.so
- On Mac OSX systems: delete \$(JAVA_HOME)/lib/libsunec.dylib
- On Windows systems: delete \$(JAVA_HOME)\bin\sunec.dll

</pre>

Written Offer for Source Code

<pre>

For third party technology that you receive from Oracle in binary form which is licensed under an open source license that gives you the right to receive the source code for that binary, you can obtain a copy of the applicable source code from this page:

<http://hg.openjdk.java.net/jdk9/jdk9/jdk/file/tip/src/jdk.crypto.ec/share/native/libsunec/impl>

If the source code for the technology was not provided to you with the binary, you can also receive a copy of the source code on physical media by submitting a written request to:

Oracle America, Inc.
Attn: Associate General Counsel,
Development and Engineering Legal
500 Oracle Parkway, 10th Floor
Redwood Shores, CA 94065

Or, you may send an email to Oracle using the form at:

<http://www.oracle.com/goto/opensourcecode/request>

Your request should include:

- The name of the component or binary file(s) for which you are requesting the source code
- The name and version number of the Oracle product containing the binary
- The date you received the Oracle product
- Your name
- Your company name (if applicable)
- Your return mailing address and email and
- A telephone number in the event we need to reach you.

We may charge you a fee to cover the cost of physical media and processing.

Your request must be sent (i) within three (3) years of the date you received the Oracle product that included the component or binary file(s) that are the subject of your request, or (ii) in the case of code licensed under the GPL v3, for as long as Oracle offers spare parts or customer support for that product model.

</pre>

LGPL 2.1

<pre>

GNU LESSER GENERAL PUBLIC LICENSE
Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA
Everyone is permitted to copy and distribute verbatim copies
of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts
as the successor of the GNU Library Public License, version 2, hence
the version number 2.1.]

Preamble

The licenses for most software are designed to take away your
freedom to share and change it. By contrast, the GNU General Public
Licenses are intended to guarantee your freedom to share and change
free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some
specially designated software packages--typically libraries--of the
Free Software Foundation and other authors who decide to use it. You
can use it too, but we suggest you first think carefully about whether
this license or the ordinary General Public License is the better
strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use,
not price. Our General Public Licenses are designed to make sure that
you have the freedom to distribute copies of free software (and charge
for this service if you wish); that you receive source code or can get
it if you want it; that you can change the software and use pieces of
it in new free programs; and that you are informed that you can do
these things.

To protect your rights, we need to make restrictions that forbid
distributors to deny you these rights or to ask you to surrender these
rights. These restrictions translate to certain responsibilities for
you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis
or for a fee, you must give the recipients all the rights that we gave
you. You must make sure that they, too, receive or can get the source

code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes

a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

GNU LESSER GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated

interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.
- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must

be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy

from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference

directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you

distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

- a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.
- b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot

distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free

programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice

That's all there is to it!

```
</pre>  
Format: https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/  
Upstream-Name: libseccomp  
Source: https://sourceforge.net/projects/libseccomp/
```

Files: *
Copyright: 2012 Paul Moore <pmoore@redhat.com>
2012 Ashley Lai <adlai@us.ibm.com>
2012 Corey Bryant <coreyb@linux.vnet.ibm.com>
2012 Eduardo Otubo <otubo@linux.vnet.ibm.com>
2012 Eric Paris <eparis@redhat.com>
License: LGPL-2.1

Files: tests/22-sim-basic_chains_array.tests
Copyright: 2013 Vitaly Shukela <vi0oss@gmail.com>
License: LGPL-2.1

Files: src/hash.*
Copyright: 2006 Bob Jenkins <bob_jenkins@burtleburtle.net>

License: LGPL-2.1

Files: debian/*

Copyright: 2012 Kees Cook <kees@debian.org>

License: LGPL-2.1

License: LGPL-2.1

This library is free software; you can redistribute it and/or modify it under the terms of version 2.1 of the GNU Lesser General Public License as published by the Free Software Foundation.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, see <<http://www.gnu.org/licenses>>.

On Debian systems, the complete text of the GNU Lesser General Public License can be found in "/usr/share/common-licenses/LGPL-2.1".

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: GnuPG - The GNU Privacy Guard (modern version)

Upstream-Contact: GnuPG development mailing list <gnupg-devel@gnupg.org>

Source: <https://gnupg.org/download/>

Files: *

Copyright: 1992, 1995-2020, Free Software Foundation, Inc

License: GPL-3+

Files: agent/command.c

agent/command-ssh.c

agent/gpg-agent.c

common/homedir.c

common/sysutils.c

g10/mainproc.c

Copyright: 1998-2007, 2009, 2012, Free Software Foundation, Inc

2013, Werner Koch

License: GPL-3+

Files: autogen.sh

Copyright: 2003, g10 Code GmbH

License: permissive

Files: common/gc-opt-flags.h

common/i18n.h

tools/clean-sat.c

tools/no-libgrypt.c

Copyright: 1998-2001, 2003, 2004, 2006, 2007 Free Software Foundation, Inc

License: permissive

Files: common/localename.c

Copyright: 1985, 1989-1993, 1995-2003, 2007, 2008 Free Software Foundation, Inc.

License: LGPL-2.1+

Files: dirmngr/dns.c

dirmngr/dns.h

Copyright: 2008-2010, 2012-2016 William Ahern

License: Expat

Files: doc/yat2m.c

scd/app-geldkarte.c

Copyright: 2004, 2005, g10 Code GmbH

2006, 2008, 2009, 2011, Free Software Foundation, Inc

License: GPL-3+

Files: scd/ccid-driver.h

scd/ccid-driver.c

Copyright: 2003-2007, Free Software Foundation, Inc

License: GPL-3+ or BSD-3-clause

Files: tools/rfc822parse.c

tools/rfc822parse.h

Copyright: 1999-2000, Werner Koch, Duesseldorf

2003-2004, g10 Code GmbH

License: LGPL-3+

Files: tools/sockprox.c

Copyright: 2007, g10 Code GmbH

License: GPL-3+

Files: doc/OpenPGP

Copyright: 1998-2013 Free Software Foundation, Inc.

1997, 1998, 2013 Werner Koch

1998 The Internet Society

License: RFC-Reference

Files: tests/gpgscm/*

Copyright: 2000, Dimitrios Souflis

2016, Justus Winter, Werner Koch

License: TinySCHEME

Files: debian/*

Copyright: 1998-2020 Debian GnuPG packagers, including

Eric Dorland <eric@debian.org>

Daniel Kahn Gillmor <dkg@fifthhorseman.net>

NIIBE Yutaka <gniibe@fsj.org>

License: GPL-3+

Files: debian/org.gnupg.scd daemon.metainfo.xml

Copyright: 2017 Daniel Kahn Gillmor <dkg@fifthhorseman.net>

Comment: This file is licensed permissively for the sake of AppStream

License: CC0-1.0

License: TinySCHEME

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

.

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

.

Neither the name of Dimitrios Souflis nor the names of the contributors may be used to endorse or promote products derived from this software without specific prior written permission.

.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: permissive

This file is free software; as a special exception the author gives unlimited permission to copy and/or distribute it, with or without modifications, as long as this notice is preserved.

.

This file is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY, to the extent permitted by law; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

License: RFC-Reference

doc/OpenPGP merely cites and references IETF Draft draft-ietf-openpgp-formats-07.txt. This is believed to be fair use; but if not, it's covered by the source document's license under the 'comment on' clause. The license statement follows.

.
This document and translations of it may be copied and furnished to others, and derivative works that comment on or otherwise explain it or assist in its implementation may be prepared, copied, published and distributed, in whole or in part, without restriction of any kind, provided that the above copyright notice and this paragraph are included on all such copies and derivative works. However, this document itself may not be modified in any way, such as by removing the copyright notice or references to the Internet Society or other Internet organizations, except as needed for the purpose of developing Internet standards in which case the procedures for copyrights defined in the Internet Standards process must be followed, or as required to translate it into languages other than English.

.
The limited permissions granted above are perpetual and will not be revoked by the Internet Society or its successors or assigns.

License: GPL-3+

GnuPG is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3 of the License, or (at your option) any later version.

.
GnuPG is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.
You should have received a copy of the GNU General Public License along with this program; if not, see <<https://www.gnu.org/licenses/>>.

.
On Debian systems, the full text of the GNU General Public License version 3 can be found in the file ``usr/share/common-licenses/GPL-3'`.

License: LGPL-3+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 3 of the License, or (at your option) any later version.

.
This program is distributed in the hope that it will be useful, but

WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this program; if not, see <<https://www.gnu.org/licenses/>>.

On Debian systems, the full text of the GNU Lesser General Public License version 3 can be found in the file ``usr/share/common-licenses/LGPL-3'`.

License: LGPL-2.1+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this program; if not, see <<https://www.gnu.org/licenses/>>.

On Debian systems, the full text of the GNU Lesser General Public License version 2.1 can be found in the file ``usr/share/common-licenses/LGPL-2.1'`.

License: BSD-3-clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, and the entire permission notice in its entirety, including the disclaimer of warranties.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES

(INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: Expat

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

License: CC0-1.0

To the extent possible under law, the author(s) have dedicated all copyright and related and neighboring rights to this software to the public domain worldwide. This software is distributed without any warranty.

.

On Debian systems, the complete text of the CC0 license, version 1.0, can be found in /usr/share/common-licenses/CC0-1.0.

This package was written by Peter Tobias <tobias@et-inf.fho-emden.de> on Thu, 16 Jan 1997 01:00:34 +0100.

License:

Copyright (C) 2009 Michael Meskes <meskes@debian.org>

Copyright (C) 2004-2005 Graham Wilson <graham@debian.org>

Copyright (C) 1997 Bernd Eckenfels

Copyright (C) 1997 Peter Tobias <tobias@et-inf.fho-emden.de>

Copyright (C) 1996 Free Software Foundation, Inc.

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; version 2 of the License.

This program is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
GNU General Public License for more details.

You should have received a copy of the GNU General Public License
along with this program; if not, write to the Free Software
Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA

On Debian systems, the complete text of the GNU General Public License
can be found in /usr/share/common-licenses/GPL-2 file.

CUP Parser Generator for Java v 0.11b

CUP Parser Generator License

<pre>

Copyright 1996-2015 by Scott Hudson, Frank Flannery, C. Scott Ananian, Michael Petter

Permission to use, copy, modify, and distribute this software and its
documentation for any purpose and without fee is hereby granted, provided
that the above copyright notice appear in all copies and that both
the copyright notice and this permission notice and warranty disclaimer
appear in supporting documentation, and that the names of the authors or
their employers not be used in advertising or publicity pertaining to
distribution of the software without specific, written prior permission.

The authors and their employers disclaim all warranties with regard to
this software, including all implied warranties of merchantability and
fitness. In no event shall the authors or their employers be liable for
any special, indirect or consequential damages or any damages whatsoever
resulting from loss of use, data or profits, whether in an action of
contract, negligence or other tortious action, arising out of or in
connection with the use or performance of this software.

</pre>

It was downloaded from <ftp://ftp.gnu.org/gnu/findutils>

Debian maintainer history: The original package was put together by
Ian Murdock <imurdock@debian.org>, afterwards Kevin Dalley
<kevind@rahul.net> took over. 2003-07 Andreas Metzler
<ametzler@debian.org> followed.

Upstream Authors:

* GNU find was written by Eric Decker <cire@cisco.com>,
with enhancements by David MacKenzie <djm@gnu.org>,
Jay Plett <jay@silence.princeton.nj.us>,
and Tim Wood <axolotl!tim@toad.com>.

The idea for `-print0` and `xargs -0` came from
Dan Bernstein <brnstnd@kramden.acf.nyu.edu>.
Improvements have been made by James Youngman <jay@gnu.org>.

* GNU `xargs`
was originally written by Mike Rendell, with enhancements by David
MacKenzie. Modifications by James Youngman Dmitry V. Levin

* GNU `locate` and its associated utilities were originally
written by James Woods, with enhancements by David MacKenzie, James Youngman
and Bas van Gompel.

Upstream's AUTHORS lists these major contributors:

Eric B. Decker
Michael Rendell
David J. MacKenzie
Jim Meyering
Tim Wood
Kevin Dalley <kevind@rahul.net>
Paul Eggert <eggert@cs.ucla.edu>
James Youngman <jay@gnu.org>
Jay Plett
Paul Sheer
Dmitry V. Levin
Bas van Gompel
Eric Blake <ebb9@byu.net>
Andreas Metzler
Kamil Dudka <kdudka@redhat.com>
Bernhard Voelker <mail@bernhard-voelker.de>

Current upstream maintainer is James Youngman <jay@gnu.org>.

Copyright (C) 1990-2021 Free Software Foundation, Inc.

This program is free software: you can redistribute it and/or modify
it under the terms of the GNU General Public License as published by
the Free Software Foundation, either version 3 of the License, or
(at your option) any later version.

This program is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
GNU General Public License for more details.

You should have received a copy of the GNU General Public License
along with this program. If not, see <<http://www.gnu.org/licenses/>>.

On Debian GNU/Linux systems, the complete text of the GNU General
Public License version 3 can be found in ``/usr/share/common-licenses/GPL-3'`.

=====
DOCUMENTATION

Copyright (C) 1994-2021 Free Software Foundation, Inc.

Permission is granted to copy, distribute and/or modify this
document under the terms of the GNU Free Documentation License,
Version 1.3 or any later version published by the Free Software
Foundation; with no Invariant Sections, no Front-Cover Texts, and
no Back-Cover Texts. A copy of the license is included in the
section entitled "GNU Free Documentation License".

On Debian GNU/Linux systems, the complete text of the GNU Free Documentation
License, Version 1.3 can be found in ``/usr/share/common-licenses/GFDL-1.3'`.
Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>
Upstream-Name: nPth
Upstream-Contact: Werner Koch <wk@gnupg.org>
Source: <ftp://ftp.gnupg.org/gcrypt/npth/>

Files: *
Copyright: Copyright (C) 2011, 2012, 2015, 2017 g10 Code GmbH
License: LGPL-2.1+

Files: debian/*
Copyright: 2017 Eric Dorland <eric@debian.org>
License: LGPL-2.1+

License: LGPL-2.1+
nPth is free software; you can redistribute it and/or modify
it under the terms of the GNU Lesser General Public License as
published by the Free Software Foundation; either version 2.1 of
the License, or (at your option) any later version.

.
nPth is distributed in the hope that it will be useful, but
WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See
the GNU Lesser General Public License for more details.

.
You should have received a copy of the GNU Lesser General Public
License along with this program; if not, see <<https://www.gnu.org/licenses/>>.
.

On Debian systems, the full text of the GNU Lesser General Public License version 2.1 can be found in the file `~/usr/share/common-licenses/LGPL-2.1'`.

This is the Debian GNU/Linux prepackaged version of the Debian Base System Miscellaneous files. These files were written by Ian Murdock <imurdock@debian.org> and Bruce Perens <bruce@pixar.com>.

This package was first put together by Bruce Perens <Bruce@Pixar.com>, from his own sources.

The GNU Public Licenses in `~/usr/share/common-licenses` were taken from `ftp.gnu.org` and are copyrighted by the Free Software Foundation, Inc.

The Artistic License in `~/usr/share/common-licenses` is the one coming from Perl and its SPDX name is "Artistic License 1.0 (Perl)".

Copyright (C) 1995-2011 Software in the Public Interest.

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

On Debian GNU/Linux systems, the complete text of the GNU General Public License can be found in `~/usr/share/common-licenses/GPL'`. This is the Debian prepackaged version of the GNU C Library version 2.23.

It was put together by the GNU Libc Maintainers <debian-glibc@lists.debian.org> from <<https://sourceware.org/git/glibc.git>>

* Most of the GNU C library is under the following copyright:

Copyright (C) 1991-2015 Free Software Foundation, Inc.

The GNU C Library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

The GNU C Library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU

Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with the GNU C Library; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA

On Debian systems, the complete text of the GNU Library General Public License can be found in ``/usr/share/common-licenses/LGPL-2.1'`.

* The utilities associated with GNU C library is under the following copyright:

Copyright (C) 1991-2015 Free Software Foundation, Inc.

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA.

On Debian systems, the complete text of the GNU Library General Public License can be found in ``/usr/share/common-licenses/GPL-2'`.

* All code incorporated from 4.4 BSD is distributed under the following license:

Copyright (C) 1991 Regents of the University of California.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. [This condition was removed.]

4. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

* The DNS resolver code, taken from BIND 4.9.5, is copyrighted both by UC Berkeley and by Digital Equipment Corporation. The DEC portions are under the following license:

Portions Copyright (C) 1993 by Digital Equipment Corporation.

Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies, and that the name of Digital Equipment Corporation not be used in advertising or publicity pertaining to distribution of the document or software without specific, written prior permission.

THE SOFTWARE IS PROVIDED ``AS IS" AND DIGITAL EQUIPMENT CORP. DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL DIGITAL EQUIPMENT CORPORATION BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

* The ISC portions are under the following license:

Portions Copyright (c) 1996-1999 by Internet Software Consortium.

Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS" AND INTERNET SOFTWARE CONSORTIUM DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES

OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL INTERNET SOFTWARE CONSORTIUM BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

* The Sun RPC support (from rpcsrc-4.0) is covered by the following license:

Copyright (c) 2010, Oracle America, Inc.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of the "Oracle America, Inc." nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

* The following CMU license covers some of the support code for Mach, derived from Mach 3.0:

Mach Operating System
Copyright (C) 1991,1990,1989 Carnegie Mellon University
All Rights Reserved.

Permission to use, copy, modify and distribute this software and its documentation is hereby granted, provided that both the copyright

notice and this permission notice appear in all copies of the software, derivative works or modified versions, and any portions thereof, and that both notices appear in supporting documentation.

CARNEGIE MELLON ALLOWS FREE USE OF THIS SOFTWARE IN ITS ``AS IS" CONDITION. CARNEGIE MELLON DISCLAIMS ANY LIABILITY OF ANY KIND FOR ANY DAMAGES WHATSOEVER RESULTING FROM THE USE OF THIS SOFTWARE.

Carnegie Mellon requests users of this software to return to

Software Distribution Coordinator
School of Computer Science
Carnegie Mellon University
Pittsburgh PA 15213-3890

or Software.Distribution@CS.CMU.EDU any improvements or extensions that they make and grant Carnegie Mellon the rights to redistribute these changes.

* The file `if_ppp.h` is under the following CMU license:

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY CARNEGIE MELLON UNIVERSITY AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE UNIVERSITY OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

* The following license covers the files from Intel's "Highly Optimized Mathematical Functions for Itanium" collection:

Intel License Agreement

Copyright (c) 2000, Intel Corporation

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* The name of Intel Corporation may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL INTEL OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

* The files inet/getnameinfo.c and sysdeps/posix/getaddrinfo.c are copyright (C) by Craig Metz and are distributed under the following license:

```
/* The Inner Net License, Version 2.00
```

The author(s) grant permission for redistribution and use in source and binary forms, with or without modification, of the software and documentation provided that the following conditions are met:

0. If you receive a version of the software that is specifically labelled as not being for redistribution (check the version message and/or README), you are not permitted to redistribute that version of the software in any way or form.

1. All terms of the all other applicable copyrights and licenses must be

followed.

2. Redistributions of source code must retain the authors' copyright notice(s), this list of conditions, and the following disclaimer.
3. Redistributions in binary form must reproduce the authors' copyright notice(s), this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution.
4. [The copyright holder has authorized the removal of this clause.]
5. Neither the name(s) of the author(s) nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY ITS AUTHORS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHORS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

If these license terms cause you a real problem, contact the author. */

- * The file sunrpc/des_impl.c is copyright Eric Young:

Copyright (C) 1992 Eric Young

Collected from libdes and modified for SECURE RPC by Martin Kuck 1994

This file is distributed under the terms of the GNU Lesser General Public License, version 2.1 or later - see the file COPYING.LIB for details.

If you did not receive a copy of the license with this program, please see <<http://www.gnu.org/licenses/>> to obtain a copy.

- * The libidn code is copyright Simon Josefsson, with portions copyright The Internet Society, Tom Tromey and Red Hat, Inc.:

Copyright (C) 2002, 2003, 2004, 2011 Simon Josefsson

This file is part of GNU Libidn.

GNU Libidn is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

GNU Libidn is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU

Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with GNU Libidn; if not, see <<http://www.gnu.org/licenses/>>.

* The following notice applies to portions of libidn/nfkc.c:

This file contains functions from GLIB, including gutf8.c and gunidecomp.c, all licensed under LGPL and copyright hold by:

Copyright (C) 1999, 2000 Tom Tromeey
Copyright 2000 Red Hat, Inc.

* The following applies to portions of libidn/punycode.c and libidn/punycode.h:

This file is derived from RFC 3492bis written by Adam M. Costello.

Disclaimer and license: Regarding this entire document or any portion of it (including the pseudocode and C code), the author makes no guarantees and is not responsible for any damage resulting from its use. The author grants irrevocable permission to anyone to use, modify, and distribute it in any way that does not diminish the rights of anyone else to use, modify, and distribute it, provided that redistributed derivative works do not contain misleading author or version information. Derivative works need not be licensed under similar terms.

Copyright (C) The Internet Society (2003). All Rights Reserved.

This document and translations of it may be copied and furnished to others, and derivative works that comment on or otherwise explain it or assist in its implementation may be prepared, copied, published and distributed, in whole or in part, without restriction of any kind, provided that the above copyright notice and this paragraph are included on all such copies and derivative works. However, this document itself may not be modified in any way, such as by removing the copyright notice or references to the Internet Society or other Internet organizations, except as needed for the purpose of developing Internet standards in which case the procedures for copyrights defined in the Internet Standards process must be followed, or as required to translate it into languages other than English.

The limited permissions granted above are perpetual and will not be revoked by the Internet Society or its successors or assigns.

This document and the information contained herein is provided on an

"AS IS" basis and THE INTERNET SOCIETY AND THE INTERNET ENGINEERING TASK FORCE DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

* The file inet/rcmd.c is under a UCB copyright and the following:

Copyright (C) 1998 WIDE Project.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the project nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE PROJECT AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE PROJECT OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

* The file posix/runtests.c is copyright Tom Lord:

Copyright 1995 by Tom Lord

All Rights Reserved

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of the copyright holder not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

Tom Lord DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL TOM LORD BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

* The posix/rxspencer tests are copyright Henry Spencer:

Copyright 1992, 1993, 1994, 1997 Henry Spencer. All rights reserved. This software is not subject to any license of the American Telephone and Telegraph Company or of the Regents of the University of California.

Permission is granted to anyone to use this software for any purpose on any computer system, and to alter it and redistribute it, subject to the following restrictions:

1. The author is not responsible for the consequences of use of this software, no matter how awful, even if they arise from flaws in it.
2. The origin of this software must not be misrepresented, either by explicit claim or by omission. Since few users ever read sources, credits must appear in the documentation.
3. Altered versions must be plainly marked as such, and must not be misrepresented as being the original software. Since few users ever read sources, credits must appear in the documentation.
4. This notice may not be removed or altered.

* The file posix/PCRE.tests is copyright University of Cambridge:

Copyright (c) 1997-2003 University of Cambridge

Permission is granted to anyone to use this software for any purpose on any computer system, and to redistribute it freely, subject to the following restrictions:

1. This software is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
2. The origin of this software must not be misrepresented, either by explicit claim or by omission. In practice, this means that if you use PCRE in software that you distribute to others, commercially or otherwise, you must put a sentence like this

Regular expression support is provided by the PCRE library package, which is open source software, written by Philip Hazel, and copyright by the University of Cambridge, England.

somewhere reasonably visible in your documentation and in any relevant files or online help data or similar. A reference to the ftp site for the source, that is, to

`ftp://ftp.csx.cam.ac.uk/pub/software/programming/pcre/`

should also be given in the documentation. However, this condition is not intended to apply to whole chains of software. If package A includes PCRE, it must acknowledge it, but if package B is software that includes package A, the condition is not imposed on package B (unless it uses PCRE independently).

3. Altered versions must be plainly marked as such, and must not be misrepresented as being the original software.
4. If PCRE is embedded in any software that is released under the GNU General Purpose Licence (GPL), or Lesser General Purpose Licence (LGPL), then the terms of that licence shall supersede any condition above with which it is incompatible.

* Files from Sun fdlibm are copyright Sun Microsystems, Inc.:

Copyright (C) 1993 by Sun Microsystems, Inc. All rights reserved.

Developed at SunPro, a Sun Microsystems, Inc. business.

Permission to use, copy, modify, and distribute this software is freely granted, provided that this notice is preserved.

* Part of stdio-common/tst-printf.c is copyright C E Chew:

(C) Copyright C E Chew

Feel free to copy, use and distribute this software provided:

1. you do not pretend that you wrote it
2. you leave this copyright notice intact.

* Various long double libm functions are copyright Stephen L. Moshier:

Copyright 2001 by Stephen L. Moshier <moshier@na-net.ornl.gov>

This library is free software; you can redistribute it and/or

modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, see

<<http://www.gnu.org/licenses/>>. */

Format: <http://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Files: *

Copyright: 2013 System Administrator <root@localhost.localdomain>

License: ...

All images in this directory are copyright 1995 by Jeff Dinkins.

Unauthorized reproduction is prohibited.

For more information about Jeff's photographs, please see:

<http://www.theFixx.org/Jeff>

This package was first put together by Ian Murdock

<imurdock@debian.org> and was maintained by Steve Phillips

<sjp@cvfn.org> from sources written for the Debian Project by Ian

Murdock, Ted Hajek <tedhajek@boombox.micro.umn.edu>, and Sven Rudolph

<sr1@inf.tu-dresden.de>.

Since Nov 27 1996, it was maintained by Guy Maor <maor@debian.org>. He rewrote most of it.

Since May 20 2000, it is maintained by Roland Bauerschmidt

<rb@debian.org>.

Since March 24 2004, it is maintained by Roland Bauerschmidt

<rb@debian.org>, and co-maintained by Marc Haber

<mh+debian-packages@zugschluss.de>

Since 23 Oct 2005, it has been maintained by Joerg Hoh <joerg@joerghoh.de>

Since June 2006, it has been maintained by Stephen Gran <sgran@debian.org>

deluser is Copyright (C) 2000 Roland Bauerschmidt <rb@debian.org>

and based on the source code of adduser.

adduser is Copyright (C) 1997, 1998, 1999 Guy Maor <maor@debian.org>.

adduser is Copyright (C) 1995 Ted Hajek <tedhajek@boombox.micro.umn.edu>

with portions Copyright (C) 1994 Debian Association, Inc.

The examples directory has been contributed by John Zaitseff, and is GPL V2 as well.

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301, USA.

On Debian GNU/Linux systems, the complete text of the GNU General Public License can be found in ``usr/share/common-licenses/GPL-2'`.

Thai Dictionary

Thai Dictionary License

<pre>

Copyright (C) 1982 The Royal Institute, Thai Royal Government.

Copyright (C) 1998 National Electronics and Computer Technology Center, National Science and Technology Development Agency, Ministry of Science Technology and Environment, Thai Royal Government.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER

LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

</pre>

This is the Debian GNU/Linux prepackaged version of the EXT2 file system utilities (e2fsck, mke2fs, etc.). The EXT2 utilities were written by Theodore Ts'o <tytso@mit.edu> and Remy Card <card@masi.ibp.fr>.

Sources were obtained from <http://sourceforge.net/projects/e2fsprogs>

Packaging is Copyright (c) 2003-2007 Theodore Ts'o <tytso@mit.edu>

Copyright (c) 1997-2003 Yann Dirson <dirson@debian.org>

Copyright (c) 2001 Alcove <<http://www.alcove.com/>>

Copyright (c) 1997 Klee Dienes

Copyright (c) 1995-1996 Michael Nonweiler <mrn20@cam.ac.uk>

Upstream Author: Theodore Ts'o <tytso@mit.edu>

Copyright notice:

This package, the EXT2 filesystem utilities, are made available under the GNU General Public License version 2, with the exception of the lib/ext2fs and lib/e2p libraries, which are made available under the GNU Library General Public License Version 2, the lib/uuid library which is made available under a BSD-style license and the lib/et and lib/ss libraries which are made available under an MIT-style license.

Copyright (c) 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008 by Theodore Ts'o

On Debian GNU systems, the complete text of the GNU General Public License can be found in `~/usr/share/common-licenses/GPL-2`. The complete text of the GNU Library General Public License can be found in `~/usr/share/common-licenses/LGPL-2`.

The license used for lib/et and lib/ss libraries is:

Copyright 1987 by the Student Information Processing Board
of the Massachusetts Institute of Technology

Permission to use, copy, modify, and distribute this software and its documentation for any purpose is hereby granted, provided that the names of M.I.T. and the M.I.T. S.I.P.B. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. M.I.T. and the M.I.T. S.I.P.B. make no representations about the suitability of

this software for any purpose. It is provided "as is" without express or implied warranty.

The license used for lib/uuid is:

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, and the entire permission notice in its entirety, including the disclaimer of warranties.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF NOT ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This is the Debian package for libsemanage, and it is built from sources obtained from: <http://www.nsa.gov/selinux/code/download5.cfm>.

libsemanage is Copyright 2004-2007 Tresys Technology, LLC
Copyright 2005 Red Hat, Inc.

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software

Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1

On Debian GNU/Linux systems, the complete text of the Lesser GNU General Public License can be found in `~/usr/share/common-licenses/LGPL`.

This package is maintained by Manoj Srivastava <srivasta@debian.org>.

The Debian specific changes are 2005-2009, Manoj Srivastava <srivasta@debian.org>, and distributed under the terms of the GNU General Public License, version 2.

On Debian GNU/Linux systems, the complete text of the GNU General Public License can be found in `~/usr/share/common-licenses/GPL`.

A copy of the GNU General Public License is also available at <URL:<http://www.gnu.org/copyleft/gpl.html>>. You may also obtain it by writing to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301, USA.

Manoj Srivastava <srivasta@debian.org>
arch-tag: d4250e44-a0e0-4ee0-adb9-2bd74f6eeb27
Apache Santuario v2.3.0

Apache Santuario Notice

<pre>

Apache Santuario - XML Security for Java
Copyright 1999-2021 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

It was originally based on software copyright (c) 2001, Institute for
Data Communications Systems, <<http://www.nue.et-inf.uni-siegen.de/>>.

The development of this software was partly funded by the European
Commission in the <WebSig> project in the ISIS Programme.

</pre>

Apache 2.0 License

<pre>

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted"

means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and

attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and

(d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the

appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software

distributed under the License is distributed on an "AS IS" BASIS,
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
See the License for the specific language governing permissions and
limitations under the License.

</pre>

This package was put together by Klee Dienes <klee@debian.org> from
sources from ftp.python.org:/pub/python, based on the Debianization by
the previous maintainers Bernd S. Brentrup <bsb@uni-muenster.de> and
Bruce Perens. Current maintainer is Matthias Klose <doko@debian.org>.

It was downloaded from <http://python.org/>

Copyright:

Upstream Author: Guido van Rossum <guido@cwi.nl> and others.

License:

The following text includes the Python license and licenses and
acknowledgements for incorporated software. The licenses can be read
in the HTML and texinfo versions of the documentation as well, after
installing the pythonx.y-doc package. Licenses for files not licensed
under the Python Licenses are found at the end of this file.

Python License

=====

A. HISTORY OF THE SOFTWARE

=====

Python was created in the early 1990s by Guido van Rossum at Stichting
Mathematisch Centrum (CWI, see <http://www.cwi.nl>) in the Netherlands
as a successor of a language called ABC. Guido remains Python's
principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for
National Research Initiatives (CNRI, see <http://www.cnri.reston.va.us>)
in Reston, Virginia where he released several versions of the
software.

In May 2000, Guido and the Python core development team moved to
BeOpen.com to form the BeOpen PythonLabs team. In October of the same
year, the PythonLabs team moved to Digital Creations (now Zope
Corporation, see <http://www.zope.com>). In 2001, the Python Software
Foundation (PSF, see <http://www.python.org/psf/>) was formed, a
non-profit organization created specifically to own Python-related

Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

All Python releases are Open Source (see <http://www.opensource.org> for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

| Release | Derived from | Year | Owner | GPL-compatible? (1) |
|----------------|--------------|-----------|------------|---------------------|
| 0.9.0 thru 1.2 | | 1991-1995 | CWI | yes |
| 1.3 thru 1.5.2 | 1.2 | 1995-1999 | CNRI | yes |
| 1.6 | 1.5.2 | 2000 | CNRI | no |
| 2.0 | 1.6 | 2000 | BeOpen.com | no |
| 1.6.1 | 1.6 | 2001 | CNRI | yes (2) |
| 2.1 | 2.0+1.6.1 | 2001 | PSF | no |
| 2.0.1 | 2.0+1.6.1 | 2001 | PSF | yes |
| 2.1.1 | 2.1+2.0.1 | 2001 | PSF | yes |
| 2.2 | 2.1.1 | 2001 | PSF | yes |
| 2.1.2 | 2.1.1 | 2002 | PSF | yes |
| 2.1.3 | 2.1.2 | 2002 | PSF | yes |
| 2.2 and above | 2.1.1 | 2001-now | PSF | yes |

Footnotes:

(1) GPL-compatible doesn't mean that we're distributing Python under the GPL. All Python licenses, unlike the GPL, let you distribute a modified version without making your changes open source. The GPL-compatible licenses make it possible to combine Python with other software that is released under the GPL; the others don't.

(2) According to Richard Stallman, 1.6.1 is not GPL-compatible, because its license has a choice of law clause. According to CNRI, however, Stallman's lawyer has told CNRI's lawyer that 1.6.1 is "not incompatible" with the GPL.

Thanks to the many outside volunteers who have worked under Guido's direction to make these releases possible.

B. TERMS AND CONDITIONS FOR ACCESSING OR OTHERWISE USING PYTHON

PYTHON SOFTWARE FOUNDATION LICENSE VERSION 2

1. This LICENSE AGREEMENT is between the Python Software Foundation

("PSF"), and the Individual or Organization ("Licensee") accessing and otherwise using this software ("Python") in source or binary form and its associated documentation.

2. Subject to the terms and conditions of this License Agreement, PSF hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python alone or in any derivative version, provided, however, that PSF's License Agreement and PSF's notice of copyright, i.e., "Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014 Python Software Foundation; All Rights Reserved" are retained in Python alone or in any derivative version prepared by Licensee.

3. In the event Licensee prepares a derivative work that is based on or incorporates Python or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python.

4. PSF is making Python available to Licensee on an "AS IS" basis. PSF MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, PSF MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

5. PSF SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

6. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

7. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between PSF and Licensee. This License Agreement does not grant permission to use PSF trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party.

8. By copying, installing or otherwise using Python, Licensee agrees to be bound by the terms and conditions of this License Agreement.

BEOPEN.COM LICENSE AGREEMENT FOR PYTHON 2.0

BEOPEN PYTHON OPEN SOURCE LICENSE AGREEMENT VERSION 1

1. This LICENSE AGREEMENT is between BeOpen.com ("BeOpen"), having an office at 160 Saratoga Avenue, Santa Clara, CA 95051, and the Individual or Organization ("Licensee") accessing and otherwise using this software in source or binary form and its associated documentation ("the Software").

2. Subject to the terms and conditions of this BeOpen Python License Agreement, BeOpen hereby grants Licensee a non-exclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use the Software alone or in any derivative version, provided, however, that the BeOpen Python License is retained in the Software, alone or in any derivative version prepared by Licensee.

3. BeOpen is making the Software available to Licensee on an "AS IS" basis. BEOPEN MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, BEOPEN MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

4. BEOPEN SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF THE SOFTWARE FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF USING, MODIFYING OR DISTRIBUTING THE SOFTWARE, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

5. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

6. This License Agreement shall be governed by and interpreted in all respects by the law of the State of California, excluding conflict of law provisions. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between BeOpen and Licensee. This License Agreement does not grant permission to use BeOpen trademarks or trade names in a trademark sense to endorse or promote products or services of Licensee, or any third party. As an exception, the "BeOpen Python" logos available at <http://www.pythonlabs.com/logos.html> may be used according to the permissions granted on that web page.

7. By copying, installing or otherwise using the software, Licensee agrees to be bound by the terms and conditions of this License Agreement.

CNRI LICENSE AGREEMENT FOR PYTHON 1.6.1

1. This LICENSE AGREEMENT is between the Corporation for National Research Initiatives, having an office at 1895 Preston White Drive, Reston, VA 20191 ("CNRI"), and the Individual or Organization ("Licensee") accessing and otherwise using Python 1.6.1 software in source or binary form and its associated documentation.
2. Subject to the terms and conditions of this License Agreement, CNRI hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python 1.6.1 alone or in any derivative version, provided, however, that CNRI's License Agreement and CNRI's notice of copyright, i.e., "Copyright (c) 1995-2001 Corporation for National Research Initiatives; All Rights Reserved" are retained in Python 1.6.1 alone or in any derivative version prepared by Licensee. Alternately, in lieu of CNRI's License Agreement, Licensee may substitute the following text (omitting the quotes): "Python 1.6.1 is made available subject to the terms and conditions in CNRI's License Agreement. This Agreement together with Python 1.6.1 may be located on the Internet using the following unique, persistent identifier (known as a handle): 1895.22/1013. This Agreement may also be obtained from a proxy server on the Internet using the following URL: <http://hdl.handle.net/1895.22/1013>".
3. In the event Licensee prepares a derivative work that is based on or incorporates Python 1.6.1 or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python 1.6.1.
4. CNRI is making Python 1.6.1 available to Licensee on an "AS IS" basis. CNRI MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, CNRI MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON 1.6.1 WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.
5. CNRI SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON 1.6.1 FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON 1.6.1, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.
6. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

7. This License Agreement shall be governed by the federal intellectual property law of the United States, including without limitation the federal copyright law, and, to the extent such U.S. federal law does not apply, by the law of the Commonwealth of Virginia, excluding Virginia's conflict of law provisions. Notwithstanding the foregoing, with regard to derivative works based on Python 1.6.1 that incorporate non-separable material that was previously distributed under the GNU General Public License (GPL), the law of the Commonwealth of Virginia shall govern this License Agreement only as to issues arising under or with respect to Paragraphs 4, 5, and 7 of this License Agreement. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between CNRI and Licensee. This License Agreement does not grant permission to use CNRI trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party.

8. By clicking on the "ACCEPT" button where indicated, or by copying, installing or otherwise using Python 1.6.1, Licensee agrees to be bound by the terms and conditions of this License Agreement.

ACCEPT

CWI LICENSE AGREEMENT FOR PYTHON 0.9.0 THROUGH 1.2

Copyright (c) 1991 - 1995, Stichting Mathematisch Centrum Amsterdam, The Netherlands. All rights reserved.

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Stichting Mathematisch Centrum or CWI not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

STICHTING MATHEMATISCH CENTRUM DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL STICHTING MATHEMATISCH CENTRUM BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Mersenne Twister

The `_random` module includes code based on a download from
`http://www.math.keio.ac.jp/~matumoto/MT2002/emt19937ar.html`. The
following are the verbatim comments from the original code:

A C-program for MT19937, with initialization improved 2002/1/26.
Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using `init_genrand(seed)`
or `init_by_array(init_key, key_length)`.

Copyright (C) 1997 - 2002, Makoto Matsumoto and Takuji Nishimura,
All rights reserved.

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions
are met:

1. Redistributions of source code must retain the above copyright
notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright
notice, this list of conditions and the following disclaimer in the
documentation and/or other materials provided with the distribution.
3. The names of its contributors may not be used to endorse or promote
products derived from this software without specific prior written
permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS
"AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT
LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR
A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT
OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,
SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED
TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR
PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF
LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING
NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS
SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Any feedback is very welcome.

<http://www.math.keio.ac.jp/matumoto/emt.html>

email: matumoto@math.keio.ac.jp

Sockets

The `socket' module uses the functions, `getaddrinfo', and `getnameinfo', which are coded in separate source files from the WIDE Project, `http://www.wide.ad.jp/about/index.html'.

Copyright (C) 1995, 1996, 1997, and 1998 WIDE Project.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the project nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE PROJECT AND CONTRIBUTORS ``AS IS" AND GAI_ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE PROJECT OR CONTRIBUTORS BE LIABLE FOR GAI_ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON GAI_ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN GAI_ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Floating point exception control

The source for the `fpectl' module includes the following notice:

```
-----  
/          Copyright (c) 1996.          \  
|    The Regents of the University of California.    |  
|          All rights reserved.          |  
|                                          |
```

| Permission to use, copy, modify, and distribute this software for |
| any purpose without fee is hereby granted, provided that this en- |
| tire notice is included in all copies of any software which is or |
| includes a copy or modification of this software and in all |
| copies of the supporting documentation for such software. |

| This work was produced at the University of California, Lawrence |
| Livermore National Laboratory under contract no. W-7405-ENG-48 |
| between the U.S. Department of Energy and The Regents of the |
| University of California for the operation of UC LLNL. |

| DISCLAIMER |

| This software was prepared as an account of work sponsored by an |
| agency of the United States Government. Neither the United States |
| Government nor the University of California nor any of their em- |
| ployees, makes any warranty, express or implied, or assumes any |
| liability or responsibility for the accuracy, completeness, or |
| usefulness of any information, apparatus, product, or process |
| disclosed, or represents that its use would not infringe |
| privately-owned rights. Reference herein to any specific commer- |
| cial products, process, or service by trade name, trademark, |
| manufacturer, or otherwise, does not necessarily constitute or |
| imply its endorsement, recommendation, or favoring by the United |
| States Government or the University of California. The views and |
| opinions of authors expressed herein do not necessarily state or |
| reflect those of the United States Government or the University |
| of California, and shall not be used for advertising or product |
| endorsement purposes. |

Cookie management

The `Cookie` module contains the following notice:

Copyright 2000 by Timothy O'Malley <timo@alum.mit.edu>

All Rights Reserved

Permission to use, copy, modify, and distribute this software
and its documentation for any purpose and without fee is hereby
granted, provided that the above copyright notice appear in all
copies and that both that copyright notice and this permission
notice appear in supporting documentation, and that the name of
Timothy O'Malley not be used in advertising or publicity
pertaining to distribution of the software without specific, written

prior permission.

Timothy O'Malley DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL Timothy O'Malley BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Execution tracing

The `trace` module contains the following notice:

portions copyright 2001, Autonomous Zones Industries, Inc., all rights...
err... reserved and offered to the public under the terms of the
Python 2.2 license.
Author: Zooko O'Whielacronx
<http://zooko.com/>
<mailto:zooko@zooko.com>

Copyright 2000, Mojam Media, Inc., all rights reserved.
Author: Skip Montanaro

Copyright 1999, Bioreason, Inc., all rights reserved.
Author: Andrew Dalke

Copyright 1995-1997, Automatrix, Inc., all rights reserved.
Author: Skip Montanaro

Copyright 1991-1995, Stichting Mathematisch Centrum, all rights reserved.

Permission to use, copy, modify, and distribute this Python software and its associated documentation for any purpose without fee is hereby granted, provided that the above copyright notice appears in all copies, and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of neither Automatrix, Bioreason or Mojam Media be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

UUencode and UUdecode functions

The `uu' module contains the following notice:

Copyright 1994 by Lance Ellinghouse
Cathedral City, California Republic, United States of America.
All Rights Reserved

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Lance Ellinghouse not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

LANCE ELLINGHOUSE DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL LANCE ELLINGHOUSE CENTRUM BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Modified by Jack Jansen, CWI, July 1995:

- Use binascii module to do the actual line-by-line conversion between ascii and binary. This results in a 1000-fold speedup. The C version is still 5 times faster, though.
- Arguments more compliant with python standard

XML Remote Procedure Calls

The `xmlrpc' module contains the following notice:

The XML-RPC client interface is

Copyright (c) 1999-2002 by Secret Labs AB
Copyright (c) 1999-2002 by Fredrik Lundh

By obtaining, using, and/or copying this software and/or its associated documentation, you agree that you have read, understood, and will comply with the following terms and conditions:

Permission to use, copy, modify, and distribute this software and its associated documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appears in all copies, and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Secret Labs AB or the author not be used in advertising or publicity pertaining to distribution of the software without specific, written

prior permission.

SECRET LABS AB AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL SECRET LABS AB OR THE AUTHOR BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Licenses for Software linked to

=====

Note that the choice of GPL compatibility outlined above doesn't extend to modules linked to particular libraries, since they change the effective License of the module binary.

GNU Readline

The 'readline' module makes use of GNU Readline.

The GNU Readline Library is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2, or (at your option) any later version.

On Debian systems, you can find the complete statement in `/usr/share/doc/readline-common/copyright`'. A copy of the GNU General Public License is available in `/usr/share/common-licenses/GPL-2`'.

OpenSSL

The '_ssl' module makes use of OpenSSL.

The OpenSSL toolkit stays under a dual license, i.e. both the conditions of the OpenSSL License and the original SSLeay license apply to the toolkit. Actually both licenses are BSD-style Open Source licenses. Note that both licenses are incompatible with the GPL.

On Debian systems, you can find the complete license text in `/usr/share/doc/openssl/copyright`'.

Files with other licenses than the Python License

Files: Include/dynamic_annotations.h

Files: Python/dynamic_annotations.c

Copyright: (c) 2008-2009, Google Inc.

License: Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Neither the name of Google Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Files: Include/unicodeobject.h

Copyright: (c) Corporation for National Research Initiatives.

Copyright: (c) 1999 by Secret Labs AB.

Copyright: (c) 1999 by Fredrik Lundh.

License: By obtaining, using, and/or copying this software and/or its associated documentation, you agree that you have read, understood, and will comply with the following terms and conditions:

Permission to use, copy, modify, and distribute this software and its associated documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appears in all copies, and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Secret Labs AB or the author not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

SECRET LABS AB AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND

FITNESS. IN NO EVENT SHALL SECRET LABS AB OR THE AUTHOR BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Files: Lib/logging/*

Copyright: 2001-2010 by Vinay Sajip. All Rights Reserved.

License: Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Vinay Sajip not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

VINAY SAJIP DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL VINAY SAJIP BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Files: Lib/multiprocessing/*

Files: Modules/_multiprocessing/*

Copyright: (c) 2006-2008, R Oudkerk. All rights reserved.

License: Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of author nor the names of any contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF

SUCH DAMAGE.

Files: Lib/sqlite3/*

Files: Modules/_sqlite/*

Copyright: (C) 2004-2005 Gerhard Hring <gh@ghaering.de>

License: This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

Files: Lib/async*

Copyright: Copyright 1996 by Sam Rushing

License: Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Sam Rushing not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

SAM RUSHING DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL SAM RUSHING BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Files: Lib/tarfile.py

Copyright: (C) 2002 Lars Gustaebel <lars@gustaebel.de>

License: Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the

Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Files: Lib/turtle.py

Copyright: (C) 2006 - 2010 Gregor Lingl

License: This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

is copyright Gregor Lingl and licensed under a BSD-like license

Files: Modules/_ctypes/libffi/*

Copyright: Copyright (C) 1996-2011 Red Hat, Inc and others.

Copyright (C) 1996-2011 Anthony Green

Copyright (C) 1996-2010 Free Software Foundation, Inc

Copyright (c) 2003, 2004, 2006, 2007, 2008 Kaz Kojima

Copyright (c) 2010, 2011, Plausible Labs Cooperative, Inc.

Copyright (c) 2010 CodeSourcery

Copyright (c) 1998 Andreas Schwab

Copyright (c) 2000 Hewlett Packard Company

Copyright (c) 2009 Bradley Smith

Copyright (c) 2008 David Daney

Copyright (c) 2004 Simon Posnjak

Copyright (c) 2005 Axis Communications AB

Copyright (c) 1998 Cygnus Solutions
Copyright (c) 2004 Renesas Technology
Copyright (c) 2002, 2007 Bo Thorsen <bo@suse.de>
Copyright (c) 2002 Ranjit Mathew
Copyright (c) 2002 Roger Sayle
Copyright (c) 2000, 2007 Software AG
Copyright (c) 2003 Jakub Jelinek
Copyright (c) 2000, 2001 John Hornkvist
Copyright (c) 1998 Geoffrey Keating
Copyright (c) 2008 Bjrn Knig

License: Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the ``Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED ``AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Documentation:

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2, or (at your option) any later version. A copy of the license is included in the section entitled ``GNU General Public License".

Files: Modules/_gestalt.c

Copyright: 1991-1997 by Stichting Mathematisch Centrum, Amsterdam.

License: Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the names of Stichting Mathematisch Centrum or CWI not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

STICHTING MATHEMATISCH CENTRUM DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL STICHTING MATHEMATISCH CENTRUM BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Files: Modules/syslogmodule.c

Copyright: 1994 by Lance Ellinghouse

License: Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Lance Ellinghouse not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

LANCE ELLINGHOUSE DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL LANCE ELLINGHOUSE BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Files: Modules/zlib/*

Copyright: (C) 1995-2010 Jean-loup Gailly and Mark Adler

License: This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

Jean-loup Gailly Mark Adler
jloup@gzip.org madler@alumni.caltech.edu

If you use the zlib library in a product, we would appreciate *not* receiving

lengthy legal documents to sign. The sources are provided for free but without warranty of any kind. The library has been entirely written by Jean-loup Gailly and Mark Adler; it does not include third-party code.

Files: Modules/expat/*

Copyright: Copyright (c) 1998, 1999, 2000 Thai Open Source Software Center Ltd and Clark Cooper

Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006 Expat maintainers

License: Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Files: Modules/_decimal/libmpdec/*

Copyright: Copyright (c) 2008-2012 Stefan Kraah. All rights reserved.

License: Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT

LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Files: Misc/python-mode.el

Copyright: Copyright (C) 1992,1993,1994 Tim Peters

License: This software is provided as-is, without express or implied warranty. Permission to use, copy, modify, distribute or sell this software, without fee, for any purpose and by any individual or organization, is hereby granted, provided that the above copyright notice and this paragraph appear in all copies.

Files: Python/dtoa.c

Copyright: (c) 1991, 2000, 2001 by Lucent Technologies.

License: Permission to use, copy, modify, and distribute this software for any purpose without fee is hereby granted, provided that this entire notice is included in all copies of any software which is or includes a copy or modification of this software and in all copies of the supporting documentation for such software.

THIS SOFTWARE IS BEING PROVIDED "AS IS", WITHOUT ANY EXPRESS OR IMPLIED WARRANTY. IN PARTICULAR, NEITHER THE AUTHOR NOR LUCENT MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND CONCERNING THE MERCHANTABILITY OF THIS SOFTWARE OR ITS FITNESS FOR ANY PARTICULAR PURPOSE.

Files: Python/getopt.c

Copyright: 1992-1994, David Gottner

License: Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice, this permission notice and the following disclaimer notice appear unmodified in all copies.

I DISCLAIM ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL I BE LIABLE FOR ANY SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA, OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Files: PC/_subprocess.c

Copyright: Copyright (c) 2004 by Fredrik Lundh <fredrik@pythonware.com>

Copyright (c) 2004 by Secret Labs AB, <http://www.pythonware.com>

Copyright (c) 2004 by Peter Astrand <astrand@lysator.liu.se>

License:

- * Permission to use, copy, modify, and distribute this software and
- * its associated documentation for any purpose and without fee is
- * hereby granted, provided that the above copyright notice appears in
- * all copies, and that both that copyright notice and this permission

* notice appear in supporting documentation, and that the name of the
* authors not be used in advertising or publicity pertaining to
* distribution of the software without specific, written prior
* permission.
*
* THE AUTHORS DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE,
* INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS.
* IN NO EVENT SHALL THE AUTHORS BE LIABLE FOR ANY SPECIAL, INDIRECT OR
* CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS
* OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT,
* NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION
* WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Files: PC/winsound.c

Copyright: Copyright (c) 1999 Toby Dickenson

License: * Permission to use this software in any way is granted without
* fee, provided that the copyright notice above appears in all
* copies. This software is provided "as is" without any warranty.
*/

/* Modified by Guido van Rossum */

/* Beep added by Mark Hammond */

/* Win9X Beep and platform identification added by Uncle Timmy */

Files: Tools/pybench/*

Copyright: (c), 1997-2006, Marc-Andre Lemburg (mal@lemburg.com)

(c), 2000-2006, eGenix.com Software GmbH (info@egenix.com)

License: Permission to use, copy, modify, and distribute this software and its
documentation for any purpose and without fee or royalty is hereby
granted, provided that the above copyright notice appear in all copies
and that both that copyright notice and this permission notice appear
in supporting documentation or portions thereof, including
modifications, that you make.

THE AUTHOR MARC-ANDRE LEBBURG DISCLAIMS ALL WARRANTIES WITH REGARD TO
THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND
FITNESS, IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL,
INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING
FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT,
NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION
WITH THE USE OR PERFORMANCE OF THIS SOFTWARE !

Format: <http://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: mpdecimal

Source: <http://www.bytereef.org/mpdecimal/download.html>

Files: *

Copyright: Copyright (c) 2008-2020 Stefan Kraah. All rights reserved.

License: BSD

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Files: debian/*

Copyright: 2012-2021 Matthias Klose <doko@debian.org>

License: GPL-2+

This package is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This package is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>

On Debian systems, the complete text of the GNU General Public License version 2 can be found in "/usr/share/common-licenses/GPL-2".

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: OpenSSH

Upstream-Contact: openssh-unix-dev@mindrot.org

Source: <http://www.openssh.com/portable.html>

Comment:

The overall licence of the OpenSSH upstream code amounts to BSD-3-clause or various less restrictive licences, with the additional restrictions that

derived versions must be clearly marked as such and that if derived works are incompatible with the RFC-specified protocol then they must be called by a name other than "ssh" or "Secure Shell".

Files: *

Copyright:

1995 Tatu Ylonen <ylo@cs.hut.fi>, Espoo, Finland

Markus Friedl

Theo de Raadt

Niels Provos

Dug Song

Aaron Campbell

Damien Miller

Kevin Steves

Daniel Kouril

Wesley Griffin

Per Allansson

Nils Nordman

Simon Wilkinson

Ben Lindstrom

Tim Rice

Andre Lucas

Chris Adams

Corinna Vinschen

Cray Inc.

Denis Parker

Gert Doering

Jakob Schlyter

Jason Downs

Juha Yrj1

Michael Stone

Networks Associates Technology, Inc.

Solar Designer

Todd C. Miller

Wayne Schroeder

William Jones

Darren Tucker

Sun Microsystems

The SCO Group

Daniel Walsh

Red Hat, Inc

Simon Vallet / Genoscope

Internet Software Consortium

Reyk Floeter

Chad Mynhier

License: OpenSSH

Tatu Ylonen's original licence is as follows (excluding some terms about third-party code which are no longer relevant; see the LICENCE file for

details):

As far as I am concerned, the code I have written for this software can be used freely for any purpose. Any derived versions of this software must be clearly marked as such, and if the derived work is incompatible with the protocol description in the RFC file, it must be called by a name other than "ssh" or "Secure Shell".

Note that any information and cryptographic algorithms used in this software are publicly available on the Internet and at any major bookstore, scientific library, and patent office worldwide. More information can be found e.g. at "<http://www.cs.hut.fi/crypto>".

The legal status of this program is some combination of all these permissions and restrictions. Use only at your own responsibility. You will be responsible for any legal consequences yourself; I am not making any claims whether possessing or using this is legal or not in your country, and I am not taking any responsibility on your behalf.

Most remaining components of the software are provided under a standard 2-term BSD licence:

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Some code is licensed under an ISC-style license, to the following copyright holders:

Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

.
THE SOFTWARE IS PROVIDED "AS IS" AND TODD C. MILLER DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL TODD C. MILLER BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Files: ssh-keyscan.*

Copyright: 1995, 1996 David Mazieres <dm@lcs.mit.edu>

License: Mazieres-BSD-style

Modification and redistribution in source and binary forms is permitted provided that due credit is given to the author and the OpenBSD project by leaving this copyright notice intact.

Files: rijndael.*

License: public-domain

This code is from a reference implementation of the Rijndael cipher which has been dedicated to the public domain.

.
@version 3.0 (December 2000)

.
Optimised ANSI C code for the Rijndael cipher (now AES)

.
@author Vincent Rijmen <vincent.rijmen@esat.kuleuven.ac.be>

@author Antoon Bosselaers <antoon.bosselaers@esat.kuleuven.ac.be>

@author Paulo Barreto <paulo.barreto@terra.com.br>

.
This code is hereby placed in the public domain.

.
THIS SOFTWARE IS PROVIDED BY THE AUTHORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHORS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Files: loginrec.c openbsd-compat/* scp.c

Copyright:

1983, 1995-1997 Eric P. Allman

1999 Aaron Campbell

1993 by Digital Equipment Corporation

2000 Andre Lucas

1999-2010 Damien Miller

1997-2010 Todd C. Miller

1995, 1996, 1998, 1999, 2008 Theo de Raadt

2003 Constantin S. Svintsoff <kostik@iclub.nsu.ru>

1980, 1983, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995 The Regents of the University of California

License: BSD-3-clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Files: md5crypt.*

Copyright: Poul-Henning Kamp

License: Beer-ware

"THE BEER-WARE LICENSE" (Revision 42):

<phk@login.dknet.dk> wrote this file. As long as you retain this notice you can do whatever you want with this stuff. If we meet some day, and you think this stuff is worth it, you can buy me a beer in return. Poul-Henning Kamp

Files: openbsd-compat/bsd-sprintf.c

Copyright: 1995 Patrick Powell

License: Powell-BSD-style

This code is based on code written by Patrick Powell (papowell@astart.com) It may be used for any purpose as long as this notice remains intact on all source code distributions

Files: openbsd-compat/sigact.*

Copyright: 1998, 2000 Free Software Foundation, Inc.

License: Expat-with-advertising-restriction

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, distribute with modifications, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE ABOVE COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

.

Except as contained in this notice, the name(s) of the above copyright holders shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization.

Files: debian/*

Copyright: Matthew Vernon, Colin Watson

License: BSD-2-clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

ADDITIONAL INFORMATION ABOUT LICENSING

Certain files distributed by Oracle America, Inc. and/or its affiliates are subject to the following clarification and special exception to the GPLv2, based on the GNU Project exception for its Classpath libraries, known as the GNU Classpath Exception.

Note that Oracle includes multiple, independent programs in this software package. Some of those programs are provided under licenses deemed incompatible with the GPLv2 by the Free Software Foundation and others. For example, the package includes programs licensed under the Apache License, Version 2.0 and may include FreeType. Such programs are licensed to you under their original licenses.

Oracle facilitates your further distribution of this package by adding the Classpath Exception to the necessary parts of its GPLv2 code, which permits you to use that code in combination with other independent modules not licensed under the GPLv2. However, note that this would not permit you to commingle code under an incompatible license with Oracle's GPLv2 licensed code by, for example, cutting and pasting such code into a file also containing Oracle's GPLv2 licensed code and then distributing the result.

Additionally, if you were to remove the Classpath Exception from any of the files to which it applies and distribute the result, you would likely be required to license some or all of the other code in that distribution under the GPLv2 as well, and since the GPLv2 is incompatible with the license terms of some items included in the distribution by Oracle, removing the Classpath Exception could therefore effectively compromise your ability to further distribute the package.

Failing to distribute notices associated with some files may also create unexpected legal consequences.

Proceed with caution and we recommend that you obtain the advice of a lawyer skilled in open source matters before removing the Classpath Exception or making modifications to this package which may subsequently be redistributed and/or involve the use of third party software.

OASIS PKCS #11 Cryptographic Token Interface v3.0

OASIS PKCS #11 Cryptographic Token Interface License

<pre>

Copyright OASIS Open 2020. All Rights Reserved.

All capitalized terms in the following text have the meanings assigned to them in the OASIS Intellectual Property Rights Policy (the "OASIS IPR Policy"). The full Policy may be found at the OASIS website: [<http://www.oasis-open.org/policies-guidelines/ipr>]

This document and translations of it may be copied and furnished to others, and derivative works that comment on or otherwise explain it or assist in its implementation may be prepared, copied, published, and distributed, in whole or in part, without restriction of any kind, provided that the above copyright notice and this section are included on all such copies and derivative works. However, this document itself may not be modified in any way, including by removing the copyright notice or references to OASIS, except as needed for the purpose of developing any document or deliverable produced by an OASIS Technical Committee (in which case the rules applicable to copyrights, as set forth in the OASIS IPR Policy, must be followed) or as required to translate it into languages other than English.

The limited permissions granted above are perpetual and will not be revoked by OASIS or its successors or assigns.

This document and the information contained herein is provided on an "AS IS" basis and OASIS DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY OWNERSHIP RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. OASIS AND ITS MEMBERS WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THIS DOCUMENT OR ANY PART THEREOF.

[OASIS requests that any OASIS Party or any other party that believes it has patent claims that would necessarily be infringed by implementations of this OASIS Standards Final Deliverable, to notify OASIS TC Administrator and provide an indication of its willingness to grant patent licenses to such patent claims in a manner consistent with the IPR Mode of the OASIS Technical Committee that produced this deliverable.]

[OASIS invites any party to contact the OASIS TC Administrator if it is aware of a claim of ownership of any patent claims that would necessarily be infringed by implementations of this OASIS Standards Final Deliverable by a patent holder that is not willing to provide a license to such patent claims in a manner consistent with the IPR Mode of the OASIS Technical Committee that produced this OASIS Standards Final Deliverable. OASIS may include such claims on its website, but disclaims any obligation to do so.]

[OASIS takes no position regarding the validity or scope of any intellectual property or other rights that might be claimed to pertain to the implementation or use of the technology described in this OASIS Standards Final Deliverable or the extent to which any license under such rights might or might not be available; neither does it represent

that it has made any effort to identify any such rights. Information on OASIS' procedures with respect to rights in any document or deliverable produced by an OASIS Technical Committee can be found on the OASIS website. Copies of claims of rights made available for publication and any assurances of licenses to be made available, or the result of an attempt made to obtain a general license or permission for the use of such proprietary rights by implementers or users of this OASIS Standards Final Deliverable, can be obtained from the OASIS TC Administrator. OASIS makes no representation that any information or list of intellectual property rights will at any time be complete, or that any claims in such list are, in fact, Essential Claims.]

</pre>

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: ncurses

Upstream-Contact: bug-ncurses@gnu.org

Thomas Dickey <dickey@his.com>

Source: <https://invisible-mirror.net/archives/ncurses/>

Files: *

Copyright: 1998-2017,2018 Free Software Foundation, Inc.

1996-2019,2020 Thomas E. Dickey

2001 Pradeep Padala

License: MIT/X11

Files: install-sh

Copyright: 1994 X Consortium

License: X11

Files: progs/tset.c ncurses/tinfo/read_termcap.c

Copyright: 1980,1991,1992,1993 The Regents of the University of California

License: BSD-3-clause

License: MIT/X11

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, distribute with modifications, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.

IN NO EVENT SHALL THE ABOVE COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name(s) of the above copyright holders shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization.

License: X11

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE X CONSORTIUM BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of the X Consortium shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from the X Consortium.

License: BSD-3-clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE

IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Cryptix AES v3.2.0

Cryptix General License

<pre>

Cryptix General License

Copyright (c) 1995-2005 The Cryptix Foundation Limited.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE CRYPTIX FOUNDATION LIMITED AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE CRYPTIX FOUNDATION LIMITED OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

</pre>

This package was debianized by Ivo Timmermans <ivo@debian.org> on Fri, 3 Aug 2001 10:02:38 +0200.

It was taken over by Matthias Urlichs <smurf@debian.org>, and is now

maintained by Andreas Metzler <ametzler@debian.org> Eric Dorland
<eric@debian.org>, James Westby <jw+debian@jameswestby.net>

It was downloaded from <https://ftp.gnupg.org/gcrypt/libgcrypt/>.

Up to end of 2012 libgcrypt copyright was owned solely by FSF, since then
contributions without copyright assignment to the FSF have been integrated.

Upstream Authors (from AUTHORS)

8X-----

List of Copyright holders

=====

Copyright (C) 1989,1991-2019 Free Software Foundation, Inc.
Copyright (C) 1994 X Consortium
Copyright (C) 1996 L. Peter Deutsch
Copyright (C) 1997 Werner Koch
Copyright (C) 1998 The Internet Society
Copyright (C) 1996-1999 Peter Gutmann, Paul Kendall, and Chris Wedgwood
Copyright (C) 1996-2006 Peter Gutmann, Matt Thomlinson and Blake Coverett
Copyright (C) 2003 Nikos Mavroyanopoulos
Copyright (C) 2006-2007 NTT (Nippon Telegraph and Telephone Corporation)
Copyright (C) 2012-2019 g10 Code GmbH
Copyright (C) 2012 Simon Josefsson, Niels Mller
Copyright (c) 2012 Intel Corporation
Copyright (C) 2013 Christian Grothoff
Copyright (C) 2013-2017 Jussi Kivilinna
Copyright (C) 2013-2014 Dmitry Eremin-Solenikov
Copyright (C) 2014 Stephan Mueller
Copyright (C) 2017 Bundesamt fr Sicherheit in der Informationstechnik

Authors with a FSF copyright assignment

=====

LIBGCRYPT Werner Koch 2001-06-07
Assigns past and future changes.
Assignment for future changes terminated on 2012-12-04.
wk@gnupg.org
Designed and implemented Libgcrypt.

GNUPG Matthew Skala 1998-08-10
Disclaims changes.
mskala@ansuz.sooke.bc.ca
Wrote cipher/twofish.c.

GNUPG Natural Resources Canada 1998-08-11

Disclaims changes by Matthew Skala.

GNUPG Michael Roth Germany 1998-09-17

Assigns changes.

mroth@nessie.de

Wrote cipher/des.c.

Changes and bug fixes all over the place.

GNUPG Niklas Hernaeus 1998-09-18

Disclaims changes.

nh@df.lth.se

Weak key patches.

GNUPG Rmi Guyomarch 1999-05-25

Assigns past and future changes. (g10/compress.c, g10/encr-data.c,
g10/free-packet.c, g10/mdfilter.c, g10/plaintext.c, util/iobuf.c)

rguyom@mail.dotcom.fr

ANY g10 Code GmbH 2001-06-07

Assignment for future changes terminated on 2012-12-04.

Code marked with ChangeLog entries of g10 Code employees.

LIBGCRYPT Timo Schulz 2001-08-31

Assigns past and future changes.

twoaday@freakmail.de

LIBGCRYPT Simon Josefsson 2002-10-25

Assigns past and future changes to FSF (cipher/{md4,crc}.c, CTR mode,
CTS/MAC flags, self test improvements)

simon@josefsson.org

LIBGCRYPT Moritz Schulte 2003-04-17

Assigns past and future changes.

moritz@g10code.com

GNUTLS Nikolaos Mavrogiannopoulos 2003-11-22

nmav@gnutls.org

Original code for cipher/rfc2268.c.

LIBGCRYPT The Written Word 2005-04-15

Assigns past and future changes. (new: src/libcrypt.pc.in,
src/Makefile.am, src/secmem.c, mpi/hppa1.1/mpih-mul3.S,
mpi/hppa1.1/udiv-qrnnd.S, mpi/hppa1.1/mpih-mul2.S,
mpi/hppa1.1/mpih-mul1.S, mpi/Makefile.am, tests/prime.c,
tests/register.c, tests/ac.c, tests/basic.c, tests/tsexp.c,
tests/keygen.c, tests/pubkey.c, configure.ac, acinclude.m4)

LIBGCRYPT Brad Hards 2006-02-09

Assigns Past and Future Changes

bradh@frogmouth.net

(Added OFB mode. Changed cipher/cipher.c, test/basic.c doc/gcrypt.tex.
added SHA-224, changed cipher/sha256.c, added HMAC tests.)

LIBGCRYPT Hye-Shik Chang 2006-09-07

Assigns Past and Future Changes

perky@freebsd.org

(SEED cipher)

LIBGCRYPT Werner Dittmann 2009-05-20

Assigns Past and Future Changes

werner.dittmann@t-online.de

(mpi/amd64, tests/mpitests.c)

GNUPG David Shaw

Assigns past and future changes.

dshaw@jabberwocky.com

(cipher/camellia-glue.c and related stuff)

LIBGCRYPT Andrey Jivsov 2010-12-09

Assigns Past and Future Changes

openpgp@brainhub.org

(cipher/ecc.c and related files)

LIBGCRYPT Ulrich Mller 2012-02-15

Assigns Past and Future Changes

ulm@gentoo.org

(Changes to cipher/idea.c and related files)

LIBGCRYPT Vladimir Serbinenko 2012-04-26

Assigns Past and Future Changes

phcoder@gmail.com

(cipher/serpent.c)

Authors with a DCO

=====

Andrei Scherer <andsch@inbox.com>

2014-08-22:BF7CEF794F9.000003F0andsch@inbox.com:

Christian Aistleitner <christian@quelltextlich.at>

2013-02-26:20130226110144.GA12678@quelltextlich.at:

Christian Grothoff <christian@grothoff.org>

2013-03-21:514B5D8A.6040705@grothoff.org:

Dmitry Eremin-Solenikov <dbaryshkov@gmail.com>
2013-07-13:20130713144407.GA27334@fangorn.rup.mentorg.com:

Dmitry Kasatkin <dmitry.kasatkin@intel.com>
2012-12-14:50CAE2DB.80302@intel.com:

Jrmie Courges-Anglas <jca@wxcvbn.org>
2016-05-26:87bn3ssqg0.fsf@ritchie.wxcvbn.org

Jussi Kivilinna <jussi.kivilinna@mbnet.fi>
2012-11-15:20121115172331.150537dzb5i6jmy8@www.dalek.fi:

Jussi Kivilinna <jussi.kivilinna@iki.fi>
2013-05-06:5186720A.4090101@iki.fi:

Markus Teich <markus dot teich at stusta dot mhn dot de>
2014-10-08:20141008180509.GA2770@trolle:

Mathias L. Baumann <mathias.baumann at sociomantic.com>
2017-01-30:07c06d79-0828-b564-d604-fd16c7c86ebe@sociomantic.com:

Milan Broz <gmazyland@gmail.com>
2014-01-13:52D44CC6.4050707@gmail.com:

Peter Wu <peter@lekensteyn.nl>
2015-07-22:20150722191325.GA8113@al:

Rafal Carr <funman@videolan.org>
2012-04-20:4F91988B.1080502@videolan.org:

Sergey V. <sftp.mtuci@gmail.com>
2013-11-07:2066221.5IYa7Yq760@darkstar:

Stephan Mueller <smueller@chronox.de>
2014-08-22:2008899.25OeoeIVVA@myon.chronox.de:

Tom Mrz <tm@t8m.info>
2012-04-16:1334571250.5056.52.camel@vespa.frost.loc:

Vitezslav Cizek <vcizek@suse.com>
2015-11-05:20151105131424.GA32700@kolac.suse.cz

Werner Koch <wk@gnupg.org> (g10 Code GmbH)
2012-12-05:87obi8u4h2.fsf@vigenere.g10code.de:

More credits
=====

Libgcrypt used to be part of GnuPG but has been taken out into its own package on 2000-12-21.

Most of the stuff in mpi has been taken from an old GMP library version by Torbjorn Granlund <tege@noisy.tmg.se>.

The files cipher/rndunix.c and cipher/rndw32.c are based on those files from Cryptlib. Copyright Peter Gutmann, Paul Kendall, and Chris Wedgwood 1996-1999.

The ECC code cipher/ecc.c was based on code by Sergi Blanch i Torne, sergi at calcurco dot org.

The implementation of the Camellia cipher has been taken from the original NTT provided GPL source.

The CAVS testing program tests/cavs_driver.pl is not to be considered a part of libgcrypt proper. We distribute it merely for convenience. It has a permissive license and is copyrighted by atsec information security corporation. See the file for details.

The file salsa20.c is based on D.J. Bernstein's public domain code and taken from Nettle. Copyright 2012 Simon Josefsson and Niels Mller.

This file is free software; as a special exception the author gives unlimited permission to copy and/or distribute it, with or without modifications, as long as this notice is preserved.

This file is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY, to the extent permitted by law; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
8X-----

License:

Most of the package is licensed under the GNU Lesser General Public License (LGPL) version 2.1 (or later), except for helper and debugging binaries. See below for details. The documentation is licensed under the GPLv2 (or later), see below.

Excerpt from upstream's README:

The library is distributed under the terms of the GNU Lesser General Public License (LGPL); see the file COPYING.LIB for the actual terms. The helper programs (e.g. gcryptrnd and getrandom) as well as the documentation are distributed under the terms of

the GNU General Public License (GPL); see the file COPYING for the actual terms.

This library used to be available under the GPL - this was changed with version 1.1.7 with the rationale that there are now many free crypto libraries available and many of them come with capabilities similar to Libcrypt. We decided that to foster the use of cryptography in Free Software an LGPLed library would make more sense because it avoids problems due to license incompatibilities between some Free Software licenses and the GPL.

Please note that in many cases it is better for a library to be licensed under the GPL, so that it provides an advantage for free software projects. The Lesser GPL is so named because it does less to protect the freedom of the users of the code that it covers. See <http://www.gnu.org/philosophy/why-not-lgpl.html> for more explanation.

An example of the license headers of the LGPL is

Copyright (C) 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2006
2007, 2008, 2009, 2010, 2011 Free Software Foundation, Inc.

This file is part of Libgcrypt.

Libgcrypt is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

Libgcrypt is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this program; if not, see [<http://www.gnu.org/licenses/>](http://www.gnu.org/licenses/).

On Debian GNU/Linux systems, the complete text of the GNU Lesser General Public License can be found in
`usr/share/common-licenses/LGPL';

The documentation licensed under the GPL

Copyright © copyright{ } 2000, 2002, 2003, 2004, 2006, 2007, 2008, 2009, 2011, 2012 Free Software Foundation, Inc. @*

@quotation

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version. The text of the license can be found in the section entitled "GNU General Public License".

Further details on licensing:

From upstream's LICENSES file

8X-----

Additional license notices for Libgcrypt. -*- org -*-

This file contains the copying permission notices for various files in the Libgcrypt distribution which are not covered by the GNU Lesser General Public License (LGPL) or the GNU General Public License (GPL).

These notices all require that a copy of the notice be included in the accompanying documentation and be distributed with binary distributions of the code, so be sure to include this file along with any binary distributions derived from the GNU C Library.

* BSD_3Clause

For files:

- cipher/sha256-avx-amd64.S
- cipher/sha256-avx2-bmi2-amd64.S
- cipher/sha256-ssse3-amd64.S
- cipher/sha512-avx-amd64.S
- cipher/sha512-avx2-bmi2-amd64.S
- cipher/sha512-ssse3-amd64.S

#+begin_quote

Copyright (c) 2012, Intel Corporation

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the

documentation and/or other materials provided with the distribution.

* Neither the name of the Intel Corporation nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY INTEL CORPORATION "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL INTEL CORPORATION OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

#+end_quote

For files:

- random/jitterentropy-base.c
- random/jitterentropy.h
- random/rndjent.c (plus common Libgcrypt copyright holders)

#+begin_quote

* Copyright Stephan Mueller <smueller@chronox.de>, 2013

*

* License

* =====

*

* Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* 1. Redistributions of source code must retain the above copyright

* notice, and the entire permission notice in its entirety,

* including the disclaimer of warranties.

* 2. Redistributions in binary form must reproduce the above copyright

* notice, this list of conditions and the following disclaimer in the

* documentation and/or other materials provided with the distribution.

* 3. The name of the author may not be used to endorse or promote

* products derived from this software without specific prior

* written permission.

*

* ALTERNATIVELY, this product may be distributed under the terms of

* the GNU General Public License, in which case the provisions of the GPL are

* required INSTEAD OF the above restrictions. (This clause is
* necessary due to a potential bad interaction between the GPL and
* the restrictions contained in a BSD-style copyright.)
*
* THIS SOFTWARE IS PROVIDED ``AS IS" AND ANY EXPRESS OR IMPLIED
* WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES
* OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ALL OF
* WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE
* LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR
* CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT
* OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR
* BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF
* LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
* (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE
* USE OF THIS SOFTWARE, EVEN IF NOT ADVISED OF THE POSSIBILITY OF SUCH
* DAMAGE.
#+end_quote

* X License

For files:

- install.sh

#+begin_quote

Copyright (C) 1994 X Consortium

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE X CONSORTIUM BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of the X Consortium shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from the X Consortium.

#+end_quote

* Public domain

For files:

- cipher/arcfour-amd64.S

#+begin_quote

Author: Marc Bevand <bevand_m (at) epita.fr>

Licence: I hereby disclaim the copyright on this code and place it in the public domain.

#+end_quote

* OCB license 1

For files:

- cipher/cipher-ocb.c

#+begin_quote

OCB is covered by several patents but may be used freely by most software. See <http://web.cs.ucdavis.edu/~rogaway/ocb/license.htm> .

In particular license 1 is suitable for Libgrypt: See

<http://web.cs.ucdavis.edu/~rogaway/ocb/license1.pdf> for the full license document; it basically says:

License 1 License for Open-Source Software Implementations of OCB
(Jan 9, 2013)

Under this license, you are authorized to make, use, and distribute open-source software implementations of OCB. This license terminates for you if you sue someone over their open-source software implementation of OCB claiming that you have a patent covering their implementation.

License for Open Source Software Implementations of OCB

January 9, 2013

1 Definitions

1.1 Licensor means Phillip Rogaway.

1.2 Licensed Patents means any patent that claims priority to United States Patent Application No. 09/918,615 entitled Method and Apparatus for Facilitating Efficient Authenticated Encryption, and any utility, divisional, provisional, continuation, continuations-in-part, reexamination, reissue, or foreign counterpart patents that may issue with respect to the aforesaid patent application. This includes, but is not limited to, United

States Patent No. 7,046,802; United States Patent No. 7,200,227; United States Patent No. 7,949,129; United States Patent No. 8,321,675 ; and any patent that issues out of United States Patent Application No. 13/669,114.

1.3 Use means any practice of any invention claimed in the Licensed Patents.

1.4 Software Implementation means any practice of any invention claimed in the Licensed Patents that takes the form of software executing on a user-programmable, general-purpose computer or that takes the form of a computer-readable medium storing such software. Software Implementation does not include, for example, application-specific integrated circuits (ASICs), field-programmable gate arrays (FPGAs), embedded systems, or IP cores.

1.5 Open Source Software means software whose source code is published and made available for inspection and use by anyone because either (a) the source code is subject to a license that permits recipients to copy, modify, and distribute the source code without payment of fees or royalties, or (b) the source code is in the public domain, including code released for public use through a CC0 waiver. All licenses certified by the Open Source Initiative at opensource.org as of January 9, 2013 and all Creative Commons licenses identified on the creativecommons.org website as of January 9, 2013, including the Public License Fallback of the CC0 waiver, satisfy these requirements for the purposes of this license.

1.6 Open Source Software Implementation means a Software Implementation in which the software implicating the Licensed Patents is Open Source Software. Open Source Software Implementation does not include any Software Implementation in which the software implicating the Licensed Patents is combined, so as to form a larger program, with software that is not Open Source Software.

2 License Grant

2.1 License. Subject to your compliance with the terms of this license, including the restriction set forth in Section 2.2, Licensor hereby grants to you a perpetual, worldwide, non-exclusive, non-transferable, non-sublicenseable, no-charge, royalty-free, irrevocable license to practice any invention claimed in the Licensed Patents in any Open Source Software Implementation.

2.2 Restriction. If you or your affiliates institute patent litigation (including, but not limited to, a cross-claim or counterclaim in a lawsuit) against any entity alleging that any Use authorized by this license infringes another patent, then any rights granted to you under this license automatically terminate as of the date such litigation is filed.

3 Disclaimer

YOUR USE OF THE LICENSED PATENTS IS AT YOUR OWN RISK AND UNLESS REQUIRED

BY APPLICABLE LAW, LICENSOR MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND CONCERNING THE LICENSED PATENTS OR ANY PRODUCT EMBODYING ANY LICENSED PATENT, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF TITLE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT WILL LICENSOR BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM OR RELATED TO ANY USE OF THE LICENSED PATENTS, INCLUDING, WITHOUT LIMITATION, DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR SPECIAL DAMAGES, EVEN IF LICENSOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES PRIOR TO SUCH AN OCCURRENCE.

#+end_quote

8X-----

On Debian GNU/Linux systems, the text of the GNU General Public License, version 2 can be found in ``/usr/share/common-licenses/GPL-2'``.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: procps-ng

Source: <https://gitlab.com/procps-ng/procps>

Files: *

Copyright: 1998-2004 Albert Cahalan

1991 Tony Rems <rembo@unisoft.com>

1993 Larry Greenfield

1996 Charles Blake

1999 Mike Coleman <mkc@acm.org>

2004 Nicholas Miell

2003 Chris Rivera

2003 Robert Love <rml@tech9.net>

2008 Morty Abzug

2009 Jarrod Lowe <procps@rrod.net>

1992 Branko Lankester

???? David Engel <david@ods.com>

1992-1998 Michael K. Johnson <johnsonm@sunsite.unc.edu>

2012 Craig Small <csmall@enc.com.au>

1995 Martin Schulze <joe@infodrom.north.de>

License: LGPL-2.1+

Files: top/*

Copyright: 2002-2014 James C. Warner

License: LGPL-2.0+

Files: pgrep.*

Copyright: 2000 Kjetil Torggrim Homme <kjetilho@ifi.uio.no>

2002,2006 Albert Cahalan

2012 Roberto Polli <rpolli@babel.it>

License: GPL-2.0+

Files: pidof.*
Copyright: 2013 Jaromir Capik <jcapik@redhat.com>
License: GPL-2.0+

Files: free.*
Copyright: 2011 Sami Kerola <kerolasa@iki.fi>
2002-2003 Robert Love <rml@tech9.net>
1992 Brian Edmonds
1992 Rafal Maszkowski
2004 Albert Cahalan
License: GPL-2.0+

Files: sysctl.*
Copyright: 1999 George Staikos
License: GPL-2.0+

Files: debian/*
Copyright: 1997-2015 Craig Small <csmall@debian.org>
1996-1997 Helmut Geyer <Helmut.Geyer@iwr.uni-heidelberg.de>
License: GPL-2.0+

License: GPL-2.0+
This package is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

.
This package is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.
You should have received a copy of the GNU General Public License along with this program. If not, see <<https://www.gnu.org/licenses/>>

.
On Debian systems, the complete text of the GNU General Public License version 2 can be found in "/usr/share/common-licenses/GPL-2".

License: LGPL-2.0+
This package is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

.
This package is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

.
You should have received a copy of the GNU General Public License along with this program. If not, see <<https://www.gnu.org/licenses/>>.

.
On Debian systems, the complete text of the GNU Lesser General Public License can be found in "/usr/share/common-licenses/LGPL-2".

License: LGPL-2.1+

This package is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

.
This package is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

.
You should have received a copy of the GNU General Public License along with this program. If not, see <<https://www.gnu.org/licenses/>>.

.
On Debian systems, the complete text of the GNU Lesser General Public License can be found in "/usr/share/common-licenses/LGPL-2.1".
JRuby Joni v2.1.16

MIT License

<pre>

Copyright (c) 2017 JRuby Team

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

</pre>

This is the Debian GNU/Linux prepackaged version of the Python programming language. Python was written by Guido van Rossum <guido@cwi.nl> and others.

This package was put together by Klee Dienes <klee@debian.org> from sources from ftp.python.org:/pub/python, based on the Debianization by the previous maintainers Bernd S. Brentrup <bsb@uni-muenster.de> and Bruce Perens.

Current maintainer is Matthias Klose <doko@debian.org> until the final 2.3 version is released.

Copyright notice (as found in LICENSE in the original source).

A. HISTORY OF THE SOFTWARE

=====

Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <http://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <http://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see <http://www.zope.com>). In 2001, the Python Software Foundation (PSF, see <http://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF.

All Python releases are Open Source (see <http://www.opensource.org> for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

| Release | Derived from | Year | Owner | GPL-compatible? (1) |
|----------------|--------------|-----------|-------|---------------------|
| 0.9.0 thru 1.2 | | 1991-1995 | CWI | yes |
| 1.3 thru 1.5.2 | 1.2 | 1995-1999 | CNRI | yes |

| | | | | |
|-------|-----------|-----------|------------|---------|
| 1.6 | 1.5.2 | 2000 | CNRI | no |
| 2.0 | 1.6 | 2000 | BeOpen.com | no |
| 1.6.1 | 1.6 | 2001 | CNRI | yes (2) |
| 2.1 | 2.0+1.6.1 | 2001 | PSF | no |
| 2.0.1 | 2.0+1.6.1 | 2001 | PSF | yes |
| 2.1.1 | 2.1+2.0.1 | 2001 | PSF | yes |
| 2.2 | 2.1.1 | 2001 | PSF | yes |
| 2.1.2 | 2.1.1 | 2002 | PSF | yes |
| 2.1.3 | 2.1.2 | 2002 | PSF | yes |
| 2.2.1 | 2.2 | 2002 | PSF | yes |
| 2.2.2 | 2.2.1 | 2002 | PSF | yes |
| 2.2.3 | 2.2.2 | 2003 | PSF | yes |
| 2.3 | 2.2.2 | 2002-2003 | PSF | yes |
| 2.3.1 | 2.3 | 2002-2003 | PSF | yes |
| 2.3.2 | 2.3.1 | 2002-2003 | PSF | yes |
| 2.3.3 | 2.3.2 | 2002-2003 | PSF | yes |
| 2.3.4 | 2.3.3 | 2004 | PSF | yes |
| 2.3.5 | 2.3.4 | 2005 | PSF | yes |
| 2.4 | 2.3 | 2004 | PSF | yes |
| 2.4.1 | 2.4 | 2005 | PSF | yes |
| 2.4.2 | 2.4.1 | 2005 | PSF | yes |
| 2.4.3 | 2.4.2 | 2006 | PSF | yes |
| 2.4.4 | 2.4.3 | 2006 | PSF | yes |
| 2.5 | 2.4 | 2006 | PSF | yes |
| 2.5.1 | 2.5 | 2007 | PSF | yes |
| 2.5.2 | 2.5.1 | 2008 | PSF | yes |
| 2.5.3 | 2.5.2 | 2008 | PSF | yes |
| 2.6 | 2.5 | 2008 | PSF | yes |
| 2.6.1 | 2.6 | 2008 | PSF | yes |
| 2.6.2 | 2.6.1 | 2009 | PSF | yes |
| 2.6.3 | 2.6.2 | 2009 | PSF | yes |
| 2.6.4 | 2.6.3 | 2009 | PSF | yes |
| 3.0 | 2.6 | 2008 | PSF | yes |
| 3.0.1 | 3.0 | 2009 | PSF | yes |
| 3.1 | 3.0.1 | 2009 | PSF | yes |
| 3.1.1 | 3.1 | 2009 | PSF | yes |

Footnotes:

(1) GPL-compatible doesn't mean that we're distributing Python under the GPL. All Python licenses, unlike the GPL, let you distribute a modified version without making your changes open source. The GPL-compatible licenses make it possible to combine Python with other software that is released under the GPL; the others don't.

(2) According to Richard Stallman, 1.6.1 is not GPL-compatible, because its license has a choice of law clause. According to CNRI, however, Stallman's lawyer has told CNRI's lawyer that 1.6.1

is "not incompatible" with the GPL.

Thanks to the many outside volunteers who have worked under Guido's direction to make these releases possible.

B. TERMS AND CONDITIONS FOR ACCESSING OR OTHERWISE USING PYTHON

PYTHON SOFTWARE FOUNDATION LICENSE VERSION 2

1. This LICENSE AGREEMENT is between the Python Software Foundation ("PSF"), and the Individual or Organization ("Licensee") accessing and otherwise using this software ("Python") in source or binary form and its associated documentation.
2. Subject to the terms and conditions of this License Agreement, PSF hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python alone or in any derivative version, provided, however, that PSF's License Agreement and PSF's notice of copyright, i.e., "Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010 Python Software Foundation; All Rights Reserved" are retained in Python alone or in any derivative version prepared by Licensee.
3. In the event Licensee prepares a derivative work that is based on or incorporates Python or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python.
4. PSF is making Python available to Licensee on an "AS IS" basis. PSF MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, PSF MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.
5. PSF SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.
6. This License Agreement will automatically terminate upon a material breach of its terms and conditions.
7. Nothing in this License Agreement shall be deemed to create any

relationship of agency, partnership, or joint venture between PSF and Licensee. This License Agreement does not grant permission to use PSF trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party.

8. By copying, installing or otherwise using Python, Licensee agrees to be bound by the terms and conditions of this License Agreement.

BEOPEN.COM LICENSE AGREEMENT FOR PYTHON 2.0

----- BEOPEN PYTHON OPEN SOURCE LICENSE AGREEMENT VERSION 1

1. This LICENSE AGREEMENT is between BeOpen.com ("BeOpen"), having an office at 160 Saratoga Avenue, Santa Clara, CA 95051, and the Individual or Organization ("Licensee") accessing and otherwise using this software in source or binary form and its associated documentation ("the Software").

2. Subject to the terms and conditions of this BeOpen Python License Agreement, BeOpen hereby grants Licensee a non-exclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use the Software alone or in any derivative version, provided, however, that the BeOpen Python License is retained in the Software, alone or in any derivative version prepared by Licensee.

3. BeOpen is making the Software available to Licensee on an "AS IS" basis. BEOPEN MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, BEOPEN MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

4. BEOPEN SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF THE SOFTWARE FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF USING, MODIFYING OR DISTRIBUTING THE SOFTWARE, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

5. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

6. This License Agreement shall be governed by and interpreted in all respects by the law of the State of California, excluding conflict of law provisions. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture

between BeOpen and Licensee. This License Agreement does not grant permission to use BeOpen trademarks or trade names in a trademark sense to endorse or promote products or services of Licensee, or any third party. As an exception, the "BeOpen Python" logos available at <http://www.pythonlabs.com/logos.html> may be used according to the permissions granted on that web page.

7. By copying, installing or otherwise using the software, Licensee agrees to be bound by the terms and conditions of this License Agreement.

CNRI LICENSE AGREEMENT FOR PYTHON 1.6.1

1. This LICENSE AGREEMENT is between the Corporation for National Research Initiatives, having an office at 1895 Preston White Drive, Reston, VA 20191 ("CNRI"), and the Individual or Organization ("Licensee") accessing and otherwise using Python 1.6.1 software in source or binary form and its associated documentation.

2. Subject to the terms and conditions of this License Agreement, CNRI hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python 1.6.1 alone or in any derivative version, provided, however, that CNRI's License Agreement and CNRI's notice of copyright, i.e., "Copyright (c) 1995-2001 Corporation for National Research Initiatives; All Rights Reserved" are retained in Python 1.6.1 alone or in any derivative version prepared by Licensee. Alternately, in lieu of CNRI's License Agreement, Licensee may substitute the following text (omitting the quotes): "Python 1.6.1 is made available subject to the terms and conditions in CNRI's License Agreement. This Agreement together with Python 1.6.1 may be located on the Internet using the following unique, persistent identifier (known as a handle): 1895.22/1013. This Agreement may also be obtained from a proxy server on the Internet using the following URL: <http://hdl.handle.net/1895.22/1013>".

3. In the event Licensee prepares a derivative work that is based on or incorporates Python 1.6.1 or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python 1.6.1.

4. CNRI is making Python 1.6.1 available to Licensee on an "AS IS" basis. CNRI MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, CNRI MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS

FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON 1.6.1 WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

5. CNRI SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON 1.6.1 FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON 1.6.1, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

6. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

7. This License Agreement shall be governed by the federal intellectual property law of the United States, including without limitation the federal copyright law, and, to the extent such U.S. federal law does not apply, by the law of the Commonwealth of Virginia, excluding Virginia's conflict of law provisions. Notwithstanding the foregoing, with regard to derivative works based on Python 1.6.1 that incorporate non-separable material that was previously distributed under the GNU General Public License (GPL), the law of the Commonwealth of Virginia shall govern this License Agreement only as to issues arising under or with respect to Paragraphs 4, 5, and 7 of this License Agreement. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between CNRI and Licensee. This License Agreement does not grant permission to use CNRI trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party.

8. By clicking on the "ACCEPT" button where indicated, or by copying, installing or otherwise using Python 1.6.1, Licensee agrees to be bound by the terms and conditions of this License Agreement.

ACCEPT

CWI LICENSE AGREEMENT FOR PYTHON 0.9.0 THROUGH 1.2

Copyright (c) 1991 - 1995, Stichting Mathematisch Centrum Amsterdam, The Netherlands. All rights reserved.

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Stichting Mathematisch Centrum or CWI not be used in advertising or publicity pertaining to distribution of the software without specific, written prior

permission.

STICHTING MATHEMATISCH CENTRUM DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL STICHTING MATHEMATISCH CENTRUM BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

py3compile, py3clean and debpython module:

=====
Copyright 2010-2013 Piotr Oarowski <piotr@debian.org>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

This is the Debian GNU prepackaged version of mawk, an implementation of the AWK Programming Language. mawk was written by Mike Brennan <brennan@whidbey.com>

This package was put together by Chris Fearnley <cjf@netaxs.com>, from sources obtained from:
<ftp://ftp.whidbey.net/pub/brennan/mawk1.3.3.tar.gz>

It is currently being maintained by James Troup <james@nocrew.org>.

mawk 1.3.3 Nov 1996, Copyright (C) Michael D. Brennan
Modifications for Debian GNU/Linux Copyright (C) 1995-96 Chris Fearnley.
Modifications for Debian GNU/Linux Copyright (C) 1998-2003 James Troup.

Further modifications up to mawk 1.3.4.20200120 is of:
Copyright 2009-2018,2019,2020 by Thomas E. Dickey. The source code is

taken from <https://invisible-island.net/mawk/> .

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License version 2 as published by the Free Software Foundation.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License with your Debian GNU system, in /usr/share/common-licenses/GPL-2, or with the Debian GNU mawk source package as the file COPYING. If not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301, USA.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: package

Source: <https://sourceforge.net/projects/libtirpc/>

Files: *

Copyright: 2005 Bull S.A

License: BSD-3-Clause

Files: debian/*

Copyright: 2009 Steinar H. Gunderson <sesse@debian.org>

2019 Josue Ortega <josue@debian.org>

License: GPL-2

Files: src/auth_des.c
src/auth_none.c
src/auth_unix.c
src/authdes_prot.c
src/authunix_prot.c
src/bindresvport.c
src/clnt_bcast.c
src/clnt_perror.c
src/clnt_raw.c
src/clnt_simple.c
src/clnt_vc.c
src/debug.c
src/debug.h
src/des_crypt.c
src/getnetconfig.c
src/getnetpath.c
src/getrpcent.c
src/getrpcport.c
src/key_call.c

src/key_prot_xdr.c
src/pmap_clnt.c
src/pmap_getmaps.c
src/pmap_getport.c
src/pmap_prot.c
src/pmap_prot2.c
src/pmap_rmt.c
src/rpc_callmsg.c
src/rpc_com.h
src/rpc_commondata.c
src/rpc_dtablesize.c
src/rpc_generic.c
src/rpc_prot.c
src/rpc_soc.c
src/rpcb_prot.c
src/rpcb_st_xdr.c
src/rtime.c
src/svc_auth.c
src/svc_auth_des.c
src/svc_auth_unix.c
src/svc_dg.c
src/svc_generic.c
src/svc_raw.c
src/svc_simple.c
src/svc_vc.c
src/xdr_array.c
src/xdr_float.c
src/xdr_mem.c
src/xdr_rec.c
src/xdr_reference.c
src/xdr_sizeof.c
src/xdr_stdio.c
tirpc/rpc/auth_des.h
tirpc/rpc/auth_unix.h
tirpc/rpc/des_crypt.h
tirpc/rpc/pmap_clnt.h
tirpc/rpc/pmap_prot.h
tirpc/rpc/pmap_rmt.h
tirpc/rpc/raw.h
tirpc/rpc/rpc_com.h
tirpc/rpc/rpc_msg.h
tirpc/rpc/rpcb_clnt.h
tirpc/rpc/rpcb_prot.h
tirpc/rpc/svc_auth.h

Copyright: 1984-2009 Sun Microsystems, Inc.

1986-1991 Sun Microsystems Inc.

1986-1991 Sun Microsystems Inc. In addition, portions of such source code were derived from Berkeley

1996 Jason Downs.

2014 Red Hat, Steve Dickson <steved@redhat.com>

License: BSD-3-Clause

Files: Makefile.in
aclocal.m4
compile
config.guess
config.sub
configure
depcomp
doc/Makefile.in
install-sh
ltmain.sh
m4/libtool.m4
m4/ltoptions.m4
m4/ltsugar.m4
m4/ltversion.m4
m4/lt~obsolete.m4
man/Makefile.in
missing
src/Makefile.in

Copyright: 1992-2017 Free Software Foundation, Inc.
1994 X Consortium

License: __AUTO_PERMISSIVE__

Autogenerated files with permissive licenses.

Files: man/rpc_gss_get_error.3t
man/rpc_gss_get_mech_info.3t
man/rpc_gss_get_mechanisms.3t
man/rpc_gss_get_principal_name.3t
man/rpc_gss_get_versions.3t
man/rpc_gss_getcred.3t
man/rpc_gss_is_installed.3t
man/rpc_gss_max_data_length.3t
man/rpc_gss_mech_to_oid.3t
man/rpc_gss_qop_to_num.3t
man/rpc_gss_seccreate.3t
man/rpc_gss_set_callback.3t
man/rpc_gss_set_defaults.3t
man/rpc_gss_set_svc_name.3t
man/rpc_gss_svc_max_data_length.3t
man/rpcsec_gss.3t

Copyright: 2008 Isilon Inc <http://www.isilon.com/>

License: BSD-2-Clause

Files: src/auth_gss.c
src/authgss_prot.c
src/svc_auth_gss.c

src/svc_auth_none.c
tirpc/rpc/auth_gss.h
Copyright: 2000 Dug Song <dugsong@UMICH.EDU>. all wrongs reversed.
2000 The Regents of the University of Michigan.
License: BSD-3-Clause

Files: src/binddynport.c
src/rpc_gss_utils.c
tirpc/rpc/rpcsec_gss.h
tirpc/rpc/svc_auth_gss.h
Copyright: 2013-2018 Oracle America, Inc.
License: BSD-3-Clause

Files: src/netname.c
src/netnamer.c
Copyright: 2009 Sun Microsystems, Inc.
License: BSD-3-Clause

Files: src/clnt_generic.c
src/rpcb_clnt.c
Copyright: 2010 Oracle America, Inc.
License: BSD-3-Clause

Files: src/crypt_client.c
tirpc/rpcsvc/crypt.x
Copyright: 1996 Bill Paul <wpaul@ctr.columbia.edu>.
License: BSD-4-Clause

Files: src/des_impl.c
Copyright: 1992 Eric Young Collected from libdes and modified for SECURE RPC Martin Kuck 1994
License: LGPL-2.1+

Files: INSTALL
Copyright: 1994-2013 Free Software Foundation, Inc.
License: PERMISSIVE
Copying and distribution of this file, with or without modification,
are permitted in any medium without royalty provided the copyright
notice and this notice are preserved. This file is offered as-is,
without warranty of any kind.

Basic Installation

Files: tirpc/rpc/nettype.h
Copyright: 1986-2009 Sun Microsystems, Inc.
License: BSD-3-Clause

Files: tirpc/reentrant.h
Copyright: 1997-1998 The NetBSD Foundation, Inc.

License: BSD-2-Clause

Files: tirpc/rpc/svc_mt.h

Copyright: 2015 Axentia Technologies AB.

License: BSD-2-Clause

Files: src/getpeereid.c

Copyright: 2001 Dima Dorfman.

License: BSD-2-Clause

Files: tirpc/un-namespace.h

Copyright: 2001 Daniel Eischen <deischen@FreeBSD.org>.

License: BSD-2-Clause

Files: tirpc/rpc/rpcent.h

Copyright: 1986-2009 Sun Microsystems, Inc.

License: BSD-3-Clause

Files: src/epoll_sub.c

Copyright: 2003 Niels Provos <provos@citi.umich.edu>

License: BSD-3-Clause

Files: tirpc/rpc/clnt.h

Copyright: 2010 Oracle America, Inc.

License: BSD-3-Clause

Files: tirpc/rpc/xdr.h

Copyright: 1984-2009 Sun Microsystems, Inc.

License: BSD-3-Clause

Files: src/rpcdname.c

Copyright: 2009 Sun Microsystems, Inc.

License: BSD-3-Clause

Files: tirpc/rpc/types.h

Copyright: 2009 Sun Microsystems, Inc.

License: BSD-3-Clause

Files: src/des_soft.c

Copyright: 2009 Sun Microsystems, Inc.

License: BSD-3-Clause

Files: src/svc.c

Copyright: 1984-2009 Sun Microsystems, Inc.

License: BSD-3-Clause

Files: tirpc/rpc/auth.h

Copyright: 1984-2009 Sun Microsystems, Inc.

License: BSD-3-Clause

Files: tirpc/rpc/svc_soc.h

Copyright: 1986-2009 Sun Microsystems, Inc.

License: BSD-3-Clause

Files: src/xdr.c

Copyright: 1986-2009 Sun Microsystems, Inc.

License: BSD-3-Clause

Files: src/getpublickey.c

Copyright: 2009 Sun Microsystems, Inc.

License: BSD-3-Clause

Files: tirpc/rpc/rpc.h

Copyright: 1984-2009 Sun Microsystems, Inc.

License: BSD-3-Clause

Files: tirpc/rpc/clnt_soc.h

Copyright: 1984-2009 Sun Microsystems, Inc.

License: BSD-3-Clause

Files: src/svc_run.c

Copyright: 2009 Sun Microsystems, Inc.

License: BSD-3-Clause

Files: tirpc/rpc/des.h

Copyright: 2009 Sun Microsystems, Inc.

License: BSD-3-Clause

Files: tirpc/rpc/svc.h

Copyright: 1986-2009 Sun Microsystems, Inc.

License: BSD-3-Clause

Files: src/nis.h

Copyright: 2010 Oracle America, Inc.

License: BSD-3-Clause

Files: tirpc/rpc/svc_dg.h

Copyright: 2009 Sun Microsystems, Inc.

License: BSD-3-Clause

License: BSD-3-Clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice,

this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

- Neither the name of Sun Microsystems, Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: BSD-2-Clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: BSD-4-Clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the

documentation and/or other materials provided with the distribution.

3. All advertising materials mentioning features or use of this software must display the following acknowledgement:

This product includes software developed by Bill Paul.

4. Neither the name of the author nor the names of any co-contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY Bill Paul AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL Bill Paul OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: LGPL-2.1+

This file is distributed under the terms of the GNU Lesser General Public License, version 2.1 or later - see the file COPYING.LIB for details.

If you did not receive a copy of the license with this program, please see <<http://www.gnu.org/licenses/>> to obtain a copy.

On Debian systems, the complete text of the GNU Lesser General Public License Version 2.1 can be found in `~/usr/share/common-licenses/LGPL-2.1'`.

License: GPL-2

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License, v2, as published by the Free Software Foundation

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

On Debian systems, the complete text of the GNU General Public License version 2 can be found in `~/usr/share/common-licenses/GPL-2'`.

This package was debianized by Marcus Brinkmann <mb@g10code.de> on Thu, 25 Jul 2002 21:50:21 +0200.

It was later taken over by Matthias Urlichs <smurf@debian.org>, and is now

maintained by Andreas Metzler <ametzler@debian.org>, Eric Dorland <eric@debian.org>, James Westby <jw+debian@jameswestby.net>, Peter Eisentraut <petere@debian.org>

It was downloaded from <https://gnupg.org/ftp/gcrypt/libksba/>.

Upstream Authors: g10 Code GmbH and Fabio Fiorina.

Copyright:

| Copyright (C) 2001, 2002, 2003, 2004, 2005, 2006, 2010, 2011
| 2012, 2013, 2014, 2015, 2018, 2019 2020 g10 Code GmbH
| Copyright (C) 2001, 2002, 2003, 2007 Free Software Foundation, Inc.
| Copyright (C) 2000, 2001 Fabio Fiorina

The library and the header files are distributed under the following terms (LGPLv3+/GPLv2+):

| KSBA is free software; you can redistribute it and/or modify
| it under the terms of either
|
| - the GNU Lesser General Public License as published by the Free
| Software Foundation; either version 3 of the License, or (at
| your option) any later version.
|
| or
|
| - the GNU General Public License as published by the Free
| Software Foundation; either version 2 of the License, or (at
| your option) any later version.
|
| or both in parallel, as here.
|
| KSBA is distributed in the hope that it will be useful, but WITHOUT
| ANY WARRANTY; without even the implied warranty of MERCHANTABILITY
| or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public
| License for more details.

The other parts (e.g. manual, build system, tests) are distributed under the following terms (GPLv3):

| KSBA is free software; you can redistribute it and/or modify
| it under the terms of the GNU General Public License as published by
| the Free Software Foundation; either version 3 of the License, or
| (at your option) any later version.
|
| KSBA is distributed in the hope that it will be useful,
| but WITHOUT ANY WARRANTY; without even the implied warranty of
| MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the

| GNU General Public License for more details.

The ASN.1 definition for CMS is based on a specification published under the following terms (see src/cms.asn):

| Copyright (C) The Internet Society (1999). All Rights Reserved.

|

| This document and translations of it may be copied and furnished to
| others, and derivative works that comment on or otherwise explain it
| or assist in its implementation may be prepared, copied, published
| and distributed, in whole or in part, without restriction of any
| kind, provided that the above copyright notice and this paragraph are
| included on all such copies and derivative works. However, this
| document itself may not be modified in any way, such as by removing
| the copyright notice or references to the Internet Society or other
| Internet organizations, except as needed for the purpose of
| developing Internet standards in which case the procedures for
| copyrights defined in the Internet Standards process must be
| followed, or as required to translate it into languages other than
| English.

|

| The limited permissions granted above are perpetual and will not be
| revoked by the Internet Society or its successors or assigns.

|

| This document and the information contained herein is provided on an
| "AS IS" basis and THE INTERNET SOCIETY AND THE INTERNET ENGINEERING
| TASK FORCE DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING
| BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION
| HEREIN WILL NOT INFRINGE ANY RIGHTS OR ANY IMPLIED WARRANTIES OF
| MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

On Debian systems, the complete text of the GNU General Public License can be found in `~/usr/share/common-licenses/GPL-3`.

Files: src/asn1-constants.h

Copyright: 2020 g10 Code GmbH

License: FSFUL

Files: src/der-builder.c src/der-builder.h

Copyright: 2020 g10 Code GmbH

License: LGPL-2.1-or-later

License: FSFUL

This file is free software; the authors give unlimited permission to copy, distribute and modify it.

SPDX-License-Identifier: FSFUL

License: LGPL-2.1-or-later

This file is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This file is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this program; if not, see <<https://www.gnu.org/licenses/>>.

SPDX-License-Identifier: LGPL-2.1-or-later

libpng v1.6.37

libpng License

<pre>

COPYRIGHT NOTICE, DISCLAIMER, and LICENSE

=====

PNG Reference Library License version 2

- * Copyright (c) 1995-2019 The PNG Reference Library Authors.
- * Copyright (c) 2018-2019 Cosmin Truta.
- * Copyright (c) 2000-2002, 2004, 2006-2018 Glenn Randers-Pehrson.
- * Copyright (c) 1996-1997 Andreas Dilger.
- * Copyright (c) 1995-1996 Guy Eric Schalnat, Group 42, Inc.

The software is supplied "as is", without warranty of any kind, express or implied, including, without limitation, the warranties of merchantability, fitness for a particular purpose, title, and non-infringement. In no event shall the Copyright owners, or anyone distributing the software, be liable for any damages or other liability, whether in contract, tort or otherwise, arising from, out of, or in connection with the software, or the use or other dealings in the software, even if advised of the possibility of such damage.

Permission is hereby granted to use, copy, modify, and distribute this software, or portions hereof, for any purpose, without fee, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you

use this software in a product, an acknowledgment in the product documentation would be appreciated, but is not required.

2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This Copyright notice may not be removed or altered from any source or altered source distribution.

PNG Reference Library License version 1 (for libpng 0.5 through 1.6.35)

libpng versions 1.0.7, July 1, 2000, through 1.6.35, July 15, 2018 are Copyright (c) 2000-2002, 2004, 2006-2018 Glenn Randers-Pehrson, are derived from libpng-1.0.6, and are distributed according to the same disclaimer and license as libpng-1.0.6 with the following individuals added to the list of Contributing Authors:

Simon-Pierre Cadieux
Eric S. Raymond
Mans Rullgard
Cosmin Truta
Gilles Vollant
James Yu
Mandar Sahastrabudde
Google Inc.
Vadim Barkov

and with the following additions to the disclaimer:

There is no warranty against interference with your enjoyment of the library or against infringement. There is no warranty that our efforts or the library will fulfill any of your particular purposes or needs. This library is provided with all faults, and the entire risk of satisfactory quality, performance, accuracy, and effort is with the user.

Some files in the "contrib" directory and some configure-generated files that are distributed with libpng have other copyright owners, and are released under other open source licenses.

libpng versions 0.97, January 1998, through 1.0.6, March 20, 2000, are Copyright (c) 1998-2000 Glenn Randers-Pehrson, are derived from libpng-0.96, and are distributed according to the same disclaimer and license as libpng-0.96, with the following individuals added to the list of Contributing Authors:

Tom Lane
Glenn Randers-Pehrson
Willem van Schaik

libpng versions 0.89, June 1996, through 0.96, May 1997, are Copyright (c) 1996-1997 Andreas Dilger, are derived from libpng-0.88, and are distributed according to the same disclaimer and license as libpng-0.88, with the following individuals added to the list of Contributing Authors:

John Bowler
Kevin Bracey
Sam Bushell
Magnus Holmgren
Greg Roelofs
Tom Tanner

Some files in the "scripts" directory have other copyright owners, but are released under this license.

libpng versions 0.5, May 1995, through 0.88, January 1996, are Copyright (c) 1995-1996 Guy Eric Schalnat, Group 42, Inc.

For the purposes of this copyright and license, "Contributing Authors" is defined as the following set of individuals:

Andreas Dilger
Dave Martindale
Guy Eric Schalnat
Paul Schmidt
Tim Wegner

The PNG Reference Library is supplied "AS IS". The Contributing Authors and Group 42, Inc. disclaim all warranties, expressed or implied, including, without limitation, the warranties of merchantability and of fitness for any purpose. The Contributing Authors and Group 42, Inc. assume no liability for direct, indirect, incidental, special, exemplary, or consequential damages, which may result from the use of the PNG Reference Library, even if advised of the possibility of such damage.

Permission is hereby granted to use, copy, modify, and distribute this source code, or portions hereof, for any purpose, without fee, subject to the following restrictions:

1. The origin of this source code must not be misrepresented.
2. Altered versions must be plainly marked as such and must not

be misrepresented as being the original source.

3. This Copyright notice may not be removed or altered from any source or altered source distribution.

The Contributing Authors and Group 42, Inc. specifically permit, without fee, and encourage the use of this source code as a component to supporting the PNG file format in commercial products. If you use this source code in a product, acknowledgment is not required but would be appreciated.

</pre>

This is Debian GNU/Linux's prepackaged version of the shadow utilities.

It was downloaded from: <ftp://ftp.pld.org.pl/software/shadow/>.

As of May 2007, this site is no longer available.

Copyright:

Parts of this software are copyright 1988 - 1994, Julianne Frances Haugh.
All rights reserved.

Parts of this software are copyright 1997 - 2001, Marek Michakiewicz.
All rights reserved.

Parts of this software are copyright 2001 - 2004, Andrzej Krzysztofowicz
All rights reserved.

Parts of this software are copyright 2000 - 2007, Tomasz Koczko.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of Julianne F. Haugh nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY JULIE HAUGH AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL JULIE HAUGH OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL

DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This source code is currently archived on ftp.uu.net in the comp.sources.misc portion of the USENET archives. You may also contact the author, Julianne F. Haugh, at jockgrrl@ix.netcom.com if you have any questions regarding this package.

THIS SOFTWARE IS BEING DISTRIBUTED AS-IS. THE AUTHORS DISCLAIM ALL LIABILITY FOR ANY CONSEQUENCES OF USE. THE USER IS SOLELY RESPONSIBLE FOR THE MAINTENANCE OF THIS SOFTWARE PACKAGE. THE AUTHORS ARE UNDER NO OBLIGATION TO PROVIDE MODIFICATIONS OR IMPROVEMENTS. THE USER IS ENCOURAGED TO TAKE ANY AND ALL STEPS NEEDED TO PROTECT AGAINST ACCIDENTAL LOSS OF INFORMATION OR MACHINE RESOURCES.

Special thanks are due to Chip Rosenthal for his fine testing efforts; to Steve Simmons for his work in porting this code to BSD; and to Bill Kennedy for his contributions of LaserJet printer time and energies. Also, thanks for Dennis L. Mumaugh for the initial shadow password information and to Tony Walton (olapw@olgb1.oliv.co.uk) for the System V Release 4 changes. Effort in porting to SunOS has been contributed by Dr. Michael Newberry (miken@cs.adfa.oz.au) and Micheal J. Miller, Jr. (mke@kaber.drain.com). Effort in porting to AT&T UNIX System V Release 4 has been provided by Andrew Herbert (andrew@werple.pub.uu.oz.au). Special thanks to Marek Michalkiewicz (marekm@i17linuxb.ists.pwr.wroc.pl) for taking over the Linux port of this software.

Source files: login_access.c, login_desrpc.c, login_krb.c are derived from the logdaemon-5.0 package, which is under the following license:

```
/******
```

- * Copyright 1995 by Wietse Venema. All rights reserved. Individual files
- * may be covered by other copyrights (as noted in the file itself.)
- *
- * This material was originally written and compiled by Wietse Venema at
- * Eindhoven University of Technology, The Netherlands, in 1990, 1991,
- * 1992, 1993, 1994 and 1995.
- *
- * Redistribution and use in source and binary forms are permitted
- * provided that this entire copyright notice is duplicated in all such
- * copies.
- *
- * This software is provided "as is" and without any expressed or implied
- * warranties, including, without limitation, the implied warranties of

* merchantability and fitness for any particular purpose.

*****/

Some parts substantially in src/su.c derived from an ancestor of su for GNU. Run a shell with substitute user and group IDs.
Copyright (C) 1992-2003 Free Software Foundation, Inc.

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

On Debian GNU/Linux systems, the complete text of the GNU General Public License can be found in '/usr/share/common-licenses/GPL-2'
This is the Debian GNU/Linux prepackaged version of sed - the GNU stream oriented editor.

This package was assembled from sources obtained from:
<ftp://ftp.gnu.org/gnu/sed/>

It is currently maintained by Clint Adams <clint@debian.org>

Copyright: 1989,90,91,92,93,94,95,98,99,2002,2003,2006,2008,2009,2010 Free Software Foundation, Inc.

GNU sed is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3, or (at your option) any later version.

On Debian GNU/Linux systems you can find a copy of the GPL in /usr/share/common-licenses/GPL-3

The sed info manual is released under the terms of the GNU Free Documentation License as published by the Free Software Foundation; either version 1.3, or (at your option) any later version.

Unicode Common Local Data Repository (CLDR) v33

CLDR License

...

UNICODE, INC. LICENSE AGREEMENT - DATA FILES AND SOFTWARE
Unicode Data Files include all data files under the directories

<http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>,
<http://www.unicode.org/cldr/data/>,
<http://source.icu-project.org/repos/icu/>, and
<http://www.unicode.org/utility/trac/browser/>.

Unicode Data Files do not include PDF online code charts under the directory <http://www.unicode.org/Public/>.

Software includes any source code published in the Unicode Standard or under the directories

<http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>,
<http://www.unicode.org/cldr/data/>,
<http://source.icu-project.org/repos/icu/>, and
<http://www.unicode.org/utility/trac/browser/>.

NOTICE TO USER: Carefully read the following legal agreement.

BY DOWNLOADING, INSTALLING, COPYING OR OTHERWISE USING UNICODE INC.'S DATA FILES ("DATA FILES"), AND/OR SOFTWARE ("SOFTWARE"), YOU UNEQUIVOCALLY ACCEPT, AND AGREE TO BE BOUND BY, ALL OF THE TERMS AND CONDITIONS OF THIS AGREEMENT.
IF YOU DO NOT AGREE, DO NOT DOWNLOAD, INSTALL, COPY, DISTRIBUTE OR USE THE DATA FILES OR SOFTWARE.

COPYRIGHT AND PERMISSION NOTICE

Copyright 1991-2018 Unicode, Inc. All rights reserved.
Distributed under the Terms of Use in <http://www.unicode.org/copyright.html>.

Permission is hereby granted, free of charge, to any person obtaining a copy of the Unicode data files and any associated documentation (the "Data Files") or Unicode software and any associated documentation (the "Software") to deal in the Data Files or Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Data Files or Software, and to permit persons to whom the Data Files or Software are furnished to do so, provided that either
(a) this copyright and permission notice appear with all copies of the Data Files or Software, or
(b) this copyright and permission notice appear in associated Documentation.

THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS.

IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE,

DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in these Data Files or Software without prior written authorization of the copyright holder.

jQuery UI v1.12.1

jQuery UI License

Copyright jQuery Foundation and other contributors, <https://jquery.org/>

This software consists of voluntary contributions made by many individuals. For exact contribution history, see the revision history available at <https://github.com/jquery/jquery-ui>

The following license applies to all parts of this software except as documented below:

====

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

====

Copyright and related rights for sample code are waived via CC0. Sample code is defined as all source code contained within the demos directory.

CC0: <http://creativecommons.org/publicdomain/zero/1.0/>

====

All files located in the `node_modules` and external directories are externally maintained libraries used by this software which have their own licenses; we recommend you read them, as their terms may differ from the terms above.

...

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: libgpg-error

Upstream-Contact: gnupg-devel@gnupg.org

Source: <https://gnupg.org/ftp/gcrypt/libgpg-error/>

Files: *

Copyright: 2001-2004, 2010, 2012-2018, g10 Code GmbH

License: LGPL-2.1+

Files: `src/b64dec.c`

Copyright: 2008, 2011 Free Software Foundation, Inc.

2008, 2011, 2016 g10 Code GmbH

License: LGPL-2.1+

Files: `src/estream-printf.h` `src/estream-printf.c` `src/estream.c`

Copyright: 2004-2012, 2014-2017 g10 Code GmbH

License: LGPL-2.1+ or BSD-3-clause

Files: `src/w32-estream.c`

Copyright: 2000 Werner Koch (dd9jn)

2001, 2002, 2003, 2004, 2007, 2010, 2016 g10 Code GmbH

License: LGPL-2.1+

Files: `src/gettext.h`

Copyright: 1995-1998, 2000-2002 Free Software Foundation, Inc.

License: LGPL-2.1+

Files: `src/gpg-error-config.in`

Copyright: 1999, 2002, 2003 Free Software Foundation, Inc.

License: g10-permissive

Files: `src/mkheader.c`

Copyright: 2010 Free Software Foundation, Inc.

2014 g10 Code GmbH

License: g10-permissive

Files: `src/posix-lock.c`

Copyright: 2005-2009 Free Software Foundation, Inc.

2014 g10 Code GmbH

License: LGPL-2.1+

Files: src/w32-gettext.c

Copyright: 1995, 1996, 1997, 1999, 2005, 2007, 2008, 2010 Free Software Foundation, Inc.

License: LGPL-2.1+

Files: doc/yat2m.c

Copyright: 2005, 2013, 2015, 2016 g10 Code GmbH

2006, 2008, 2011 Free Software Foundation, Inc.

License: GPL-3+

Files: potomo

Copyright: 2008 g10 Code GmbH

2010 Free Software Foundation, Inc.

License: g10-permissive

License: g10-permissive

This file is free software; as a special exception the author gives unlimited permission to copy and/or distribute it, with or without modifications, as long as this notice is preserved.

.

This file is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY, to the extent permitted by law; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

License: LGPL-2.1+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

.

You should have received a copy of the GNU Lesser General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301, USA.

.

On Debian systems, the complete text of the GNU Lesser General Public License version 2.1 can be found in /usr/share/common-licenses/LGPL-2.1.

License: GPL-3+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by

the Free Software Foundation; either version 3 of the License, or
(at your option) any later version.

This program is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
GNU General Public License for more details.

You should have received a copy of the GNU General Public License
along with this program; if not, see <<https://www.gnu.org/licenses/>>.

On Debian systems, the complete text of the GNU General Public License
version 3 can be found in /usr/share/common-licenses/GPL-3.

License: BSD-3-clause

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions
are met:

1. Redistributions of source code must retain the above copyright
notice, and the entire permission notice in its entirety,
including the disclaimer of warranties.
2. Redistributions in binary form must reproduce the above copyright
notice, this list of conditions and the following disclaimer in the
documentation and/or other materials provided with the distribution.
3. The name of the author may not be used to endorse or promote
products derived from this software without specific prior
written permission.

THIS SOFTWARE IS PROVIDED "AS IS" AND ANY EXPRESS OR IMPLIED
WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES
OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE
DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT,
INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES
(INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR
SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT,
STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)
ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED
OF THE POSSIBILITY OF SUCH DAMAGE.

jQuery v3.5.1

jQuery License

jQuery v 3.5.1

Copyright 2005, 2018 jQuery Foundation, Inc. and other contributors

<http://jquery.com/>

Permission is hereby granted, free of charge, to any person obtaining

a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

The jQuery JavaScript Library v3.5.1 also includes Sizzle.js

Sizzle.js includes the following license:

Copyright JS Foundation and other contributors, <https://js.foundation/>

This software consists of voluntary contributions made by many individuals. For exact contribution history, see the revision history available at <https://github.com/jquery/sizzle>

The following license applies to all parts of this software except as documented below:

====

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF

MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

====

All files located in the node_modules and external directories are externally maintained libraries used by this software which have their own licenses; we recommend you read them, as their terms may differ from the terms above.

GNU GENERAL PUBLIC LICENSE
Version 1, February 1989

Copyright (C) 1989 Free Software Foundation, Inc.
51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The license agreements of most software companies try to keep users at the mercy of those companies. By contrast, our General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. The General Public License applies to the Free Software Foundation's software and to any other program whose authors commit to using it. You can use it for your programs, too.

When we speak of free software, we are referring to freedom, not price. Specifically, the General Public License is designed to make sure that you have the freedom to give away or sell copies of free software, that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of a such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must tell them their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any work containing the Program or a portion of it, either verbatim or with modifications. Each licensee is addressed as "you".

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this General Public License and to the absence of any warranty; and give any other recipients of the Program a copy of this General Public License along with the Program. You may charge a fee for the physical act of transferring a copy.

2. You may modify your copy or copies of the Program or any portion of it, and copy and distribute such modifications under the terms of Paragraph 1 above, provided that you also do the following:

a) cause the modified files to carry prominent notices stating that you changed the files and the date of any change; and

b) cause the whole of any work that you distribute or publish, that in whole or in part contains the Program or any part thereof, either

with or without modifications, to be licensed at no charge to all third parties under the terms of this General Public License (except that you may choose to grant warranty protection to some or all third parties, at your option).

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the simplest and most usual way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this General Public License.

d) You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

Mere aggregation of another independent work with the Program (or its derivative) on a volume of a storage or distribution medium does not bring the other work under the scope of these terms.

3. You may copy and distribute the Program (or a portion or derivative of it, under Paragraph 2) in object code or executable form under the terms of Paragraphs 1 and 2 above provided that you also do one of the following:

a) accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Paragraphs 1 and 2 above; or,

b) accompany it with a written offer, valid for at least three years, to give any third party free (except for a nominal charge for the cost of distribution) a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Paragraphs 1 and 2 above; or,

c) accompany it with the information you received as to where the corresponding source code may be obtained. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form alone.)

Source code for a work means the preferred form of the work for making modifications to it. For an executable file, complete source code means all the source code for all modules it contains; but, as a special exception, it need not include source code for modules which are standard libraries that accompany the operating system on which the executable file runs, or for standard header files or definitions files that accompany that operating system.

4. You may not copy, modify, sublicense, distribute or transfer the Program except as expressly provided under this General Public License. Any attempt otherwise to copy, modify, sublicense, distribute or transfer the Program is void, and will automatically terminate your rights to use the Program under this License. However, parties who have received copies, or rights to use copies, from you under this General Public License will not have their licenses terminated so long as such parties remain in full compliance.

5. By copying, distributing or modifying the Program (or any work based on the Program) you indicate your acceptance of this license to do so, and all its terms and conditions.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein.

7. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of the license which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the license, you may choose any version ever published by the Free Software Foundation.

8. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

9. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF

MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

10. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

Appendix: How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to humanity, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) 19yy <name of author>
```

```
This program is free software; you can redistribute it and/or modify  
it under the terms of the GNU General Public License as published by  
the Free Software Foundation; either version 1, or (at your option)  
any later version.
```

```
This program is distributed in the hope that it will be useful,  
but WITHOUT ANY WARRANTY; without even the implied warranty of  
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the  
GNU General Public License for more details.
```

```
You should have received a copy of the GNU General Public License  
along with this program; if not, write to the Free Software  
Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston MA 02110-1301 USA
```

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) 19xx name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the
program `Gnomovision' (a program to direct compilers to make passes
at assemblers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

```
That's all there is to it!
## Mozilla Public Suffix List
```

```
### Public Suffix Notice
^^^
```

```
You are receiving a copy of the Mozilla Public Suffix List in the following
file: <java-home>/lib/security/public_suffix_list.dat. The terms of the
Oracle license do NOT apply to this file; it is licensed under the
Mozilla Public License 2.0, separately from the Oracle programs you receive.
If you do not wish to use the Public Suffix List, you may remove the
<java-home>/lib/security/public_suffix_list.dat file.
```

```
The Source Code of this file is available under the
Mozilla Public License, v. 2.0 and is located at
https://raw.githubusercontent.com/publicsuffix/list/3c213aab32b3c014f171b1673d4ce9b5cd72bf1c/public_suffix_list.dat.
```

```
If a copy of the MPL was not distributed with this file, you can obtain one
at https://mozilla.org/MPL/2.0/.
```

```
Software distributed under the License is distributed on an "AS IS" basis,
WITHOUT WARRANTY OF ANY KIND, either express or implied. See the License
for the specific language governing rights and limitations under the License.
```

MPL v2.0

Mozilla Public License Version 2.0

=====

1. Definitions

1.1. "Contributor"

means each individual or legal entity that creates, contributes to the creation of, or owns Covered Software.

1.2. "Contributor Version"

means the combination of the Contributions of others (if any) used by a Contributor and that particular Contributor's Contribution.

1.3. "Contribution"

means Covered Software of a particular Contributor.

1.4. "Covered Software"

means Source Code Form to which the initial Contributor has attached the notice in Exhibit A, the Executable Form of such Source Code Form, and Modifications of such Source Code Form, in each case including portions thereof.

1.5. "Incompatible With Secondary Licenses"

means

(a) that the initial Contributor has attached the notice described in Exhibit B to the Covered Software; or

(b) that the Covered Software was made available under the terms of version 1.1 or earlier of the License, but not also under the terms of a Secondary License.

1.6. "Executable Form"

means any form of the work other than Source Code Form.

1.7. "Larger Work"

means a work that combines Covered Software with other material, in a separate file or files, that is not Covered Software.

1.8. "License"

means this document.

1.9. "Licensable"

means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently, any and all of the rights conveyed by this License.

1.10. "Modifications"

means any of the following:

- (a) any file in Source Code Form that results from an addition to, deletion from, or modification of the contents of Covered Software; or
- (b) any new file in Source Code Form that contains any Covered Software.

1.11. "Patent Claims" of a Contributor

means any patent claim(s), including without limitation, method, process, and apparatus claims, in any patent Licensable by such Contributor that would be infringed, but for the grant of the License, by the making, using, selling, offering for sale, having made, import, or transfer of either its Contributions or its Contributor Version.

1.12. "Secondary License"

means either the GNU General Public License, Version 2.0, the GNU Lesser General Public License, Version 2.1, the GNU Affero General Public License, Version 3.0, or any later versions of those licenses.

1.13. "Source Code Form"

means the form of the work preferred for making modifications.

1.14. "You" (or "Your")

means an individual or a legal entity exercising rights under this License. For legal entities, "You" includes any entity that controls, is controlled by, or is under common control with You. For purposes of this definition, "control" means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity.

2. License Grants and Conditions

2.1. Grants

Each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license:

- (a) under intellectual property rights (other than patent or trademark) Licensable by such Contributor to use, reproduce, make available, modify, display, perform, distribute, and otherwise exploit its Contributions, either on an unmodified basis, with Modifications, or as part of a Larger Work; and
- (b) under Patent Claims of such Contributor to make, use, sell, offer for sale, have made, import, and otherwise transfer either its Contributions or its Contributor Version.

2.2. Effective Date

The licenses granted in Section 2.1 with respect to any Contribution become effective for each Contribution on the date the Contributor first distributes such Contribution.

2.3. Limitations on Grant Scope

The licenses granted in this Section 2 are the only rights granted under this License. No additional rights or licenses will be implied from the distribution or licensing of Covered Software under this License. Notwithstanding Section 2.1(b) above, no patent license is granted by a Contributor:

- (a) for any code that a Contributor has removed from Covered Software; or
- (b) for infringements caused by: (i) Your and any other third party's modifications of Covered Software, or (ii) the combination of its Contributions with other software (except as part of its Contributor Version); or
- (c) under Patent Claims infringed by Covered Software in the absence of its Contributions.

This License does not grant any rights in the trademarks, service marks, or logos of any Contributor (except as may be necessary to comply with the notice requirements in Section 3.4).

2.4. Subsequent Licenses

No Contributor makes additional grants as a result of Your choice to distribute the Covered Software under a subsequent version of this License (see Section 10.2) or under the terms of a Secondary License (if permitted under the terms of Section 3.3).

2.5. Representation

Each Contributor represents that the Contributor believes its Contributions are its original creation(s) or it has sufficient rights to grant the rights to its Contributions conveyed by this License.

2.6. Fair Use

This License is not intended to limit any rights You have under applicable copyright doctrines of fair use, fair dealing, or other equivalents.

2.7. Conditions

Sections 3.1, 3.2, 3.3, and 3.4 are conditions of the licenses granted in Section 2.1.

3. Responsibilities

3.1. Distribution of Source Form

All distribution of Covered Software in Source Code Form, including any Modifications that You create or to which You contribute, must be under the terms of this License. You must inform recipients that the Source Code Form of the Covered Software is governed by the terms of this License, and how they can obtain a copy of this License. You may not attempt to alter or restrict the recipients' rights in the Source Code Form.

3.2. Distribution of Executable Form

If You distribute Covered Software in Executable Form then:

- (a) such Covered Software must also be made available in Source Code Form, as described in Section 3.1, and You must inform recipients of the Executable Form how they can obtain a copy of such Source Code Form by reasonable means in a timely manner, at a charge no more than the cost of distribution to the recipient; and
- (b) You may distribute such Executable Form under the terms of this License, or sublicense it under different terms, provided that the license for the Executable Form does not attempt to limit or alter the recipients' rights in the Source Code Form under this License.

3.3. Distribution of a Larger Work

You may create and distribute a Larger Work under terms of Your choice, provided that You also comply with the requirements of this License for

the Covered Software. If the Larger Work is a combination of Covered Software with a work governed by one or more Secondary Licenses, and the Covered Software is not Incompatible With Secondary Licenses, this License permits You to additionally distribute such Covered Software under the terms of such Secondary License(s), so that the recipient of the Larger Work may, at their option, further distribute the Covered Software under the terms of either this License or such Secondary License(s).

3.4. Notices

You may not remove or alter the substance of any license notices (including copyright notices, patent notices, disclaimers of warranty, or limitations of liability) contained within the Source Code Form of the Covered Software, except that You may alter any license notices to the extent required to remedy known factual inaccuracies.

3.5. Application of Additional Terms

You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Software. However, You may do so only on Your own behalf, and not on behalf of any Contributor. You must make it absolutely clear that any such warranty, support, indemnity, or liability obligation is offered by You alone, and You hereby agree to indemnify every Contributor for any liability incurred by such Contributor as a result of warranty, support, indemnity or liability terms You offer. You may include additional disclaimers of warranty and limitations of liability specific to any jurisdiction.

4. Inability to Comply Due to Statute or Regulation

If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Covered Software due to statute, judicial order, or regulation then You must: (a) comply with the terms of this License to the maximum extent possible; and (b) describe the limitations and the code they affect. Such description must be placed in a text file included with all distributions of the Covered Software under this License. Except to the extent prohibited by statute or regulation, such description must be sufficiently detailed for a recipient of ordinary skill to be able to understand it.

5. Termination

5.1. The rights granted under this License will terminate automatically if You fail to comply with any of its terms. However, if You become

compliant, then the rights granted under this License from a particular Contributor are reinstated (a) provisionally, unless and until such Contributor explicitly and finally terminates Your grants, and (b) on an ongoing basis, if such Contributor fails to notify You of the non-compliance by some reasonable means prior to 60 days after You have come back into compliance. Moreover, Your grants from a particular Contributor are reinstated on an ongoing basis if such Contributor notifies You of the non-compliance by some reasonable means, this is the first time You have received notice of non-compliance with this License from such Contributor, and You become compliant prior to 30 days after Your receipt of the notice.

5.2. If You initiate litigation against any entity by asserting a patent infringement claim (excluding declaratory judgment actions, counter-claims, and cross-claims) alleging that a Contributor Version directly or indirectly infringes any patent, then the rights granted to You by any and all Contributors for the Covered Software under Section 2.1 of this License shall terminate.

5.3. In the event of termination under Sections 5.1 or 5.2 above, all end user license agreements (excluding distributors and resellers) which have been validly granted by You or Your distributors under this License prior to termination shall survive termination.

```
*
*
* 6. Disclaimer of Warranty
* -----
*
* Covered Software is provided under this License on an "as is"
* basis, without warranty of any kind, either expressed, implied, or
* statutory, including, without limitation, warranties that the
* Covered Software is free of defects, merchantable, fit for a
* particular purpose or non-infringing. The entire risk as to the
* quality and performance of the Covered Software is with You.
* Should any Covered Software prove defective in any respect, You
* (not any Contributor) assume the cost of any necessary servicing,
* repair, or correction. This disclaimer of warranty constitutes an
* essential part of this License. No use of any Covered Software is
* authorized under this License except under this disclaimer.
*
*
```

```
*
*
* 7. Limitation of Liability
* -----
*
*
```

* Under no circumstances and under no legal theory, whether tort *
 * (including negligence), contract, or otherwise, shall any *
 * Contributor, or anyone who distributes Covered Software as *
 * permitted above, be liable to You for any direct, indirect, *
 * special, incidental, or consequential damages of any character *
 * including, without limitation, damages for lost profits, loss of *
 * goodwill, work stoppage, computer failure or malfunction, or any *
 * and all other commercial damages or losses, even if such party *
 * shall have been informed of the possibility of such damages. This *
 * limitation of liability shall not apply to liability for death or *
 * personal injury resulting from such party's negligence to the *
 * extent applicable law prohibits such limitation. Some *
 * jurisdictions do not allow the exclusion or limitation of *
 * incidental or consequential damages, so this exclusion and *
 * limitation may not apply to You. *

*

8. Litigation

Any litigation relating to this License may be brought only in the courts of a jurisdiction where the defendant maintains its principal place of business and such litigation shall be governed by laws of that jurisdiction, without reference to its conflict-of-law provisions. Nothing in this Section shall prevent a party's ability to bring cross-claims or counter-claims.

9. Miscellaneous

This License represents the complete agreement concerning the subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not be used to construe this License against a Contributor.

10. Versions of the License

10.1. New Versions

Mozilla Foundation is the license steward. Except as provided in Section 10.3, no one other than the license steward has the right to modify or publish new versions of this License. Each version will be given a distinguishing version number.

10.2. Effect of New Versions

You may distribute the Covered Software under the terms of the version of the License under which You originally received the Covered Software, or under the terms of any subsequent version published by the license steward.

10.3. Modified Versions

If you create software not governed by this License, and you want to create a new license for such software, you may create and use a modified version of this License if you rename the license and remove any references to the name of the license steward (except to note that such modified license differs from this License).

10.4. Distributing Source Code Form that is Incompatible With Secondary Licenses

If You choose to distribute Source Code Form that is Incompatible With Secondary Licenses under the terms of this version of the License, the notice described in Exhibit B of this License must be attached.

Exhibit A - Source Code Form License Notice

This Source Code Form is subject to the terms of the Mozilla Public License, v. 2.0. If a copy of the MPL was not distributed with this file, You can obtain one at <https://mozilla.org/MPL/2.0/>.

If it is not possible or desirable to put the notice in a particular file, then You may include the notice in a location (such as a LICENSE file in a relevant directory) where a recipient would be likely to look for such a notice.

You may add additional accurate notices of copyright ownership.

Exhibit B - "Incompatible With Secondary Licenses" Notice

This Source Code Form is "Incompatible With Secondary Licenses", as defined by the Mozilla Public License, v. 2.0.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>
Files-Excluded-regen-configure: bin/*
Upstream-Name: perl
Source: <http://www.perl.com/CPAN/src/5.0/>
Comment:

This package was initially debianized by Brendan O'Dea <bod@debian.org> on Thu, 17 Aug 2000 16:10:54 +1000. The packaging has since been modified by various others, including Dominic Hargreaves <dom@earth.li> and Niko Tyni <ntyni@debian.org>.

Upstream Authors:

Larry Wall et. al. (see /usr/share/doc/perl/AUTHORS).

Last checked against: Perl 5.32.1

Files: *

Copyright:

Perl is Copyright (C) 1987-2021 by Larry Wall and others. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the terms of either:

- a) the GNU General Public License as published by the Free Software Foundation; either version 1, or (at your option) any later version, or
- b) the "Artistic License" which comes with Perl.

The directories ext/, dist/, and cpan/ contain separate distributions that have been bundled with the Perl core. The copyright and license status of these have been detailed separately below.

It is assumed that all the other files are part of Perl and share the above copyright and license information unless explicitly specified differently. Only the exceptions have been detailed below.

As a small portion of the files are indeed licensed differently from the above, all the other licenses have been collected and/or duplicated at the end of this file to facilitate review.

Files: perlio.c

Copyright:

Copyright (c) 1996-2006, Nick Ing-Simmons

Copyright (c) 2006, 2007, 2008 Larry Wall and others

License: GPL-1+ or Artistic

Comment:

This file is a part of Perl itself, licensed as above.

Files: malloc.c

Copyright:

Modifications Copyright Ilya Zakharevich 1996-99.

License: GPL-1+ or Artistic

Comment:

This file is a part of Perl itself, licensed as above.

Files: mro_core.c

Copyright:

Copyright (c) 2007 Brandon L Black

Copyright (c) 2007, 2008 Larry Wall and others

License: GPL-1+ or Artistic

Comment:

This file is a part of Perl itself, licensed as above.

Files: perl.c

Copyright:

Copyright 1987-2018, Larry Wall

MS-DOS port Copyright (c) 1989, 1990, Diomidis Spinellis

OS/2 port Copyright (c) 1990, 1991, Raymond Chen, Kai Uwe Rommel

Version 5 port Copyright (c) 1994-2002, Andreas Kaiser, Ilya Zakharevich

License: GPL-1+ or Artistic

Comment:

This file is a part of Perl itself, licensed as above.

These copyright notices are embedded in the code, and possibly apply to other files as well.

Files: time64.c

Copyright:

Copyright (c) 2007-2008 Michael G Schwern

.

This software originally derived from Paul Sheer's pivotal_gmtime_r.c.

License: Expat

Files:

regcomp.c

regex.c

Copyright:

Copyright (c) 1986 by University of Toronto.

Written by Henry Spencer. Not derived from licensed software.

.

Alterations to Henry's code are...

Copyright (C) 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999,

2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008

by Larry Wall and others

.

NOTE: this is derived from Henry Spencer's regex code, and should not be confused with the original package (see point 3 below). Thanks, Henry!

License: REGCOMP, and GPL-1+ or Artistic

Comment:

The "alterations to Henry's code" have the following license information:

.
You may distribute under the terms of either the GNU General Public License or the Artistic License, as specified in the README file.

Files: perly.h

Copyright:

Copyright (C) 1984, 1989-1990, 2000-2015, 2018-2019 Free Software Foundation, Inc.

License: GPL-3+-WITH-BISON-EXCEPTION

Files: mkppport

Copyright:

Copyright 2006 by Marcus Holland-Moritz <mhx@cpan.org>.

License: GPL-1+ or Artistic

Comment:

This program is free software; you may redistribute it and/or modify it under the same terms as Perl itself.

Files: ebcdic_tables.h

Copyright:

Copyright (c) 2008-2009 Bjoern Hoehrmann <bjoern@hoehrmann.de>

License: Expat

Files:

inline.h

perl.h

Copyright:

Copyright (C) 1993-2012 by Larry Wall and others

Copyright (c) 2008-2009 Bjoern Hoehrmann <bjoern@hoehrmann.de>

License: GPL-1+ or Artistic

Comment:

These files contains tables and code adapted from <https://bjoern.hoehrmann.de/utf-8/decoder/dfa/>, which requires this copyright notice:

.

Copyright (c) 2008-2009 Bjoern Hoehrmann <bjoern@hoehrmann.de>

Files: lib/unicore/*.txt

Copyright:

1991-2016 Unicode, Inc.

License: Unicode

Comment:

The license is given as

.

For terms of use, see http://www.unicode.org/terms_of_use.html

.

See the end of this file for the full text of this license as downloaded

from the above URL on Tue, 26 Apr 2011 14:41:24 +0300.

Files: lib/deprecate.pm

Copyright:

Copyright (C) 2009, 2011

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself, either Perl version 5.10.0 or, at your option, any later version of Perl 5 you may have available.

Files: lib/B/Deparse.pm

Copyright:

Copyright (c) 1998-2000, 2002, 2003, 2004, 2005, 2006 Stephen McCamant.

All rights reserved.

License: GPL-1+ or Artistic

Comment:

This module is free software; you can redistribute and/or modify it under the same terms as Perl itself.

Files: dist/FindBin/lib/FindBin.pm

Copyright:

Copyright (c) 1995 Graham Barr & Nick Ing-Simmons. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: symbian/*

Copyright:

Copyright (c) Nokia 2004-2005. All rights reserved.

License: GPL-1+ or Artistic

Comment:

All files are licensed under the same terms as Perl itself.

Files: symbian/PerlUIS90.rss

Copyright:

Copyright (c) 2006 Alexander Smishlajev. All rights reserved.

License: GPL-1+ or Artistic

Comment:

The PerlUi class is licensed under the same terms as Perl itself.

Files: README.symbian

Copyright:

Copyright (c) 2004-2005 Nokia. All rights reserved.

Copyright (c) 2006-2007 Jarkko Hietaniemi.

License: GPL-1+ or Artistic

Comment:

The Symbian port is licensed under the same terms as Perl itself.

Files: t/op/split_unicode.t

Copyright:

Copyright (c) 1991-2006 Unicode, Inc.

License: GPL-1+ or Artistic, and Unicode

Comment:

The test data was extracted from the Unicode Character Database.

.

It is assumed that the test code is licensed under the same terms as Perl.

Files: regen/ebcdic.pl

Copyright:

Copyright (c) 2008-2009 Bjoern Hoehrmann <bjoern@hoehrmann.de>

License: Expat

Comment:

* Some of the tables are adapted from

* <https://bjoern.hoehrmann.de/utf-8/decoder/dfa/>

Files: regen/reentr.pl

Copyright: Copyright (c) 2002,2003 Jarkko Hietaniemi

License: GPL-1+ or Artistic

Comment:

You may distribute under the terms of either the GNU General Public License or the Artistic License, as specified in the README file.

Files:

Porting/checkansi.pl

Porting/valgrindpp.pl

Copyright:

Copyright 2003, 2007 by Marcus Holland-Moritz <mhx@cpan.org>.

License: GPL-1+ or Artistic

Comment:

This program is free software; you may redistribute it and/or modify it under the same terms as Perl itself.

Files: Porting/config_h.pl

Copyright:

Copyright (C) 2005-2012 by H.Merijn Brand (m)'12 [22-09-2012]

License: GPL-1+ or Artistic

Comment:

You may distribute under the terms of either the GNU General Public License or the Artistic License, as specified in the README file.

Files: Porting/git-deltatool

Copyright:

This software is copyright (c) 2010 by David Golden.

License: GPL-1+ or Artistic

Comment:

This is free software; you can redistribute it and/or modify it under the same terms as the Perl 5 programming language system itself.

Files: NetWare/*

Copyright:

Copyright (C) 2000-01, 2002 Novell, Inc. All Rights Reserved.

License: GPL-1+ or Artistic

Comment:

You may distribute under the terms of either the GNU General Public License or the Artistic License, as specified in the README file.

Files:

vms/vms.c

vms/vmsish.h

Copyright:

Copyright (C) 1993-2015 by Charles Bailey and others.

License: GPL-1+ or Artistic

Comment:

You may distribute under the terms of either the GNU General Public License or the Artistic License, as specified in the README file.

Files: win32/fcrypt.c

Copyright:

Copyright (C) 1993 Eric Young - see README for more details

License: GPL-1+ or Artistic

Comment:

This file is a part of Perl itself, licensed as above.

Files:

dist/autouse/*

dist/base/*

dist/constant/*

dist/Devel-SelfStubber/*

dist/Dumpvalue/*

dist/Env/*

cpan/ExtUtils-Manifest/*

dist/I18N-Collate/*

dist/Safe/*

ext/Fcntl/*

ext/FileCache/*

ext/GDBM_File/*

ext/IPC-Open3/*

ext/NDBM_File/*

ext/ODBM_File/*

ext/Opcode/*

ext/PerlIO-encoding/*
ext/PerlIO-scalar/*
ext/PerlIO-via/*
ext/POSIX/*
ext/re/*
cpan/Socket/*
ext/Sys-Hostname/*
ext/Tie-Hash-NamedCapture/*
ext/Tie-Memoize/*
ext/VMS-DCLsym/*
ext/VMS-Stdio/*

Copyright: unknown

License: GPL-1+ or Artistic

Comment:

There is no copyright or license information in these distributions.
It is assumed that they are licensed under the same terms as Perl itself.

Files: cpan/Archive-Tar/*

Copyright: 2002 - 2009 Jos Boumans <kane@cpan.org>. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This library is free software; you may redistribute and/or modify
it under the same terms as Perl itself.

Files:

cpan/AutoLoader/*

dist/SelfLoader/*

Copyright: This package has the same copyright and license as the perl core:

Copyright (C) 1993, 1994, 1995, 1996, 1997, 1998, 1999,

2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2011, 2012

by Larry Wall and others

.

All rights reserved.

License: GPL-1+ or Artistic

Comment:

This package has the same copyright and license as the perl core.

Files: cpan/autodie/*

Copyright: 2008-2009, Paul Fenwick <pjf@perltraining.com.au>

License: GPL-1+ or Artistic

Comment:

This module is free software, you may distribute it under the
same terms as Perl itself.

Files:

cpan/autodie/lib/autodie/exception/system.pm

cpan/autodie/lib/autodie/exception.pm

Copyright: 2008-2009, Paul Fenwick <pjf@perltraining.com.au>

License: GPL-1+ or Artistic

Comment:

This is free software. You may modify and/or redistribute this code under the same terms as Perl 5.10 itself, or, at your option, any later version of Perl 5.

Files:

cpan/autodie/lib/autodie/Scope/GuardStack.pm

cpan/autodie/lib/autodie/Util.pm

Copyright: Copyright 2013-2014, Niels Thykier <niels@thykier.net>

License: GPL-1+ or Artistic

Comment:

This module is free software. You may distribute it under the same terms as Perl itself.

Files: cpan/Compress-Raw-Bzip2/*

Copyright: Copyright (c) 2005-2019 Paul Marquess. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Compress-Raw-Bzip2/bzip2-src/*

Copyright: Copyright(C) 1996-2019 Julian Seward. All rights reserved

Comment:

cpan/Compress-Raw-Bzip2/bzip2-src/README states:

Note that the files bzip2.c, bzip2recover.c, bzlib.c & decompress.c have been modified to allow them to build with a C++ compiler.

The file bzip2-src/bzip2-cpp.patch contains the patch that was used to modify the original source.

but the patch has apparently been filtered out when including the software into the Perl core distribution.

License: BZIP

Files: cpan/Compress-Raw-Zlib/*

Copyright: Copyright (c) 2005-2019 Paul Marquess. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Compress-Raw-Zlib/zlib-src/*

Copyright:

Copyright (C) 1995-2017 Jean-loup Gailly and Mark Adler

License: ZLIB

Files: cpan/Config-Perl-V/*

Copyright:

Copyright (C) 2009-2019 H.Merijn Brand

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/CPAN/*

Copyright: unknown

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files:

cpan/CPAN/lib/App/Cpan.pm

cpan/CPAN/scripts/cpan

Copyright: (c) 2001-2018, brian d foy, All Rights Reserved.

License: GPL-1+ or Artistic

Comment:

You may redistribute this under the same terms as Perl itself.

Files: cpan/CPAN-Meta/*

Copyright:

This software is copyright (c) 2010 by David Golden, Ricardo Signes, Adam Kennedy and Contributors.

License: GPL-1+ or Artistic

Comment:

This is free software; you can redistribute it and/or modify it under the same terms as the Perl 5 programming language system itself.

Files:

cpan/CPAN-Meta/lib/CPAN/Meta/History/Meta_1_0.pod

cpan/CPAN-Meta/lib/CPAN/Meta/History/Meta_1_1.pod

cpan/CPAN-Meta/lib/CPAN/Meta/History/Meta_1_2.pod

cpan/CPAN-Meta/lib/CPAN/Meta/History/Meta_1_3.pod

cpan/CPAN-Meta/lib/CPAN/Meta/History/Meta_1_4.pod

Copyright: Ken Williams

License: GPL-1+ or Artistic

Comment:

This is free software; you can redistribute it and/or modify it under the same terms as the Perl 5 programming language system itself.

Files: cpan/CPAN-Meta-Requirements/*

Copyright:

This software is copyright (c) 2010 by David Golden and Ricardo Signes.

License: GPL-1+ or Artistic

Comment:

This is free software; you can redistribute it and/or modify it under the same terms as the Perl 5 programming language system itself.

Files: cpan/CPAN-Meta-YAML/*

Copyright:

This software is copyright (c) 2010 by Adam Kennedy.

License: GPL-1+ or Artistic

Comment:

This is free software; you can redistribute it and/or modify it under the same terms as the Perl 5 programming language system itself.

Files: cpan/DB_File/*

Copyright: Copyright (c) 1995-2020 Paul Marquess. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: dist/Devel-PPPort/*

Copyright:

Version 3.x, Copyright (C) 2004-2013, Marcus Holland-Moritz.

Copyright (C) 2018, The perl5 porters

Version 2.x, Copyright (C) 2001, Paul Marquess.

Version 1.x, Copyright (C) 1999, Kenneth Albanowski.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files:

dist/Devel-PPPort/parts/inc/mess

dist/Devel-PPPort/parts/inc/01_test

Copyright:

Copyright (C) 2017, 2019 Pali <pali@cpan.org>

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Digest/*

Copyright:

Copyright 1998-2006 Gisle Aas.

Copyright 1995,1996 Neil Winton.

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Digest-MD5/*

Copyright:

Copyright 1998-2003 Gisle Aas.

Copyright 1995-1996 Neil Winton.

Copyright 1990-1992 RSA Data Security, Inc.

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Digest-SHA/*

Copyright:

Copyright (C) 2003-2018 Mark Shelor, All Rights Reserved

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Encode/*

Copyright: Copyright 2002-2014 Dan Kogai <dankogai@cpan.org>

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Encode/bin/encguess

Copyright: 2015 Michael LaGrasta and Dan Kogai

License: Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the terms of the the Artistic License (2.0).

Files: dist/encoding-warnings/*

Copyright:

Copyright 2004, 2005, 2006, 2007 by Audrey Tang <cpan@audreyt.org>.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: dist/Exporter/lib/Exporter.pm

Copyright: unknown

License: GPL-1+ or Artistic

Comment:

This library is free software. You can redistribute it and/or modify it under the same terms as Perl itself.

Files: dist/Tie-File/*

Copyright:

Tie::File version 0.97 is copyright (C) 2003 Mark Jason Dominus.

License: GPL-2+ or Artistic

Comment:

This library is free software; you may redistribute it and/or modify it under the same terms as Perl itself.

.

These terms are your choice of any of (1) the Perl Artistic Licence, or (2) version 2 of the GNU General Public License as published by the Free Software Foundation, or (3) any later version of the GNU General Public License.

Files: cpan/experimental/*

Copyright:

This software is copyright (c) 2013 by Leon Timmermans.

License: GPL-1+ or Artistic

Comment:

This is free software; you can redistribute it and/or modify it under the same terms as the Perl 5 programming language system itself.

Files: cpan/ExtUtils-Constant/*

Copyright: unknown

License: GPL-1+ or Artistic

Comment:

There are no copyright or license notices in this distribution. It is assumed that the copyright and license of Perl itself applies here as well.

.

This is supported by the README of the separate CPAN distribution at <<https://metacpan.org/release/ExtUtils-Constant>>, which states:

.

You may distribute this work under the terms of either the GNU General Public License or the Artistic License, as specified in perl's README file.

.

Copyright 2001, 2002, 2005 Nicholas Clark

Files: cpan/ExtUtils-MakeMaker/lib/ExtUtils/MakeMaker/Locale.pm

Copyright: 2010 Gisle Aas <gisle@aas.no>

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/ExtUtils-Manifest/lib/ExtUtils/Manifest.pm

Copyright: 1996- by Andreas Koenig

License: GPL-1+ or Artistic

Comment:

This is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files:

cpan/File-Fetch/*

cpan/IPC-Cmd/*

cpan/Module-Load/*

cpan/Module-Load-Conditional/*

cpan/Module-Loaded/*

cpan/Params-Check/*

Copyright:

There are no copyright notices in these distributions.

Their author is Jos Boumans <kane@cpan.org>.

License: GPL-1+ or Artistic

Comment:

This library is free software; you may redistribute and/or modify it under the same terms as Perl itself.

Files: cpan/File-Path/*

Copyright:

This module is copyright (C) Charles Bailey, Tim Bunce, David Landgren, James Keenan, and Richard Elberger 1995-2018. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/File-Temp/*

Copyright:

This software is copyright (c) 2013 by Tim Jenness and the UK Particle Physics and Astronomy Research Council.

License: GPL-1+ or Artistic

Comment:

This is free software; you can redistribute it and/or modify it under the same terms as the Perl 5 programming language system itself.

Files: cpan/Filter-Util-Call/*

Copyright:

Copyright (c) 1995-2011 Paul Marquess. All rights reserved.

Copyright (c) 2011-2014 Reini Urban. All rights reserved.

Copyright (c) 2014-2017 cPanel Inc. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Getopt-Long/*

Copyright:

Module Getopt::Long is Copyright 1990,2015 by Johan Vromans.

License: GPL-2+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the terms of the Perl Artistic License or the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

Files: cpan/HTTP-Tiny/*

Copyright:

This software is copyright (c) 2018 by Christian Hansen.

License: GPL-1+ or Artistic

Comment:

This is free software; you can redistribute it and/or modify it under the same terms as the Perl 5 programming language system itself.

Files: cpan/IO-Compress/*

Copyright:

Copyright (c) 1995-2019 Paul Marquess. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/IO-Zlib/*

Copyright:

Copyright (c) 1998-2004 Tom Hughes <tom@compton.nu>. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/IPC-SysV/*

Copyright:

Version 2.x, Copyright (C) 2007-2010, Marcus Holland-Moritz.

Version 1.x, Copyright (c) 1997, Graham Barr.

Version 1.x, Copyright (c) 1999, Graham Barr.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/JSON-PP/*

Copyright:

Copyright 2007-2016 by Makamaka Hannyaharamitu

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/libnet/*

Copyright:

(C) 1995-2006 Graham Barr. All rights reserved.

(C) 2013-2016 Steve Hay. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/libnet/Makefile.PL

Copyright:

Copyright (C) 2014 Steve Hay. All rights reserved.

License: GPL-1+ or Artistic

Comment:

You may distribute under the terms of either the GNU General Public License or the Artistic License, as specified in the LICENCE file.

Files: cpan/Scalar-List-Utills/*

Copyright:

Copyright (c) 1997-2009 Graham Barr <gbarr@pobox.com>. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Scalar-List-Utills/lib/Scalar/Util.pm

Copyright:

Copyright (c) 1997-2007 Graham Barr <gbarr@pobox.com>. All rights reserved.

Copyright (c) 1999 Tuomas J. Lukka <lukka@iki.fi>. All rights reserved.

Copyright (C) 2004, 2008 Matthijs van Duin. All rights reserved.

Copyright (C) 2014 cPanel Inc. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Scalar-List-Utills/lib/Sub/Util.pm

Copyright: (c) 2014 Paul Evans <leonerdd@leonerdd.org.uk>. All rights reserved

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Locale-Maketext-Simple/*

Copyright:

Copyright 2003, 2004, 2005, 2006 by Audrey Tang <cpan@audreyt.org>

License: Expat or GPL-1+ or Artistic

Comment:

This software is released under the MIT license cited below. Additionally, when this software is distributed with Perl Kit, Version 5, you may also redistribute it and/or modify it under the same terms as Perl itself.

Files:

cpan/Locale-Maketext-Simple/t/po_with_i_default/i_default.po

cpan/Locale-Maketext-Simple/t/po_with_i_default/fr.po

cpan/Locale-Maketext-Simple/t/po_with_i_default/en.po

cpan/Locale-Maketext-Simple/t/po_without_i_default/en.po

cpan/Locale-Maketext-Simple/t/po_without_i_default/fr.po

Copyright:

Copyright (C) All Perl Hackers everywhere

Ton Voon <ton.voon@opsera.com>, 2009.

License: Expat or GPL-1+ or Artistic

Comment:

It is assumed that these translations are licensed under the same terms as the rest of the Locale-Maketext-Simple distribution.

Files: cpan/Math-Complex/*

Copyright: unknown

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Memoize/*

Copyright:

Copyright 1998, 1999, 2000, 2001, 2012 M-J. Dominus.

License: GPL-1+ or Artistic

Comment:

This library is free software; you may redistribute it and/or modify it under the same terms as Perl itself.

.

You may copy and distribute this program under the same terms as Perl itself. If in doubt, write to mjd-perl-memoize+@plover.com for a license.

Files: cpan/MIME-Base64/*

Copyright:

Copyright 1995-2004,2010 Gisle Aas <gisle@ActiveState.com>

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/MIME-Base64/Base64.xs

Copyright:

Copyright 1997-2004 Gisle Aas

Copyright (c) 1991 Bell Communications Research, Inc. (Bellcore)

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

.

The tables and some of the code that used to be here was borrowed from metamail, which comes with this message:

.

Copyright (c) 1991 Bell Communications Research, Inc. (Bellcore)

.

Permission to use, copy, modify, and distribute this material for any purpose and without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies, and that the name of Bellcore not be used in advertising or publicity pertaining to this material without the specific, prior written permission of an authorized representative of Bellcore. BELLCORE MAKES NO REPRESENTATIONS ABOUT THE ACCURACY OR SUITABILITY OF THIS MATERIAL FOR ANY PURPOSE. IT IS PROVIDED "AS IS", WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES.

Files: cpan/Module-Metadata/*

Copyright:

Copyright (c) 2001-2011 Ken Williams. All rights reserved.

Copyright (c) 2010-2011 Matt Trout and David Golden. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/NEXT/*

Copyright:

Copyright (c) 2000-2001, Damian Conway. All Rights Reserved.

License: GPL-1+ or Artistic

Comment:

This module is free software. It may be used, redistributed and/or modified under the same terms as Perl itself.

Files: cpan/parent/*

Copyright:

Copyright (c) 2007-2017 Max Maischein <corion@cpan.org>

License: GPL-1+ or Artistic

Comment:

This module is released under the same terms as Perl itself.

Files: cpan/PerlIO-via-QuotedPrint/*

Copyright:

Copyright (c) 2002-2004,2012 Elizabeth Mattijsen. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Perl-OSType/*

Copyright:

This software is copyright (c) 2016 by David Golden.

License: GPL-1+ or Artistic

Comment:

This is free software; you can redistribute it and/or modify it under the same terms as the Perl 5 programming language system itself.

Files: cpan/Pod-Checker/*

Copyright:

Copyright (C) 1994-2000 by Bradford Appleton. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This file is part of "PodParser". PodParser is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Pod-Escapes/*

Copyright:

Copyright (c) 2001-2004 Sean M. Burke. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/podlators/*

Copyright:

Copyright 1999-2001, 2008, 2010, 2012, 2014-2016, 2018-2019 Russ Allbery <rra@cpan.org>

Substantial contributions by Sean Burke <sburke@cpan.org>

License: GPL-1+ or Artistic

Comment:

This program is free software; you may redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/podlators/lib/Pod/Text/Overstrike.pm

Copyright:

Copyright 2000 by Joe Smith <Joe.Smith@inwap.com>.

Copyright 1999, 2001, 2004, 2006, 2008, 2009, 2018-2019 Russ Allbery <rra@cpan.org>.

License: GPL-1+ or Artistic

Comment:

This program is free software; you may redistribute it and/or modify it under the same terms as Perl itself.

Files:

cpan/podlators/t/data/snippets/README

cpan/podlators/t/data/basic.cap

cpan/podlators/t/data/basic.clr

cpan/podlators/t/data/basic.man

cpan/podlators/t/data/basic.ovr

cpan/podlators/t/data/basic.pod

cpan/podlators/t/data/basic.txt

Copyright:

Copyright 2001-2018 Russ Allbery <rra@cpan.org>

License: RRA-KEEP-THIS-NOTICE

Comment:

The license text can be found at the end of this file.

Files:

cpan/podlators/t/docs/pod-spelling.t

cpan/podlators/t/docs/pod.t

cpan/podlators/t/docs/synopsis.t

cpan/podlators/t/lib/Test/RRA.pm

cpan/podlators/t/lib/Test/RRA/Config.pm

cpan/podlators/t/style/minimum-version.t

cpan/podlators/t/style/module-version.t

cpan/podlators/t/style/strict.t

Copyright:

Copyright 2012-2014 The Board of Trustees of the Leland Stanford Junior University

Copyright 2014-2016, 2019 Russ Allbery <eagle@eyrie.org>

License: Expat

Files:

cpan/podlators/t/lib/Test/RRA/ModuleVersion.pm

cpan/podlators/t/docs/spdx-license.t

cpan/podlators/t/style/obsolete-strings.t

Copyright: Copyright 2016, 2018-2019 Russ Allbery <eagle@eyrie.org>

License: Expat

Files: cpan/podlators/t/man/no-encode.t

Copyright:

Copyright 2016 Niko Tyni <ntyni@iki.fi>

Copyright 2016, 2018-2019 Russ Allbery <rra@cpan.org>

License: GPL-1+ or Artistic

Comment:

This program is free software; you may redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Pod-Simple/*

Copyright:

Copyright (c) 2002-2004 Sean M. Burke. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Pod-Simple/lib/Pod/Simple/XHTML.pm

Copyright:

Copyright (c) 2003-2005 Allison Randal.

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files:

cpan/Pod-Simple/t/perlfaq.pod

cpan/Pod-Simple/t/perlfaqo.txt

Copyright:

Copyright (c) 1997-1999 Tom Christiansen and Nathan Torkington.

All rights reserved.

License: GPL-1+ or Artistic

Comment:

This document is part of the perlfaq distribution. A newer version of it is also included in pod/perlfaq3.pod.

.

The license notice in the document is:

.

When included as an integrated part of the Standard Distribution of Perl or of its documentation (printed or otherwise), this works is covered under Perl's Artistic License. For separate distributions of all or part of this FAQ outside of that, see L<perlfaq>.

.

Irrespective of its distribution, all code examples here are in the public domain. You are permitted and encouraged to use this code and any derivatives thereof in your own programs for fun or for profit as you see fit. A simple comment in the code giving credit to the FAQ would be courteous but is not required.

.

The corresponding license in pod/perlfaq.pod is:

.

This document is available under the same terms as Perl itself. Code

examples in all the perlfac documents are in the public domain. Use them as you see fit (and at your own risk with no warranty from anyone).

Files: cpan/Pod-Usage/*

Copyright:

Copyright (C) 1996-2000 by Bradford Appleton. All rights reserved.

Copyright (c) 2001-2016 by Marek Rouchal.

License: GPL-1+ or Artistic

Comment:

This file is part of "Pod-Usage". Pod-Usage is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Pod-Usage/t/inc/Pod/PlainText.pm

Copyright:

Copyright 1999-2000 by Russ Allbery <rra@stanford.edu>

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Sys-Syslog/*

Copyright:

Copyright (C) 1990-2012 by Larry Wall and others.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Sys-Syslog/fallback/syslog.h

Copyright:

Copyright (c) 1982, 1986, 1988, 1993

The Regents of the University of California. All rights reserved.

License: BSD-3-clause-with-weird-numbering

Files: cpan/Term-ANSIColor/*

Copyright:

Copyright 1996 Zenin

Copyright 1996-1998, 2000-2002, 2005-2006, 2008-2018, 2020 Russ Allbery <rra@cpan.org>

Copyright 2012 Kurt Starsinic <kstarsinic@gmail.com>

License: GPL-1+ or Artistic

Comment:

This program is free software; you may redistribute it and/or modify it under the same terms as Perl itself.

Files:

cpan/Term-ANSIColor/t/lib/Test/RRA.pm

Copyright:

Copyright 2016, 2018-2019 Russ Allbery <eagle@eyrie.org>
Copyright 2013, 2014 The Board of Trustees of the Leland Stanford Junior University
License: Expat

Files:

cpan/Term-ANSIColor/t/lib/Test/RRA/Config.pm

Copyright:

Copyright 2015, 2016, 2019 Russ Allbery <eagle@eyrie.org>

Copyright 2013-2014 The Board of Trustees of the Leland Stanford Junior University

License: Expat

Files: cpan/Term-Cap/*

Copyright: 1995-2015 (c) perl5 porters.

License: GPL-1+ or Artistic

Comment:

This software is free software and can be modified and distributed under the same terms as Perl itself.

Files: cpan/Test-Harness/*

Copyright:

Copyright (c) 2007-2011, Andy Armstrong <andy@hexten.net>. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This module is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Test-Harness/lib/TAP/Parser.pm

Copyright:

Copyright 2006-2008 Curtis "Ovid" Poe, all rights reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Test-Harness/lib/TAP/Parser/YAMLish/Reader.pm

Copyright:

Copyright 2007-2011 Andy Armstrong.

Portions copyright 2006-2008 Adam Kennedy.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Test-Simple/*

Copyright:

Copyright 2001-2008 by Michael G Schwern <schwern@pobox.com>.

Copyright 2019 Chad Granum <exodist@cpan.org>.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Test-Simple/lib/Test/Builder.pm

Copyright:

Copyright 2002-2008 by chromatic <chromatic@wgz.org> and
Michael G Schwern E<schwern@pobox.com>.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Test-Simple/lib/Test/Builder/Tester/Color.pm

Copyright:

Copyright Mark Fowler <mark@twoshortplanks.com> 2002.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Test-Simple/lib/Test/Builder/Tester.pm

Copyright:

Copyright Mark Fowler <mark@twoshortplanks.com> 2002, 2004.

.

Some code taken from Test::More and Test::Catch, written by by Michael G Schwern <schwern@pobox.com>. Hence, those parts Copyright Michael G Schwern 2001. Used and distributed with permission.

.

This module is copyright 2005 Fergal Daly <fergal@esatclear.ie>, some parts are based on other people's work.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Test-Simple/lib/Test/Tutorial.pod

Copyright:

Copyright 2001 by Michael G Schwern <schwern@pobox.com>.

License: GPL-1+ or Artistic

Comment:

This documentation is free; you can redistribute it and/or modify it under the same terms as Perl itself.

.

Irrespective of its distribution, all code examples in these files are hereby placed into the public domain. You are permitted and encouraged to use this code in your own programs for fun

or for profit as you see fit. A simple comment in the code giving credit would be courteous but is not required.

Files: cpan/Test-Simple/lib/Test/Builder/IO/Scalar.pm

Copyright:

Copyright (c) 1996 by Eryq. All rights reserved.

Copyright (c) 1999,2001 by ZeeGee Software Inc. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Test-Simple/lib/Test/Tester/CaptureRunner.pm

Copyright: Copyright 2003 by Fergal Daly <fergal@esatclear.ie>.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files:

cpan/Test-Simple/lib/Test/use/ok.pm

cpan/Test-Simple/lib/ok.pm

Copyright: none

To the extent possible under law, has waived all copyright and related or neighboring rights to L<Test-use-ok>

License: CC0-1.0

Comment:

The file links to <http://creativecommons.org/publicdomain/zero/1.0/> and the full license text as retrieved from there can be found at the end of this file.

Files: cpan/Text-Balanced/*

Copyright:

Copyright 1997 - 2001 Damian Conway. All Rights Reserved.

Some (minor) parts copyright 2009 Adam Kennedy.

License: GPL-1+ or Artistic

Comment:

This module is free software. It may be used, redistributed and/or modified under the same terms as Perl itself.

Files: cpan/Text-ParseWords/*

Copyright: unknown

License: GPL-1+ or Artistic

Comment:

There are no copyright notices this distribution.

This library is free software; you may redistribute and/or modify it under the same terms as Perl itself.

Files: cpan/Text-Tabs/*

Copyright:

Copyright (C) 1996-2009 David Muir Sharnoff.

Copyright (C) 2005 Aristotle Pagaltzis

Copyright (C) 2012-2013 Google, Inc.

License: TEXT-TABS

Files:

cpan/bignum/*

cpan/Tie-RefHash/*

cpan/Win32API-File/*

cpan/ExtUtils-Install/*

cpan/Math-BigInt/*

cpan/Math-BigInt-FastCalc/*

cpan/Math-BigRat/*

dist/Thread-Queue/*

Copyright: unknown

License: GPL-1+ or Artistic

Comment:

This program is free software; you may redistribute it and/or modify it under the same terms as Perl itself.

These distributions include no copyright notices but have the same explicit licensing information.

Files: cpan/Time-Local/*

Copyright:

Copyright (c) 1997 - 2018 by Graham Barr & Dave Rolsky.

License: GPL-1+ or Artistic

Comment:

This is free software; you can redistribute it and/or modify it under the same terms as the Perl 5 programming language system itself.

Files: cpan/Time-Piece/*

Copyright: unknown

License: GPL-1+ or Artistic

Comment:

This module is free software, you may distribute it under the same terms as Perl.

Files: cpan/Time-Piece/Piece.xs

Copyright:

strptime copied from freebsd with the following copyright:

Copyright (c) 1994 Powerdog Industries. All rights reserved.

License: GPL-1+ or Artistic, and BSD-4-clause-POWERDOG

Comment:

The strptime function is licensed under the BSD-like license included below. It is assumed that the other parts are licensed under the same terms as the rest of the distribution.

Files: cpan/Unicode-Collate/*

Copyright:

This module is Copyright(C) 2001-2018, SADAHIRO Tomoyuki. Japan. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This module is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Unicode-Collate/Collate/allkeys.txt

Copyright:

Copyright (c) 2017 Unicode, Inc.

License: Unicode

Comment:

For terms of use, see http://www.unicode.org/terms_of_use.html

See below for the full text of this license as downloaded from the above URL on Tue, 26 Apr 2011 14:41:24 +0300.

Files: dist/Unicode-Normalize/*

Copyright:

Copyright(C) 2001-2012, SADAHIRO Tomoyuki. Japan. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This module is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: cpan/Win32/*

Copyright: (c) 1995 Microsoft Corporation. All rights reserved.

License: GPL-1+ or Artistic

Comment:

There are no copyright notices or license information in this distribution, but the README file of the separate CPAN distribution at <https://fastapi.metacpan.org/source/JDB/Win32-0.52/README> states:

.

This module is free software; you may redistribute it and/or modify it under the same terms as Perl itself.

.

The "Perl for Win32" source code was licensed under the same terms as Perl itself and contained this copyright notice:

.

(c) 1995 Microsoft Corporation. All rights reserved.

Developed by ActiveWare Internet Corp.

Files: dist/Attribute-Handlers/*

Copyright:

Copyright (c) 2001-2009, Damian Conway. All Rights Reserved.

License: GPL-1+ or Artistic

Comment:

This module is free software. It may be used, redistributed and/or modified under the same terms as Perl itself.

Files: dist/Carp/*

Copyright:

Copyright (c) 1994-2013 Larry Wall

Copyright (c) 2011, 2012, 2013 Andrew Main (Zefram) <zefram@fysh.org>

License: GPL-1+ or Artistic

Comment:

This module is free software. It may be used, redistributed and/or modified under the same terms as Perl itself.

Files: dist/Data-Dumper/*

Copyright:

Copyright (c) 1996-2019 Gurusamy Sarathy. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: dist/ExtUtils-CBuilder/*

Copyright:

Copyright (c) 2003-2005 Ken Williams. All rights reserved.

Copyright (c) 2012-2020 Ken Williams. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: dist/ExtUtils-ParseXS/*

Copyright:

Copyright 2002-2012 by Ken Williams, David Golden and other contributors.

All rights reserved.

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

.

Based on the ExtUtils::xsubpp code by Larry Wall and the Perl 5

Porters, which was released under the same license terms.

Files: dist/Filter-Simple/*

Copyright:

Copyright (c) 2000-2008, Damian Conway. All Rights Reserved.

License: GPL-1+ or Artistic

Comment:

This module is free software. It may be used, redistributed and/or modified under the same terms as Perl itself.

Files: dist/if/*

Copyright: This software is copyright (c) 2002 by Ilya Zakharevich.

License: GPL-1+ or Artistic

Comment:

This is free software; you can redistribute it and/or modify it under the same terms as the Perl 5 programming language system itself.

Files: dist/I18N-LangTags/*

Copyright:

Copyright 1998+, Sean M. Burke <sburke@cpan.org>, all rights reserved.

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: dist/I18N-LangTags/lib/I18N/LangTags/List.pm

Copyright:

Copyright (c) 2001+ Sean M. Burke. All rights reserved.

License: GPL-1+ or Artistic

Comment:

You can redistribute and/or modify this document under the same terms as Perl itself.

Files: dist/IO/*

Copyright:

Copyright (c) 1996-2003 Graham Barr <gbarr@pobox.com>. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: dist/IO/lib/IO/Socket.pm

Copyright:

Copyright (c) 1997-8 Graham Barr <gbarr@pobox.com>. All rights reserved.

Copyright 2001, Lincoln Stein <lstein@cshl.org>.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or

modify it under the same terms as Perl itself.

The atmark() implementation: Copyright 2001, Lincoln Stein <lstein@cshl.org>.

This module is distributed under the same terms as Perl itself.

Feel free to use, modify and redistribute it as long as you retain the correct attribution.

Files: dist/lib/*

Copyright: as above for 'Files: *'

License: GPL-1+ or Artistic

Comment:

This package has the same copyright and license as the perl core.

Files: dist/Locale-Maketext/*

Copyright:

Copyright 1999-2004, Sean M. Burke <sburke@cpan.org>, all rights reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: dist/Locale-Maketext/lib/Locale/Maketext/TPJ13.pod

Copyright: 1999 The Perl Journal.

License: GPL-1+ or Artistic

Comment:

This document may be distributed under the same terms as Perl itself.

Files: dist/Module-CoreList/*

Copyright:

Copyright (C) 2002-2009 Richard Clamp. All Rights Reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you may redistribute it and/or modify it under the same terms as Perl itself.

Files: dist/Module-CoreList/corelist

Copyright:

Copyright (c) 2002-2007 by D.H. aka PodMaster

License: GPL-1+ or Artistic

Comment:

This program is distributed under the same terms as perl itself.

Files: dist/Module-CoreList/lib/Module/CoreList/Utils.pm

Copyright:

Copyright (C) 2013 Chris Williams. All Rights Reserved.

License: GPL-1+ or Artistic

Comment:

This module is free software; you can redistribute it and/or modify it

under the same terms as Perl itself.

Files: dist/Net-Ping/*

Copyright:

Copyright (c) 2017-2018, Reini Urban. All rights reserved.

Copyright (c) 2016, cPanel Inc. All rights reserved.

Copyright (c) 2012, Steve Peters. All rights reserved.

Copyright (c) 2002-2003, Rob Brown. All rights reserved.

Copyright (c) 2001, Colin McMillen. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you may redistribute it and/or modify it under the same terms as Perl itself.

Files: dist/PathTools/*

Copyright:

Copyright (c) 2004 by the Perl 5 Porters. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: dist/PathTools/Cwd.xs

Copyright:

Copyright (c) 2004 by the Perl 5 Porters. All rights reserved.

Copyright (c) 2003 Constantin S. Svintsoff <kostik@iclub.nsu.ru>

License: GPL-1+ or Artistic, and BSD-3-clause-GENERIC

Comment:

The main license applies to most of the code:

.

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

.

but portions of it have been taken from a BSD variant and are licensed under the terms of the "BSD-3-clause-GENERIC" license included in this file.

.

dist/PathTools/Cwd.pm states:

.

Portions of the C code in this library are copyright (c) 1994 by the Regents of the University of California. All rights reserved. The license on this code is compatible with the licensing of the rest of the distribution - please see the source code in F<Cwd.xs> for the details.

.

but, as discussed in

<http://rt.cpan.org/Public/Bug/Display.html?id=64116>

this is outdated and dist/PathTools/Cwd.xs itself contains the correct

information.

Files: cpan/Pod-Perldoc/*

Copyright:

Copyright (c) 2002-2007 Sean M. Burke.

Copyright (c) 2011 Mark Allen. All rights reserved.

Copyright (c) 2011 brian d foy. All rights reserved.

Copyright (c) 2017 Mark Allen.

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: dist/Storable/*

Copyright:

Copyright (c) 1995-2001, Raphael Manfredi

Copyright (c) 2002-2014 by the Perl 5 Porters

Copyright (c) 2016,2017 cPanel Inc

Copyright (c) 2017, Reini Urban

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl 5 itself.

Files: dist/Storable/t/forgive.t

Copyright:

Copyright (c) 1995-2000, Raphael Manfredi

(C) Copyright 1997, Universitat Dortmund, all rights reserved.

License: GPL-1+ or Artistic

Comment:

You may redistribute only under the same terms as Perl 5, as specified in the README file that comes with the distribution.

Files:

dist/Storable/t/attach_errors.t

dist/Storable/t/attach_singleton.t

dist/Storable/t/circular_hook.t

Copyright:

Copyright 2005, Adam Kennedy.

License: GPL-1+ or Artistic

Comment:

You may redistribute only under the same terms as Perl 5, as specified in the README file that comes with the distribution.

Files:

dist/Storable/t/code.t

dist/Storable/t/sig_die.t

Copyright:

Copyright (c) 2002 Slaven Rezic

License: GPL-1+ or Artistic

Comment:

You may redistribute only under the same terms as Perl 5, as specified in the README file that comes with the distribution.

Files: dist/threads/*

Copyright: unknown

License: GPL-1+ or Artistic

Comment:

threads is released under the same license as Perl.

Files: dist/threads-shared/*

Copyright: unknown

License: GPL-1+ or Artistic

Comment:

threads::shared is released under the same license as Perl.

Files: dist/threads-shared/shared.xs

Copyright:

Copyright (c) 2001-2002, 2006 Larry Wall

License: GPL-1+ or Artistic

Comment:

You may distribute under the terms of either the GNU General Public License or the Artistic License, as specified in the README file.

Files: dist/Test/*

Copyright:

Copyright (c) 1998-2000 Joshua Nathaniel Pritikin.

Copyright (c) 2001-2002 Michael G. Schwern.

Copyright (c) 2002-2004 Sean M. Burke.

License: GPL-1+ or Artistic

Comment:

This package is free software and is provided "as is" without express or implied warranty. It may be used, redistributed and/or modified under the same terms as Perl itself.

Files: dist/Time-HiRes/*

Copyright:

Copyright (c) 1996-2002 Douglas E. Wegscheid. All rights reserved.

Copyright (c) 2002-2010 Jarkko Hietaniemi.

Copyright (c) 2011, 2012, 2013 Andrew Main (Zefram) <zefram@fysh.org>

All rights reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: dist/XSLoader/*

Copyright:

Copyright (C) 1990-2011 by Larry Wall and others.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: ext/attributes/*

Copyright:

Copyright (C) 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008

by Larry Wall and others

License: GPL-1+ or Artistic

Comment:

You may distribute under the terms of either the GNU General Public License or the Artistic License, as specified in the README file.

Files:

ext/Amiga-ARexx/*

ext/Amiga-Exec/*

Copyright:

Copyright (C) 2013 by Andy Broad.

License: GPL-1+ or Artistic

Comment:

There is no license information included. It is assumed that this distribution is licensed under the same terms as Perl itself.

Files: ext/B/*

Copyright:

Copyright (c) 1996, 1997, 1998 Malcolm Beattie

License: GPL-1+ or Artistic

Comment:

You may distribute under the terms of either the GNU General Public License or the Artistic License, as specified in the README file.

Files: ext/B/B/Concise.pm

Copyright:

Copyright (C) 2000-2003 Stephen McCamant. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute and/or modify it under the same terms as Perl itself.

Files: ext/Devel-Peek/*

Copyright:

Copyright (c) 1995-98 Ilya Zakharevich. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: ext/DynaLoader/*

Copyright: unknown

License: GPL-1+ or Artistic

Comment:

There is no license information included that clearly applies to the whole of this distribution. It is assumed that it is licensed under the same terms as Perl itself.

Files: ext/DynaLoader/dl_aix.xs

Copyright:

This is an unpublished work copyright (c) 1992 Helios Software GmbH
3000 Hannover 1, Germany

License: GPL-1+ or Artistic

Comment:

It is assumed that this file is licensed under the same terms as Perl itself.

Files: ext/DynaLoader/dl_freemint.xs

Copyright:

based upon the file "dl.c", which is Copyright (c) 1994, Larry Wall

License: GPL-1+ or Artistic

Comment:

You may distribute under the terms of either the GNU General Public License or the Artistic License, as specified in the README file.

Files: ext/DynaLoader/dl_symbian.xs

Copyright: 2004, Nokia

License: GPL-1+ or Artistic

Comment:

The license in the file is specified as

.

License: Artistic/GPL

Files: ext/Errno/*

Copyright:

Copyright (c) 1997-8 Graham Barr. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: ext/File-Glob/*

Copyright: unknown

License: Artistic

Comment:

The Perl interface was written by Nathan Torkington <gnat@fiii.com>, and is released under the artistic license. Further modifications were made by Greg Bacon <gbacon@cs.uah.edu>, Gurusamy Sarathy <gsar@activestate.com>, and Thomas Wegner <wegner_thomas@yahoo.com>.

Files:

ext/File-Glob/bsd_glob.c

ext/File-Glob/bsd_glob.h

Copyright:

Copyright (c) 1989, 1993

The Regents of the University of California. All rights reserved.

.

This code is derived from software contributed to Berkeley by

Guido van Rossum.

License: BSD-3-clause

Files: ext/Hash-Util/*

Copyright: unknown

License: GPL-1+ or Artistic

Comment:

There is no license information in this distribution.

It is assumed that it is licensed under the same terms as Perl itself.

Files: ext/Hash-Util/lib/Hash/Util.pm

Copyright:

hv_store() is from Array::RefElem, Copyright 2000 Gisle Aas.

License: GPL-1+ or Artistic

Comment:

As above, it is assumed that this file is licensed under the same terms as Perl itself.

.

The copyright and license information of Array::RefElem, as fetched from <<https://fastapi.metacpan.org/source/GAAS/Array-RefElem-1.00/README>>, is as follows:

.

Copyright 2000 Gisle Aas <gisle@aas.no>

.

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: ext/Hash-Util-FieldHash/*

Copyright:

Copyright (C) 2006-2007 by (Anno Siegel)

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself, either Perl version 5.8.7 or, at your option, any later version of Perl 5 you may have available.

Files: ext/I18N-Langinfo/*

Copyright:

Copyright 2001 by Jarkko Hietaniemi

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: ext/mro/*

Copyright:

Copyright (c) 2007 Brandon L Black

Copyright (c) 2008,2009 Larry Wall and others

License: GPL-1+ or Artistic

Comment:

You may distribute under the terms of either the GNU General Public License or the Artistic License, as specified in the README file.

Files: ext/Pod-Html/*

Copyright: unknown

License: Artistic

Comment:

This program is distributed under the Artistic License.

Files: ext/SDBM_File/*

Copyright: none

License: SDBM-PUBLIC-DOMAIN

Files: ext/Win32CORE/*

Copyright:

Copyright (C) 2007 by Larry Wall and others

License: GPL-1+ or Artistic

Comment:

You may distribute under the terms of either the GNU General Public License or the Artistic License, as specified in the README file.

Files: ext/XS-APItest/*

Copyright:

Copyright (C) 2002,2004 Tim Jenness, Christian Soeller, Hugo van der Sanden.

All Rights Reserved.

.

Copyright (C) 2009 Andrew Main (Zefram) <zefram@fysh.org>

License: GPL-1+ or Artistic

Comment:

This library is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: ext/XS-Typemap/*

Copyright:

Copyright (C) 2001 Tim Jenness All Rights Reserved.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files:

pod/perldebtut.pod

pod/perlperf.pod

Copyright:

Richard Foley <richard.foley@rfi.net> Copyright (c) 2000

License: GPL-1+ or Artistic

Comment:

These files are a part of Perl itself, licensed as above.

Files: pod/perlembded.pod

Copyright:

Copyright (C) 1995, 1996, 1997, 1998 Doug MacEachern and Jon Orwant. All Rights Reserved.

License: GPL-1+ or Artistic

Comment:

This document may be distributed under the same terms as Perl itself.

Files: pod/perlexperiment.pod

Copyright:

Copyright 2010, brian d foy <brian.d.foy@gmail.com>

License: GPL-1+ or Artistic

Comment:

You can use and redistribute this document under the same terms as Perl itself.

Files:

cpan/perlfaq/lib/perlfaq*.pod

Copyright:

Copyright (c) 1997-2010 Tom Christiansen, Nathan Torkington, and other authors as noted. All rights reserved.

License: GPL-1+ or Artistic

Comment:

This documentation is free; you can redistribute it and/or modify it under the same terms as Perl itself.

.

Irrespective of its distribution, all code examples here are in the public

domain. You are permitted and encouraged to use this code and any derivatives thereof in your own programs for fun or for profit as you see fit. A simple comment in the code giving credit to the FAQ would be courteous but is not required.

Files: cpan/perlfaq/lib/perlfaq.pod

Copyright:

Tom Christiansen wrote the original version of this document.

brian d foy <bdfoy@cpan.org> wrote this version. See the individual perlfaq documents for additional copyright information.

License: GPL-1+ or Artistic

Comment:

This document is available under the same terms as Perl itself. Code examples in all the perlfaq documents are in the public domain. Use them as you see fit (and at your own risk with no warranty from anyone).

Files:

pod/perlfiter.pod

pod/perlthrtut.pod

Copyright:

copyright 1998 The Perl Journal

License: GPL-1+ or Artistic

Comment:

This document may be distributed under the same terms as Perl itself.

Files: cpan/perlfaq/lib/perlglossary.pod

Copyright:

Based on the Glossary of I<Programming Perl>, Fourth Edition, by Tom Christiansen, brian d foy, Larry Wall, & Jon Orwant.

Copyright (c) 2000, 1996, 1991, 2012 O'Reilly Media, Inc.

License: GPL-1+ or Artistic

Comment:

This document may be distributed under the same terms as Perl itself.

Files: pod/perlmodinstall.pod

Copyright:

Copyright (C) 1998, 2002, 2003 Jon Orwant. All Rights Reserved.

License: GPL-1+ or Artistic

Comment:

This document may be distributed under the same terms as Perl itself.

Files: pod/perlpodstyle.pod

Copyright:

Copyright 1999, 2000, 2001, 2004, 2006, 2008, 2010, 2015, 2018 Russ Allbery <rra@cpan.org>

License: RRA-KEEP-THIS-NOTICE

Comment:

The license text can be found at the end of this file.

Files: pod/perltreapi.pod

Copyright:

Copyright 2006 Yves Orton and 2007 var Arnfrj Bjarmason.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: pod/perltreftut.pod

Copyright:

Copyright 1998 The Perl Journal.

License: GPL-1+ or Artistic

Comment:

This documentation is free; you can redistribute it and/or modify it under the same terms as Perl itself.

.

Irrespective of its distribution, all code examples in these files are hereby placed into the public domain. You are permitted and encouraged to use this code in your own programs for fun or for profit as you see fit. A simple comment in the code giving credit would be courteous but is not required.

Files:

pod/perltrequick.pod

pod/perltreretut.pod

Copyright:

Copyright (c) 2000 Mark Kvale

All rights reserved.

License: GPL-1+ or Artistic

Comment:

This document may be distributed under the same terms as Perl itself.

Files: pod/perltreunicook.pod

Copyright:

Copyright (c) 2012 Tom Christiansen

License: GPL-1+ or Artistic

Comment:

This document may be distributed under the same terms as Perl itself.

Files: pod/perltreuniintro.pod

Copyright:

Copyright 2001-2011 Jarkko Hietaniemi <jhi@iki.fi>

License: GPL-1+ or Artistic

Comment:

This document may be distributed under the same terms as Perl itself.

Files:

Copying

pod/perlglpl.pod

Copyright:

Copyright (C) 1989 Free Software Foundation, Inc.

51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA

License: DONT-CHANGE-THE-GPL

Files: t/io/shm.t

Copyright:

Copyright (C) 1999, Graham Barr <gbarr@pobox.com>.

Copyright (C) 2007-2010, Marcus Holland-Moritz <mhx@cpan.org>.

License: GPL-1+ or Artistic

Comment:

This program is free software; you can redistribute it and/or modify it under the same terms as Perl itself.

Files: regen-configure/*

Copyright:

Copyright (c) 1996-1998, Andy Dougherty

Copyright (c) 1999-2011, H.Merijn Brand

License: GPL-1+ or Artistic or Artistic-dist

Comment:

This directory is a snapshot of the upstream metaconfig repository, containing code originally forked from 'dist' upstream by Larry Wall and Raphael Manfredi. The 'dist/' subdirectory is unmodified upstream code, but the other subdirectories contain mixed code. Some units are dual licensed and some are specifically Artistic-only.

.

The bin/ subdirectory is being filtered from the upstream snapshot (with the Files-Excluded mechanism at the top of this copyright file) because it contains files generated from dist sources. The Debian package build uses the tools from the separate 'dist' package.

.

From regen-configure/U/README:

.

You may distribute the files contained in this distribution under the terms of either

.

a) the "Artistic License" which comes with Perl, or

.

b) the "Artistic License" which comes with dist, or

.

c) the GNU General Public License as published by the Free Software Foundation; either version 1, or (at your option) any later version (see the file "Copying" that comes with the Perl distribution).

.

The full text of the "Artistic License" which comes with dist

differs slightly from the one that is in /usr/share/common-licenses on Debian systems, and can be found later in this file under the "Artistic-dist" tag.

Files: regen-configure/dist/*

Copyright:

Copyright (c) 1991-1997, 2004-2006, 2012 Raphael Manfredi

Copyright (c) 1996,1998 Andy Dougherty

Copyright (c) 1996, Cygnus Support

Copyright (c) 1996, Spider Boardman

Copyright (c) 1996, Sven Verdoolaege

Copyright (c) 1997, Chip Salzenberg

Copyright (c) 1998 Andy Dougherty

Copyright (c) 1999-2001 Jarkko Hietaniemi

License: Artistic-dist

Comment:

This subdirectory contains unmodified 'dist' code that is licensed under the modified Artistic license detailed below under the "Artistic-dist" tag. The different files have separate copyright notices, collected above.

Files: regen-configure/U/*

Copyright:

Copyright (c) 1991-1997, 2004-2006, Raphael Manfredi

Copyright (c) 1996-2010, Andy Dougherty

Copyright (c) 1996, Sven Verdoolaege

Copyright (c) 1998-2016 Jarkko Hietaniemi

Copyright (c) 2004-2018 H.Merijn Brand

Copyright (c) 2006-2006, H.Merijn Brand & Nicholas Clark

Copyright (c) 2011, H.Merijn Brand & Tony Cook

Copyright (c) 2014-2014, Karl Williamson & H.Merijn Brand

Copyright (c) 2016 H.Merijn Brand & Todd Rinaldo

Copyright (c) 2016 Tony Cook

Copyright (c) 2017, Lukas Mai

Copyright (c) 2017 Dagfinn Ilmari Mannsker

Copyright (c) 2017-2019, Karl Williamson

License: Artistic or GPL-1+ or Artistic-dist

Comment:

From regen-configure/U/README:

.

The units in the "modified" directory have been derived from units associated with the metaconfig program of Raphael Manfredi's "dist" distribution. These units list Raphael Manfredi as the Copyright holder. dist is distributed under a modified version of the Perl Artistic License. Clause 7 of this modified license as contained in dist-3.0-pl60 provides:

.

7. You may reuse parts of this Package in your own programs, provided that you explicitly state where you got them from, in the source code

(and, left to your courtesy, in the documentation), duplicating all the associated copyright notices and disclaimers. Besides your changes, if any, must be clearly marked as such. Parts reused that way will no longer fall under this license if, and only if, the name of your program(s) have no immediate connection with the name of the Package itself or its associated programs. You may then apply whatever restrictions you wish on the reused parts or choose to place them in the Public Domain--this will apply only within the context of your package.

.
In accordance with this clause, the versions of these units contained here are made available under the same terms as the rest of the units.

.
It is assumed that the above relicensing also applies to all files in the other subdirectories that are declared to be licensed under the same modified Artistic license.

.
The modified license can be found later in this file under the "Artistic-dist" tag.

Files: utf8.c

Copyright:

Portions Copyright (c) 2008-2009 Bjoern Hoehrmann <bjoern@hoehrmann.de>

License: GPL-1+ or Artistic, and Expat

Comment:

This program is free software; you can redistribute it and/or modify it under the terms of either:

- a) the GNU General Public License as published by the Free Software Foundation; either version 1, or (at your option) any later version, or
- b) the "Artistic License" which comes with Perl.

Files: debian/*

Copyright:

Portions of the Debian packaging are

Copyright 2008-2011 Niko Tyni <ntyni@debian.org>

Copyright 2011 Dominic Hargreaves <dom@earth.li>

The other people listed in debian/changelog are most probably copyright holders too, but they have not included explicit copyright or licensing information.

License: GPL-1+ or Artistic

Comment:

The portions by Niko Tyni and Dominic Hargreaves may be redistributed and/or modified under the same terms as Perl itself. It is assumed that

other contributors have placed their contributions under a compatible license.

License: LGPL-2.1

On Debian GNU/Linux systems, the complete text of the LGPL 2.1 license can be found in ``usr/share/common-licenses/LGPL-2.1'`.

License: GPL-1+

On Debian GNU/Linux systems, the complete text of the GNU General Public License can be found in ``usr/share/common-licenses/GPL-1'`.

License: GPL-2+

On Debian GNU/Linux systems, the complete text of version 2 of the GNU General Public License can be found in ``usr/share/common-licenses/GPL-2'`.

License: Artistic

On Debian GNU/Linux systems, the complete text of the Artistic Licence can be found in ``usr/share/common-licenses/Artistic'`.

License: Artistic-2

Copyright (c) 2000-2006, The Perl Foundation.

.

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

.

Preamble

.

This license establishes the terms under which a given free software Package may be copied, modified, distributed, and/or redistributed. The intent is that the Copyright Holder maintains some artistic control over the development of that Package while still keeping the Package available as open source and free software.

.

You are always permitted to make arrangements wholly outside of this license directly with the Copyright Holder of a given Package. If the terms of this license do not permit the full use that you propose to make of the Package, you should contact the Copyright Holder and seek a different licensing arrangement.

.

Definitions

.

"Copyright Holder" means the individual(s) or organization(s) named in the copyright notice for the entire Package.

.

"Contributor" means any party that has contributed code or other material to the Package, in accordance with the Copyright Holder's procedures.

.
"You" and "your" means any person who would like to copy, distribute, or modify the Package.

.
"Package" means the collection of files distributed by the Copyright Holder, and derivatives of that collection and/or of those files. A given Package may consist of either the Standard Version, or a Modified Version.

.
"Distribute" means providing a copy of the Package or making it accessible to anyone else, or in the case of a company or organization, to others outside of your company or organization.

.
"Distributor Fee" means any fee that you charge for Distributing this Package or providing support for this Package to another party. It does not mean licensing fees.

.
"Standard Version" refers to the Package if it has not been modified, or has been modified only in ways explicitly requested by the Copyright Holder.

.
"Modified Version" means the Package, if it has been changed, and such changes were not explicitly requested by the Copyright Holder.

.
"Original License" means this Artistic License as Distributed with the Standard Version of the Package, in its current version or as it may be modified by The Perl Foundation in the future.

.
"Source" form means the source code, documentation source, and configuration files for the Package.

.
"Compiled" form means the compiled bytecode, object code, binary, or any other form resulting from mechanical transformation or translation of the Source form.

.
Permission for Use and Modification Without Distribution

.
(1) You are permitted to use the Standard Version and create and use Modified Versions for any purpose without restriction, provided that you do not Distribute the Modified Version.

.
Permissions for Redistribution of the Standard Version

.
(2) You may Distribute verbatim copies of the Source form of the Standard Version of this Package in any medium without restriction, either gratis or for a Distributor Fee, provided that you duplicate all of the original copyright notices and associated disclaimers. At your discretion, such verbatim copies may or may not include a

Compiled form of the Package.

.
(3) You may apply any bug fixes, portability changes, and other modifications made available from the Copyright Holder. The resulting Package will still be considered the Standard Version, and as such will be subject to the Original License.

.
Distribution of Modified Versions of the Package as Source

.
(4) You may Distribute your Modified Version as Source (either gratis or for a Distributor Fee, and with or without a Compiled form of the Modified Version) provided that you clearly document how it differs from the Standard Version, including, but not limited to, documenting any non-standard features, executables, or modules, and provided that you do at least ONE of the following:

.
(a) make the Modified Version available to the Copyright Holder of the Standard Version, under the Original License, so that the Copyright Holder may include your modifications in the Standard Version. (b) ensure that installation of your Modified Version does not prevent the user installing or running the Standard Version. In addition, the Modified Version must bear a name that is different from the name of the Standard Version. (c) allow anyone who receives a copy of the Modified Version to make the Source form of the Modified Version available to others under (i) the Original License or (ii) a license that permits the licensee to freely copy, modify and redistribute the Modified Version using the same licensing terms that apply to the copy that the licensee received, and requires that the Source form of the Modified Version, and of any works derived from it, be made freely available in that license fees are prohibited but Distributor Fees are allowed.

.
Distribution of Compiled Forms of the Standard Version or Modified Versions without the Source

.
(5) You may Distribute Compiled forms of the Standard Version without the Source, provided that you include complete instructions on how to get the Source of the Standard Version. Such instructions must be valid at the time of your distribution. If these instructions, at any time while you are carrying out such distribution, become invalid, you must provide new instructions on demand or cease further distribution. If you provide valid instructions or cease distribution within thirty days after you become aware that the instructions are invalid, then you do not forfeit any of your rights under this license.

.
(6) You may Distribute a Modified Version in Compiled form without the Source, provided that you comply with Section 4 with respect to the Source of the Modified Version.

.

Aggregating or Linking the Package

.

(7) You may aggregate the Package (either the Standard Version or Modified Version) with other packages and Distribute the resulting aggregation provided that you do not charge a licensing fee for the Package. Distributor Fees are permitted, and licensing fees for other components in the aggregation are permitted. The terms of this license apply to the use and Distribution of the Standard or Modified Versions as included in the aggregation.

.

(8) You are permitted to link Modified and Standard Versions with other works, to embed the Package in a larger work of your own, or to build stand-alone binary or bytecode versions of applications that include the Package, and Distribute the result without restriction, provided the result does not expose a direct interface to the Package.

.

Items That are Not Considered Part of a Modified Version

.

(9) Works (including, but not limited to, modules and scripts) that merely extend or make use of the Package, do not, by themselves, cause the Package to be a Modified Version. In addition, such works are not considered parts of the Package itself, and are not subject to the terms of this license.

.

General Provisions

.

(10) Any use, modification, and distribution of the Standard or Modified Versions is governed by this Artistic License. By using, modifying or distributing the Package, you accept this license. Do not use, modify, or distribute the Package, if you do not accept this license.

.

(11) If your Modified Version has been derived from a Modified Version made by someone other than you, you are nevertheless required to ensure that your Modified Version complies with the requirements of this license.

.

(12) This license does not grant you the right to use any trademark, service mark, tradename, or logo of the Copyright Holder.

.

(13) This license includes the non-exclusive, worldwide, free-of-charge patent license to make, have made, use, offer to sell, sell, import and otherwise transfer the Package with respect to any patent claims licensable by the Copyright Holder that are necessarily infringed by the Package. If you institute patent litigation (including a cross-claim or counterclaim) against any party alleging that the Package constitutes direct or contributory patent

infringement, then this Artistic License to you shall terminate on the date that such litigation is filed.

(14) Disclaimer of Warranty: THE PACKAGE IS PROVIDED BY THE COPYRIGHT HOLDER AND CONTRIBUTORS "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES. THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT ARE DISCLAIMED TO THE EXTENT PERMITTED BY YOUR LOCAL LAW. UNLESS REQUIRED BY LAW, NO COPYRIGHT HOLDER OR CONTRIBUTOR WILL BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING IN ANY WAY OUT OF THE USE OF THE PACKAGE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: BZIP

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
3. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
4. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Julian Seward, jseward@bzip.org
bzip2/libbzip2 version 1.0.5 of 10 December 2007

License: ZLIB

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

License: Expat

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

License: BSD-3-clause-with-weird-numbering

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
4. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: BSD-4-clause-POWERDOG

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:
This product includes software developed by Powerdog Industries.
4. The name of Powerdog Industries may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY POWERDOG INDUSTRIES ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE POWERDOG INDUSTRIES BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: Unicode

EXHIBIT 1

UNICODE, INC. LICENSE AGREEMENT - DATA FILES AND SOFTWARE

Unicode Data Files include all data files under the directories <http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>, and <http://www.unicode.org/cldr/data/> . Unicode Data Files

do not include PDF online code charts under the directory <http://www.unicode.org/Public/>. Software includes any source code published in the Unicode Standard or under the directories <http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>, and <http://www.unicode.org/cldr/data/>.

NOTICE TO USER: Carefully read the following legal agreement. BY DOWNLOADING, INSTALLING, COPYING OR OTHERWISE USING UNICODE INC.'S DATA FILES ("DATA FILES"), AND/OR SOFTWARE ("SOFTWARE"), YOU UNEQUIVOCALLY ACCEPT, AND AGREE TO BE BOUND BY, ALL OF THE TERMS AND CONDITIONS OF THIS AGREEMENT. IF YOU DO NOT AGREE, DO NOT DOWNLOAD, INSTALL, COPY, DISTRIBUTE OR USE THE DATA FILES OR SOFTWARE.

COPYRIGHT AND PERMISSION NOTICE

Copyright 1991-2011 Unicode, Inc. All rights reserved. Distributed under the Terms of Use in <http://www.unicode.org/copyright.html>.

Permission is hereby granted, free of charge, to any person obtaining a copy of the Unicode data files and any associated documentation (the "Data Files") or Unicode software and any associated documentation (the "Software") to deal in the Data Files or Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Data Files or Software, and to permit persons to whom the Data Files or Software are furnished to do so, provided that (a) the above copyright notice(s) and this permission notice appear with all copies of the Data Files or Software, (b) both the above copyright notice(s) and this permission notice appear in associated documentation, and (c) there is clear notice in each modified Data File or in the Software as well as in the documentation associated with the Data File(s) or Software that the data or software has been modified.

THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale,

use or other dealings in these Data Files or Software without prior written authorization of the copyright holder.

License: BSD-3-clause-GENERIC

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The names of the authors may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: BSD-3-clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)

HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: REGCOMP

Permission is granted to anyone to use this software for any purpose on any computer system, and to redistribute it freely, subject to the following restrictions:

1. The author is not responsible for the consequences of use of this software, no matter how awful, even if they arise from defects in it.
2. The origin of this software must not be misrepresented, either by explicit claim or by omission.
3. Altered versions must be plainly marked as such, and must not be misrepresented as being the original software.

License: TEXT-TABS

This module may be modified, used, copied, and redistributed at your own risk.

Although allowed by the preceding license, please do not publicly redistribute modified versions of this code with the name "Text::Tabs" unless it passes the unmodified Text::Tabs test suite.

License: DONT-CHANGE-THE-GPL

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

License: SDBM-PUBLIC-DOMAIN

From ext/SDBM_File/sdbm/README:

The entire sdbm library package, as authored by me, Ozan S. Yigit, is hereby placed in the public domain. As such, the author is not responsible for the consequences of use of this software, no matter how awful, even if they arise from defects in it. There is no expressed or implied warranty for the sdbm library.

Since the sdbm library package is in the public domain, this original release or any additional public-domain releases of the modified original cannot possibly (by definition) be withheld from you. Also by definition, You (singular) have all the rights to this code (including the right to sell without permission, the right to hoard[3] and the right to do other icky things as you see fit) but those rights are also granted to everyone else.

Please note that all previous distributions of this software contained a copyright (which is now dropped) to protect its origins and its current public domain status against any possible claims and/or challenges.

License: GPL-3+-WITH-BISON-EXCEPTION

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <http://www.gnu.org/licenses/>.

As a special exception, you may create a larger work that contains part or all of the Bison parser skeleton and distribute that work under terms of your choice, so long as that work isn't itself a parser generator using the skeleton or a modified version thereof as a parser skeleton. Alternatively, if you modify or redistribute the parser skeleton itself, you may (at your option) remove this special exception, which will cause the skeleton and the resulting Bison output files to be licensed under the GNU General Public License without this special exception.

This special exception was added by the Free Software Foundation in version 2.2 of Bison.

License: HSIEH-DERIVATIVE

The derivative content includes raw computer source code, ideas, opinions, and excerpts whose original source is covered under another license and transformations of such derivatives. Note that mere excerpts by themselves (with the exception of raw source code) are not considered derivative works under this license. Use and redistribution is limited to the following conditions:

One may not create a derivative work which, in any way, violates the Paul Hsieh exposition license described above on the original content.

One may not apply a license to a derivative work that precludes anyone else from using and redistributing derivative content.

One may not attribute any derivative content to authors not involved in the creation of the content, though an attribution to the author

is not necessary.

License: HSIEH-BSD

Copyright (c) 2010, Paul Hsieh

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither my name, Paul Hsieh, nor the names of any other contributors to the code use may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: CC0-1.0

Statement of Purpose

The laws of most jurisdictions throughout the world automatically confer exclusive Copyright and Related Rights (defined below) upon the creator and subsequent owner(s) (each and all, an "owner") of an original work of authorship and/or a database (each, a "Work").

Certain owners wish to permanently relinquish those rights to a Work for the purpose of contributing to a commons of creative, cultural and scientific works ("Commons") that the public can reliably and without fear of later claims of infringement build upon, modify, incorporate in other works, reuse and redistribute as freely as possible in any form whatsoever and for any purposes, including without limitation commercial purposes. These owners may contribute to the Commons to promote the ideal

of a free culture and the further production of creative, cultural and scientific works, or to gain reputation or greater distribution for their Work in part through the use and efforts of others.

For these and/or other purposes and motivations, and without any expectation of additional consideration or compensation, the person associating CC0 with a Work (the "Affirmer"), to the extent that he or she is an owner of Copyright and Related Rights in the Work, voluntarily elects to apply CC0 to the Work and publicly distribute the Work under its terms, with knowledge of his or her Copyright and Related Rights in the Work and the meaning and intended legal effect of CC0 on those rights.

1. Copyright and Related Rights. A Work made available under CC0 may be protected by copyright and related or neighboring rights ("Copyright and Related Rights"). Copyright and Related Rights include, but are not limited to, the following:

- the right to reproduce, adapt, distribute, perform, display, communicate, and translate a Work;

- moral rights retained by the original author(s) and/or performer(s);

- publicity and privacy rights pertaining to a person's image or likeness depicted in a Work;

- rights protecting against unfair competition in regards to a Work, subject to the limitations in paragraph 4(a), below;

- rights protecting the extraction, dissemination, use and reuse of data in a Work;

- database rights (such as those arising under Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, and under any national implementation thereof, including any amended or successor version of such directive); and

- other similar, equivalent or corresponding rights throughout the world based on applicable law or treaty, and any national implementations thereof.

2. Waiver. To the greatest extent permitted by, but not in contravention of, applicable law, Affirmer hereby overtly, fully, permanently, irrevocably and unconditionally waives, abandons, and surrenders all of Affirmer's Copyright and Related Rights and associated claims and causes of action, whether now known or unknown (including existing as well as future claims and causes of action), in the Work (i) in all territories worldwide, (ii) for the maximum duration provided by

applicable law or treaty (including future time extensions), (iii) in any current or future medium and for any number of copies, and (iv) for any purpose whatsoever, including without limitation commercial, advertising or promotional purposes (the "Waiver"). Affirmer makes the Waiver for the benefit of each member of the public at large and to the detriment of Affirmer's heirs and successors, fully intending that such Waiver shall not be subject to revocation, rescission, cancellation, termination, or any other legal or equitable action to disrupt the quiet enjoyment of the Work by the public as contemplated by Affirmer's express Statement of Purpose.

.
3. Public License Fallback. Should any part of the Waiver for any reason be judged legally invalid or ineffective under applicable law, then the Waiver shall be preserved to the maximum extent permitted taking into account Affirmer's express Statement of Purpose. In addition, to the extent the Waiver is so judged Affirmer hereby grants to each affected person a royalty-free, non transferable, non sublicensable, non exclusive, irrevocable and unconditional license to exercise Affirmer's Copyright and Related Rights in the Work (i) in all territories worldwide, (ii) for the maximum duration provided by applicable law or treaty (including future time extensions), (iii) in any current or future medium and for any number of copies, and (iv) for any purpose whatsoever, including without limitation commercial, advertising or promotional purposes (the "License"). The License shall be deemed effective as of the date CC0 was applied by Affirmer to the Work. Should any part of the License for any reason be judged legally invalid or ineffective under applicable law, such partial invalidity or ineffectiveness shall not invalidate the remainder of the License, and in such case Affirmer hereby affirms that he or she will not (i) exercise any of his or her remaining Copyright and Related Rights in the Work or (ii) assert any associated claims and causes of action with respect to the Work, in either case contrary to Affirmer's express Statement of Purpose.

.
4. Limitations and Disclaimers.

.
No trademark or patent rights held by Affirmer are waived, abandoned, surrendered, licensed or otherwise affected by this document.

.
Affirmer offers the Work as-is and makes no representations or warranties of any kind concerning the Work, express, implied, statutory or otherwise, including without limitation warranties of title, merchantability, fitness for a particular purpose, non infringement, or the absence of latent or other defects, accuracy, or the present or absence of errors, whether or not discoverable, all to the greatest extent permissible under applicable law.

Affirmer disclaims responsibility for clearing rights of other persons that may apply to the Work or any use thereof, including without limitation any person's Copyright and Related Rights in the Work. Further, Affirmer disclaims responsibility for obtaining any necessary consents, permissions or other rights required for any use of the Work.

Affirmer understands and acknowledges that Creative Commons is not a party to this document and has no duty or obligation with respect to this CC0 or use of the Work.

Comment:

This license text was retrieved from

<<http://creativecommons.org/publicdomain/zero/1.0/>>

on Fri, 05 Feb 2016 20:30:28 +0200

License: RRA-KEEP-THIS-NOTICE

Copying and distribution of this file, with or without modification, are permitted in any medium without royalty provided the copyright notice and this notice are preserved. This file is offered as-is, without any warranty.

License: Artistic-dist

The "Artistic License"

Preamble

The intent of this document is to state the conditions under which a Package may be copied, such that the Copyright Holder maintains some semblance of artistic control over the development of the Package, while giving the users of the package the right to use and distribute the Package in a more-or-less customary fashion, plus the right to make reasonable modifications.

It also grants you the rights to reuse parts of a Package in your own programs without transferring this License to those programs, provided that you meet some reasonable requirements.

Definitions:

"Package" refers to the collection of files distributed by the Copyright Holder, and derivatives of that collection of files created through textual modification.

"Standard Version" refers to such a Package if it has not been modified, or has been modified in accordance with the wishes of the Copyright Holder as specified below.

"Copyright Holder" is whoever is named in the copyright or

copyrights for the package.

"You" is you, if you're thinking about copying or distributing this Package.

"Reasonable copying fee" is whatever you can justify on the basis of media cost, duplication charges, time of people involved, and so on. (You will not be required to justify it to the Copyright Holder, but only to the computing community at large as a market that must bear the fee.)

"Freely Available" means that no fee is charged for the item itself, though there may be fees involved in handling the item. It also means that recipients of the item may redistribute it under the same conditions they received it.

1. You may make and give away verbatim copies of the source form of the Standard Version of this Package without restriction, provided that you duplicate all of the original copyright notices and associated disclaimers.
2. You may apply bug fixes, portability fixes and other modifications derived from the Public Domain or from the Copyright Holder. A Package modified in such a way shall still be considered the Standard Version.
3. You may otherwise modify your copy of this Package in any way, provided that you insert a prominent notice in each changed file stating how and when you changed that file, and provided that you do at least ONE of the following:
 - a) place your modifications in the Public Domain or otherwise make them Freely Available, such as by posting said modifications to Usenet or an equivalent medium, or placing the modifications on a major archive site such as uunet.uu.net, or by allowing the Copyright Holder to include your modifications in the Standard Version of the Package.
 - b) use the modified Package only within your corporation or organization.
 - c) rename any non-standard executables so the names do not conflict with standard executables, which must also be provided, and provide a separate manual page for each non-standard executable that clearly documents how it differs from the Standard Version.
 - d) make other distribution arrangements with the Copyright Holder.
4. You may distribute the programs of this Package in object code or executable form, provided that you do at least ONE of the following:
 - a) distribute a Standard Version of the executables and library files,

together with instructions (in the manual page or equivalent) on where to get the Standard Version.

b) accompany the distribution with the machine-readable source of the Package with your modifications.

c) give non-standard executables non-standard names, and clearly document the differences in manual pages (or equivalent), together with instructions on where to get the Standard Version.

d) make other distribution arrangements with the Copyright Holder.

5. You may charge a reasonable copying fee for any distribution of this Package. You may charge any fee you choose for support of this Package. You may not charge a fee for this Package itself. However, you may distribute this Package in aggregate with other (possibly commercial) programs as part of a larger (possibly commercial) software distribution provided that you do not advertise this Package as a product of your own.

6. The scripts and library files supplied as input to or produced as output from the programs of this Package do not automatically fall under the copyright of this Package, but belong to whoever generated them, and may be sold commercially, and may be aggregated with this Package. If such scripts or library files are aggregated with this Package via the so-called "undump" or "unexec" methods of producing a binary executable image, then distribution of such an image shall neither be construed as a distribution of this Package nor shall it fall under the restrictions of Paragraphs 3 and 4, provided that you do not represent such an executable image as a Standard Version of this Package.

7. You may reuse parts of this Package in your own programs, provided that you explicitly state where you got them from, in the source code (and, left to your courtesy, in the documentation), duplicating all the associated copyright notices and disclaimers. Besides your changes, if any, must be clearly marked as such. Parts reused that way will no longer fall under this license if, and only if, the name of your program(s) have no immediate connection with the name of the Package itself or its associated programs. You may then apply whatever restrictions you wish on the reused parts or choose to place them in the Public Domain--this will apply only within the context of your package.

8. The name of the Copyright Holder may not be used to endorse or promote products derived from this software without specific prior written permission.

9. THIS PACKAGE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED

WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The End

Comment:

This license was copied from the upstream 'dist' repository,

<https://github.com/rmanfredi/dist.git>

at Sun, 15 Oct 2017 13:07:36 +0300.

GNU LESSER GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. <<http://fsf.org/>>

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

This version of the GNU Lesser General Public License incorporates the terms and conditions of version 3 of the GNU General Public License, supplemented by the additional permissions listed below.

0. Additional Definitions.

As used herein, "this License" refers to version 3 of the GNU Lesser General Public License, and the "GNU GPL" refers to version 3 of the GNU General Public License.

"The Library" refers to a covered work governed by this License, other than an Application or a Combined Work as defined below.

An "Application" is any work that makes use of an interface provided by the Library, but which is not otherwise based on the Library. Defining a subclass of a class defined by the Library is deemed a mode of using an interface provided by the Library.

A "Combined Work" is a work produced by combining or linking an Application with the Library. The particular version of the Library with which the Combined Work was made is also called the "Linked Version".

The "Minimal Corresponding Source" for a Combined Work means the Corresponding Source for the Combined Work, excluding any source code for portions of the Combined Work that, considered in isolation, are based on the Application, and not on the Linked Version.

The "Corresponding Application Code" for a Combined Work means the object code and/or source code for the Application, including any data and utility programs needed for reproducing the Combined Work from the Application, but excluding the System Libraries of the Combined Work.

1. Exception to Section 3 of the GNU GPL.

You may convey a covered work under sections 3 and 4 of this License without being bound by section 3 of the GNU GPL.

2. Conveying Modified Versions.

If you modify a copy of the Library, and, in your modifications, a facility refers to a function or data to be supplied by an Application that uses the facility (other than as an argument passed when the facility is invoked), then you may convey a copy of the modified version:

- a) under this License, provided that you make a good faith effort to ensure that, in the event an Application does not supply the function or data, the facility still operates, and performs whatever part of its purpose remains meaningful, or
- b) under the GNU GPL, with none of the additional permissions of this License applicable to that copy.

3. Object Code Incorporating Material from Library Header Files.

The object code form of an Application may incorporate material from a header file that is part of the Library. You may convey such object code under terms of your choice, provided that, if the incorporated material is not limited to numerical parameters, data structure layouts and accessors, or small macros, inline functions and templates (ten or fewer lines in length), you do both of the following:

- a) Give prominent notice with each copy of the object code that the Library is used in it and that the Library and its use are covered by this License.
- b) Accompany the object code with a copy of the GNU GPL and this license document.

4. Combined Works.

You may convey a Combined Work under terms of your choice that, taken together, effectively do not restrict modification of the portions of the Library contained in the Combined Work and reverse engineering for debugging such modifications, if you also do each of the following:

- a) Give prominent notice with each copy of the Combined Work that the Library is used in it and that the Library and its use are covered by this License.

b) Accompany the Combined Work with a copy of the GNU GPL and this license document.

c) For a Combined Work that displays copyright notices during execution, include the copyright notice for the Library among these notices, as well as a reference directing the user to the copies of the GNU GPL and this license document.

d) Do one of the following:

0) Convey the Minimal Corresponding Source under the terms of this License, and the Corresponding Application Code in a form suitable for, and under terms that permit, the user to recombine or relink the Application with a modified version of the Linked Version to produce a modified Combined Work, in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.

1) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (a) uses at run time a copy of the Library already present on the user's computer system, and (b) will operate properly with a modified version of the Library that is interface-compatible with the Linked Version.

e) Provide Installation Information, but only if you would otherwise be required to provide such information under section 6 of the GNU GPL, and only to the extent that such information is necessary to install and execute a modified version of the Combined Work produced by recombining or relinking the Application with a modified version of the Linked Version. (If you use option 4d0, the Installation Information must accompany the Minimal Corresponding Source and Corresponding Application Code. If you use option 4d1, you must provide the Installation Information in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.)

5. Combined Libraries.

You may place library facilities that are a work based on the Library side by side in a single library together with other library facilities that are not Applications and are not covered by this License, and convey such a combined library under terms of your choice, if you do both of the following:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities,

conveyed under the terms of this License.

b) Give prominent notice with the combined library that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

6. Revised Versions of the GNU Lesser General Public License.

The Free Software Foundation may publish revised and/or new versions of the GNU Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library as you received it specifies that a certain numbered version of the GNU Lesser General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that published version or of any later version published by the Free Software Foundation. If the Library as you received it does not specify a version number of the GNU Lesser General Public License, you may choose any version of the GNU Lesser General Public License ever published by the Free Software Foundation.

If the Library as you received it specifies that a proxy can decide whether future versions of the GNU Lesser General Public License shall apply, that proxy's public statement of acceptance of any version is permanent authorization for you to choose that version for the Library.

Apt is copyright 1997, 1998, 1999 Jason Gunthorpe and others.

Apt is currently developed by APT Development Team <deity@lists.debian.org>.

License: GPLv2+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301, USA.

See /usr/share/common-licenses/GPL-2, or

<<http://www.gnu.org/copyleft/gpl.txt>> for the terms of the latest version of the GNU General Public License.

JSZip v3.7.1

JSZip is dual licensed. You may use it under the MIT license *or* the GPLv3 license.

The MIT License

...

Copyright (c) 2009-2016 Stuart Knightley, David Duponchel, Franz Buchinger, Antnio Afonso

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

...

GPL version 3

...

GNU GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. <<http://fsf.org/>>

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The GNU General Public License is a free, copyleft license for software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to

share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

Developers that use the GNU GPL protect your rights with two steps: (1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to

avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS

0. Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations.

To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

2. Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. The output from running a

covered work is covered by this License only if the output, given its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law.

You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for you, or provide you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you.

Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing is not allowed; section 10 makes it unnecessary.

3. Protecting Users' Legal Rights From Anti-Circumvention Law.

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

5. Conveying Modified Source Versions.

You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

- a) The work must carry prominent notices stating that you modified it, and giving a relevant date.
- b) The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement modifies the requirement in section 4 to "keep intact all notices".
- c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.
- d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an "aggregate" if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

- a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.

b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.

d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.

e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.

A "User Product" is either (1) a "consumer product", which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, "normally used" refers to a typical or common use of that class of product, regardless of the status

of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

"Installation Information" for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in source code form), and must require no special password or key for unpacking, reading or copying.

7. Additional Terms.

"Additional permissions" are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by

this License without regard to the additional permissions.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission.

Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

- a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or
- b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or
- c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or
- d) Limiting the use for publicity purposes of names of licensors or authors of the material; or
- e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or
- f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on those licensors and authors.

All other non-permissive additional terms are considered "further restrictions" within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains a further restriction but permits relicensing or conveying under this License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying.

If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the

additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

8. Termination.

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

9. Acceptance Not Required for Having Copies.

You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

10. Automatic Licensing of Downstream Recipients.

Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License.

An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity transaction, each party to that transaction who receives a copy of the work also receives whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts.

You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and you may not initiate litigation (including a cross-claim or counterclaim in a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it.

11. Patents.

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, "control" includes the right to grant patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version.

In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a

party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory patent license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

12. No Surrender of Others' Freedom.

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not

excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

13. Use with the GNU Affero General Public License.

Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU Affero General Public License into a single combined work, and to convey the resulting work. The terms of this License will continue to apply to the part which is the covered work, but the special requirements of the GNU Affero General Public License, section 13, concerning interaction through a network will apply to the combination as such.

14. Revised Versions of this License.

The Free Software Foundation may publish revised and/or new versions of the GNU General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies that a certain numbered version of the GNU General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the GNU General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future versions of the GNU General Public License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Program.

Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

15. Disclaimer of Warranty.

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY

APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

17. Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

END OF TERMS AND CONDITIONS

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: brotli

Source: <https://github.com/google/brotli>

Files: *

Copyright: 2009, 2010, 2013-2015 by the Brotli Authors

License: MIT

Files: debian/*

Copyright: 2015 Tomasz Buchert <tomasz@debian.org>

License: MIT

License: MIT

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell

copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

IAIK (Institute for Applied Information Processing and Communication) PKCS#11 wrapper files v1

IAIK License

<pre>

Copyright (c) 2002 Graz University of Technology. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The end-user documentation included with the redistribution, if any, must include the following acknowledgment:

"This product includes software developed by IAIK of Graz University of Technology."

Alternately, this acknowledgment may appear in the software itself, if and wherever such third-party acknowledgments normally appear.

4. The names "Graz University of Technology" and "IAIK of Graz University of Technology" must not be used to endorse or promote products derived from this software without prior written permission.
5. Products derived from this software may not be called "IAIK PKCS Wrapper", nor may "IAIK" appear in their name, without prior written permission of Graz University of Technology.

THIS SOFTWARE IS PROVIDED "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES,

INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE LICENSOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

</pre>

JLine v3.20.0

JLine License

<pre>

Copyright (c) 2002-2018, the original author or authors.

All rights reserved.

<https://opensource.org/licenses/BSD-3-Clause>

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of JLine nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING

IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED
OF THE POSSIBILITY OF SUCH DAMAGE.

</pre>

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: LSB implementation package

Files: *

Copyright: 2002-2010, Chris Lawrence <lawrenc@debian.org>

License: GPL-2

Files: init-functions.d/50-ubuntu-logging

Copyright: 2005-2011, Canonical Ltd.

License: GPL-2

Files: init-functions

Copyright: 2002-2009, Chris Lawrence <lawrenc@debian.org>

License: BSD-3-clause

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions
are met:

1. Redistributions of source code must retain the above copyright
notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright
notice, this list of conditions and the following disclaimer in the
documentation and/or other materials provided with the distribution.
3. Neither the name of the author nor the names of other contributors
may be used to endorse or promote products derived from this software
without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS''
AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO,
THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR
PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS
BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR
CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF
SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR
BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY,
WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE
OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN
IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: GPL-2

This program is free software; you can redistribute it
and/or modify it under the terms of the GNU General Public
License as published by the Free Software Foundation;
version 2 dated June 1991.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this package; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA

On Debian systems, the full text of the GNU General Public License version 2 can be found in the file `/usr/share/common-licenses/GPL-2`.

This is the Debian GNU/Linux package `debianutils`.

It is an original Debian package. Programs in it were maintained by Guy Maor <maor@debian.org>, and are now maintained by Clint Adams <schizo@debian.org>.

All its programs except `savelog`, and which may be redistributed under the terms of the GNU GPL, Version 2 or later, found on Debian systems in the file `/usr/share/common-licenses/GPL-2`.

which is in the public domain.

`savelog` may be redistributed under the following terms: (The rest of this file consists of `savelog`'s distribution terms.)

#ident "@(#)smail:RELEASE-3_2:COPYING,v 1.2 1996/06/14 18:59:10 woods Exp"

SMAIL GENERAL PUBLIC LICENSE
(Clarified 11 Feb 1988)

Copyright (C) 1988 Landon Curt Noll & Ronald S. Karr
Copyright (C) 1992 Ronald S. Karr
Copyleft (GNU) 1988 Landon Curt Noll & Ronald S. Karr

Everyone is permitted to copy and distribute verbatim copies of this license, but changing it is not allowed. You can also use this wording to make the terms for other programs.

The license agreements of most software companies keep you at the mercy of those companies. By contrast, our general public license is intended to give everyone the right to share SMAIL. To make sure that you get the rights we want you to have, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. Hence this license agreement.

Specifically, we want to make sure that you have the right to give away copies of SMAIL, that you receive source code or else can get it if you want it, that you can change SMAIL or use pieces of it in new free programs, and that you know you can do these things.

To make sure that everyone has such rights, we have to forbid you to deprive anyone else of these rights. For example, if you distribute copies of SMAIL, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must tell them their rights.

Also, for our own protection, we must make certain that everyone finds out that there is no warranty for SMAIL. If SMAIL is modified by someone else and passed on, we want its recipients to know that what they have is not what we distributed, so that any problems introduced by others will not reflect on our reputation.

Therefore we (Landon Curt Noll and Ronald S. Karr) make the following terms which say what you must do to be allowed to distribute or change SMAIL.

COPYING POLICIES

1. You may copy and distribute verbatim copies of SMAIL source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy a valid copyright notice "Copyright (C) 1988 Landon Curt Noll & Ronald S. Karr" (or with whatever year is appropriate); keep intact the notices on all files that refer to this License Agreement and to the absence of any warranty; and give any other recipients of the SMAIL program a copy of this License Agreement along with the program. You may charge a distribution fee for the physical act of transferring a copy.

2. You may modify your copy or copies of SMAIL or any portion of it, and copy and distribute such modifications under the terms of Paragraph 1 above, provided that you also do the following:

a) cause the modified files to carry prominent notices stating that you changed the files and the date of any change; and

b) cause the whole of any work that you distribute or publish, that in whole or in part contains or is a derivative of SMAIL or any part thereof, to be licensed at no charge to all third parties on terms identical to those contained in this License Agreement (except that you may choose to grant more extensive warranty protection to some or all third parties, at your option).

c) You may charge a distribution fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

Mere aggregation of another unrelated program with this program (or its derivative) on a volume of a storage or distribution medium does not bring the other program under the scope of these terms.

3. You may copy and distribute SMAIL (or a portion or derivative of it, under Paragraph 2) in object code or executable form under the terms of Paragraphs 1 and 2 above provided that you also do one of the following:

a) accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Paragraphs 1 and 2 above; or,

b) accompany it with a written offer, valid for at least three years, to give any third party free (except for a nominal shipping charge) a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Paragraphs 1 and 2 above; or,

c) accompany it with the information you received as to where the corresponding source code may be obtained. (This alternative is allowed only for non-commercial distribution and only if you received the program in object code or executable form alone.)

For an executable file, complete source code means all the source code for all modules it contains; but, as a special exception, it need not include source code for modules which are standard libraries that accompany the operating system on which the executable file runs.

4. You may not copy, sublicense, distribute or transfer SMAIL except as expressly provided under this License Agreement. Any attempt otherwise to copy, sublicense, distribute or transfer SMAIL is void and your rights to use the program under this License agreement shall be automatically terminated. However, parties who have received computer software programs from you with this License Agreement will not have their licenses terminated so long as such parties remain in full compliance.

5. If you wish to incorporate parts of SMAIL into other free programs whose distribution conditions are different, write to Landon Curt Noll & Ronald S. Karr via the Free Software Foundation at 51 Franklin St, Fifth Floor, Boston, MA 02110-1301, USA. We have not yet worked out a simple rule that can be stated here, but we will often permit this. We will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting

the sharing and reuse of software.

Your comments and suggestions about our licensing policies and our software are welcome! This contract was based on the contract made by the Free Software Foundation. Please contact the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301, USA, or call (617) 542-5942 for details on copylefted material in general.

NO WARRANTY

BECAUSE SMAIL IS LICENSED FREE OF CHARGE, WE PROVIDE ABSOLUTELY NO WARRANTY, TO THE EXTENT PERMITTED BY APPLICABLE STATE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING, LANDON CURT NOLL & RONALD S. KARR AND/OR OTHER PARTIES PROVIDE SMAIL "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF SMAIL IS WITH YOU. SHOULD SMAIL PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW WILL LANDON CURT NOLL & RONALD S. KARR AND/OR ANY OTHER PARTY WHO MAY MODIFY AND REDISTRIBUTE SMAIL AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY LOST PROFITS, LOST MONIES, OR OTHER SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS) SMAIL, EVEN IF YOU HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, OR FOR ANY CLAIM BY ANY OTHER PARTY.

This package was debianized by Pierre Chifflier <pollux@debian.org> on Mon, 22 Jun 2009 21:47:25 +0200.

It was downloaded from <http://people.redhat.com/sgrubb/libcap-ng/>

Upstream Author: Steve Grubb <sgrubb@redhat.com>

Copyright 2009 Red Hat Inc.

License:

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful,

but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301, USA.

see ``/usr/share/common-licenses/LGPL-2.1'`.

Files in the 'utils/' directory, Makefile.am and doc/Makefile.am are licensed under the GNU General Public License version 2 or above
See ``/usr/share/common-licenses/GPL-2'`.

The Debian packaging is:

Copyright (C) 2009 Pierre Chifflier <pollux@debian.org>

and is licensed under the GPL version 3,
see ``/usr/share/common-licenses/GPL-3'`.

This is Debian GNU/Linux's prepackaged version of the FSF's GNU Readline library.

This package was put together by Matthias Klose <doko@debian.org>, derived from the bash package by Guy Maor <maor@debian.org>, from the GNU sources at

<ftp.gnu.org:/pub/gnu/readline/readline-6.0.tar.gz>.

Upstream Authors:

Chet Ramey <chet.ramey@case.edu>

Jeff Solomon <jsolomon@stanford.edu> (examples/excallback.c)

Harold Levy <Harold.Levy@synopsys.com> (examples/rl-fgets.c)

Juergen Weigert <jnweiger@immd4.informatik.uni-erlangen.de> (examples/rlfe)

Michael Schroeder <mlschroe@immd4.informatik.uni-erlangen.de> (examples/rlfe)

Oliver Laumann (examples/rlfe)

Copyright:

Copyright (C) 1987-2009 Free Software Foundation, Inc.

Copyright (C) 1999 Jeff Solomon (examples/excallback.c)

Copyright (C) 2003-2004 Harold Levy (examples/rl-fgets.c)

Copyright (C) 1993-2002 Juergen Weigert (examples/rlfe)

Copyright (C) 1993-2002 Michael Schroeder (examples/rlfe)

Copyright (C) 1987 Oliver Laumann (examples/rlfe)

License:

Readline is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This package is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with Readline. If not, see <<http://www.gnu.org/licenses/>>.

examples/rl-fgets.c: GPL v2 or later.

examples/rlfe: GPL v2 or later.

On Debian systems, the complete text of the GNU General Public License can be found in ``usr/share/common-licenses/GPL-3'`.

The documentation files `doc/*.texi` and derived `.info`, `.html`, `.ps` and `.pdf` files are:

Copyright (C) 1988-2015 Free Software Foundation, Inc.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled "GNU Free Documentation License".

On Debian systems, the complete text of the GNU Free Documentation License can be found in ``usr/share/common-licenses/GFDL'`.

The Debian packaging is:

Copyright (C) 1999-2009 Matthias Klose <doko@debian.org>

and is licensed under the GPL version 3,
see ``usr/share/common-licenses/GPL-3'`.

This is Debian GNU/Linux's prepackaged version of the PCRE regular expression library and associated `pgrep` utility.

This package was put together by me, Mark Baker <mbaker@iee.org> from the original sources obtained from `ftp.csx.cam.ac.uk:/pub/software/programming/pcre`.

PCRE LICENCE

PCRE is a library of functions to support regular expressions whose syntax and semantics are as close as possible to those of the Perl 5 language.

Release 7 of PCRE is distributed under the terms of the "BSD" licence, as specified below. The documentation for PCRE, supplied in the "doc" directory, is distributed under the same terms as the software itself.

The basic library functions are written in C and are freestanding. Also included in the distribution is a set of C++ wrapper functions.

THE BASIC LIBRARY FUNCTIONS

Written by: Philip Hazel
Email local part: ph10
Email domain: cam.ac.uk

University of Cambridge Computing Service,
Cambridge, England.

Copyright (c) 1997-2007 University of Cambridge
All rights reserved.

THE C++ WRAPPER FUNCTIONS

Contributed by: Google Inc.

Copyright (c) 2007, Google Inc.
All rights reserved.

THE "BSD" LICENCE

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of the University of Cambridge nor the name of Google Inc. nor the names of their contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

End

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: mercurial

Source: <http://www.selenic.com/mercurial/>

Files: *

Copyright: 2005-2018, Matt Mackall <mpm@selenic.com> and others.

License: GPL-2+

Files: contrib/python-zstandard/*

Copyright: (c) 2016, Gregory Szorc

License:

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- .
- 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- .
- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- .
- 3. Neither the name of the copyright holder nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.
- .

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR

ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Files: mercurial/thirdparty/selectors2.py

Copyright: (c) 2017 Seth Michael Larson

License:

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Files: mercurial/thirdparty/attr/*

Copyright: (c) 2015 Hynek Schlawack

License:

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Files: mercurial/thirdparty/cbor/*

Copyright: (c) Alex Grnholm

License:

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Files: mercurial/thirdparty/concurrent/*

Copyright: 2009 Brian Quinlan

License:

PYTHON SOFTWARE FOUNDATION LICENSE VERSION 2

.

1. This LICENSE AGREEMENT is between the Python Software Foundation ("PSF"), and the Individual or Organization ("Licensee") accessing and otherwise using this software ("Python") in source or binary form and its associated documentation.

.

2. Subject to the terms and conditions of this License Agreement, PSF hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python alone or in any derivative version, provided, however, that PSF's License Agreement and PSF's notice of copyright, i.e., "Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006 Python Software Foundation; All Rights Reserved" are retained in Python alone or in any derivative version prepared by Licensee.

.

3. In the event Licensee prepares a derivative work that is based on or incorporates Python or any part thereof, and wants to make the derivative work available to others as provided herein, then

Licensee hereby agrees to include in any such work a brief summary of the changes made to Python.

.
4. PSF is making Python available to Licensee on an "AS IS" basis. PSF MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, PSF MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

.
5. PSF SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

.
6. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

.
7. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between PSF and Licensee. This License Agreement does not grant permission to use PSF trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party.

.
8. By copying, installing or otherwise using Python, Licensee agrees to be bound by the terms and conditions of this License Agreement.

Files: mercurial/thirdparty/xdiff/*

Copyright: (C) 2003 Davide Libenzi

License: LGPL-2.1+

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

.
This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

.
You should have received a copy of the GNU Lesser General Public License along with this library; if not, see
<<http://www.gnu.org/licenses/>>.

.
On Debian systems, the full text of the GNU Lesser General Public License version 2.1 can be found in the file
'/usr/share/common-licenses/LGPL-2.1'.

Files: mercurial/thirdparty/zope/*

Copyright: 2001-2006 Zope Foundation and Contributors.

License:

Zope Public License (ZPL) Version 2.1

.
A copyright notice accompanies this license document that identifies the copyright holders.

.
This license has been certified as open source. It has also been designated as GPL compatible by the Free Software Foundation (FSF).

.
Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

.
1. Redistributions in source code must retain the accompanying copyright notice, this list of conditions, and the following disclaimer.

.
2. Redistributions in binary form must reproduce the accompanying copyright notice, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution.

.
3. Names of the copyright holders must not be used to endorse or promote products derived from this software without prior written permission from the copyright holders.

.
4. The right to distribute this software or to use it for any purpose does not give you the right to use Servicemarks (sm) or Trademarks (tm) of the copyright holders. Use of them is covered by separate agreement with the copyright holders.

.
5. If any files are modified, you must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

.
Disclaimer

.
THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS ``AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Files: debian/*

Copyright: 2005-2010, Vincent Danjean <vdanjean@debian.org>

2011-2015, Javi Merino <vicho@debian.org>

2017 Tristan Seligmann <mithrandi@debian.org>

License: GPL-2+

License: GPL-2+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this package; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA

.

On Debian systems, the full text of the GNU General Public License version 2 can be found in the file

``usr/share/common-licenses/GPL-2'.`

This package was debianized by Ivo Timmermans <ivo@debian.org> on Sat, 15 Jun 2002 23:37:29 +0200.

Matthias Urlichs <smurf@debian.org>.

It is now maintained by Andreas Metzler <ametzler@debian.org>, Eric Dorland <eric@debian.org> and James Westby <jw+debian@jameswestby.net>

It was downloaded from <https://ftp.gnu.org/gnu/libtasn1/>

Upstream Authors: Fabio Fiorina <fiorinaf@gnutls.org>

Simon Josefsson <jas@extundo.com>

Nikos Mavrogiannopoulos <nmav@gnutls.org>

The library itself is licensed as LGPLv2.1+, the build system, test-suite and command-line tools (package libtasn1-bin) are GPLv3+.

Copyright (library):

/*

* Copyright (C) 2000-2020 Free Software Foundation, Inc.

*

* This file is part of LIBTASN1.
*
* The LIBTASN1 library is free software; you can redistribute it
* and/or modify it under the terms of the GNU Lesser General Public
* License as published by the Free Software Foundation; either
* version 2.1 of the License, or (at your option) any later version.
*
* This library is distributed in the hope that it will be useful, but
* WITHOUT ANY WARRANTY; without even the implied warranty of
* MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU
* Lesser General Public License for more details.
*
* You should have received a copy of the GNU Lesser General Public
* License along with this library; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
* 02110-1301, USA
*/

On Debian GNU/Linux systems, the complete text of the GNU Lesser
General Public License can be found in
`/usr/share/common-licenses/LGPL'; the text of the earliest applying version
of the license (2.1) can be found in `/usr/share/common-licenses/LGPL-2.1'.

Copyright (build system, test-suite and command-line tools):

* Copyright (C) 2000-2020 Free Software Foundation, Inc.
*
* This file is part of LIBTASN1.
*
* This program is free software: you can redistribute it and/or modify
* it under the terms of the GNU General Public License as published by
* the Free Software Foundation, either version 3 of the License, or
* (at your option) any later version.
*
* This program is distributed in the hope that it will be useful,
* but WITHOUT ANY WARRANTY; without even the implied warranty of
* MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
* GNU General Public License for more details.
*
* You should have received a copy of the GNU General Public License
* along with this program. If not, see <<http://www.gnu.org/licenses/>>.
*
*/

On Debian GNU/Linux systems, the complete text of the GNU General Public
License version 3 can be found in /usr/share/common-licenses/GPL-3.

The documentation is distributed under the terms of the GNU Free Documentation License (FDL 1.3):

Copyright (c) 2001-2020 Free Software Foundation, Inc.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled "GNU Free Documentation License".

On Debian systems a copy of the complete text of the GNU FDL 1.3 can be found in /usr/share/common-licenses/GFDL-1.3.

Apache Portable Runtime
Copyright (c) 2000-2019 The Apache Software Foundation.

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

Portions of this software were developed at the National Center for Supercomputing Applications (NCSA) at the University of Illinois at Urbana-Champaign.

This software contains code derived from the RSA Data Security Inc. MD5 Message-Digest Algorithm.

This software contains code derived from UNIX V7, Copyright(C) Caldera International Inc.
Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>
Upstream-Name: DejaVu fonts
Upstream-Author: Stepan Roh <src@users.sourceforge.net> (original author),
see /usr/share/doc/fonts-dejavu-core/AUTHORS for full list
Source: <https://dejavu-fonts.github.io/>

Files: *
Copyright: Copyright (c) 2003 by Bitstream, Inc. All Rights Reserved.
Bitstream Vera is a trademark of Bitstream, Inc.
DejaVu changes are in public domain.
License: bitstream-vera
Permission is hereby granted, free of charge, to any person obtaining a copy of the fonts accompanying this license ("Fonts") and associated documentation files (the "Font Software"), to reproduce and distribute the Font Software, including without limitation the rights to use, copy, merge, publish, distribute, and/or sell copies of the Font Software, and to permit persons to whom the Font Software is furnished to do so, subject to the following conditions:

.
The above copyright and trademark notices and this permission notice shall be included in all copies of one or more of the Font Software typefaces.

.
The Font Software may be modified, altered, or added to, and in particular the designs of glyphs or characters in the Fonts may be modified and additional glyphs or characters may be added to the Fonts, only if the fonts are renamed to names not containing either the words "Bitstream" or the word "Vera".

.
This License becomes null and void to the extent applicable to Fonts or Font Software that has been modified and is distributed under the "Bitstream Vera" names.

.
The Font Software may be sold as part of a larger software package but no copy of one or more of the Font Software typefaces may be sold by itself.

.
THE FONT SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF COPYRIGHT, PATENT, TRADEMARK, OR OTHER RIGHT. IN NO EVENT SHALL BITSTREAM OR THE GNOME FOUNDATION BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, INCLUDING ANY GENERAL, SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF THE USE OR INABILITY TO USE THE FONT SOFTWARE OR FROM OTHER DEALINGS IN THE FONT SOFTWARE.

.
Except as contained in this notice, the names of Gnome, the Gnome Foundation, and Bitstream Inc., shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Font Software without prior written authorization from the Gnome Foundation or Bitstream Inc., respectively. For further information, contact: fonts at gnome dot org.

Files: debian/*

Copyright: (C) 2005-2006 Peter Cernak <pce@users.sourceforge.net>

(C) 2006-2011 Davide Viti <zinosat@tiscali.it>

(C) 2011-2013 Christian Perrier <bubulle@debian.org>

(C) 2013 Fabian Greffrath <fabian+debian@greffrath.com>

License: GPL-2+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

.
This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied

warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this package; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA

On Debian systems, the full text of the GNU General Public License version 2 can be found in the file /usr/share/common-licenses/GPL-2'.

Apache Xerces v2.12.1

Apache Xerces Notice

<pre>

```
=====
== NOTICE file corresponding to section 4(d) of the Apache License, ==
== Version 2.0, in this case for the Apache Xerces Java distribution. ==
=====
```

Apache Xerces Java
Copyright 1999-2020 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

Portions of this software were originally based on the following:

- software copyright (c) 1999, IBM Corporation., <http://www.ibm.com>.
- software copyright (c) 1999, Sun Microsystems., <http://www.sun.com>.
- voluntary contributions made by Paul Eng on behalf of the Apache Software Foundation that were originally developed at iClick, Inc., software copyright (c) 1999.

</pre>

Apache 2.0 License

<pre>

```
        Apache License
        Version 2.0, January 2004
        http://www.apache.org/licenses/
```

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but

excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its

distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise,

unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

</pre>

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: editline

Upstream-Contact: Jess Thrysoee <jess@thrysoee.dk>

Files:

*

Copyright:

Copyright (c) 1992, 1993

The Regents of the University of California. All rights reserved.

.

This code is derived from software contributed to Berkeley by
Christos Zoulas of Cornell University.

License: BSD-3-clause

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions
are met:

1. Redistributions of source code must retain the above copyright
notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright
notice, this list of conditions and the following disclaimer in the
documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors
may be used to endorse or promote products derived from this software
without specific prior written permission.

.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND
ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE
FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
SUCH DAMAGE.

This is the Debian GNU/Linux prepackaged version of the `ss`
command-line interface parsing library. It is currently
distributed together with the EXT2 file system utilities, which are
otherwise packaged as "e2fsprogs".

This package was put together by Yann Dirson <dirson@debian.org>,
from sources obtained from a mirror of:
[tsx-11.mit.edu:/pub/linux/packages/ext2fs/](http://tsx-11.mit.edu/pub/linux/packages/ext2fs/)

From the original distribution:

Copyright 1987, 1988 by the Student Information Processing Board
of the Massachusetts Institute of Technology

Permission to use, copy, modify, and distribute this software
and its documentation for any purpose and without fee is
hereby granted, provided that the above copyright notice
appear in all copies and that both that copyright notice and
this permission notice appear in supporting documentation,
and that the names of M.I.T. and the M.I.T. S.I.P.B. not be
used in advertising or publicity pertaining to distribution
of the software without specific, written prior permission.
M.I.T. and the M.I.T. S.I.P.B. make no representations about
the suitability of this software for any purpose. It is
provided "as is" without express or implied warranty.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: base-passwd

Upstream-Contact: Colin Watson <cjwatson@debian.org>

Files: *

Copyright: Copyright 1999-2002 Wichert Akkerman <wichert@deephackmode.org>

Copyright 2002, 2003, 2004 Colin Watson <cjwatson@debian.org>

License: GPL-2

Files:

passwd.master

group.master

License: public-domain

Copyright: PD; Originally written by Ian Murdock <imurdock@debian.org> and

Bruce Perens <bruce@pixar.com>.

Files: doc/*

Copyright: Copyright 2001, 2002 Joey Hess

Copyright 2002, 2003, 2004, 2005, 2007 Colin Watson

Copyright 2007 David Mandelberg

License: GPL-2

License: GPL-2

On Debian and Debian-based systems, a copy of the GNU General Public

License version 2 is available in /usr/share/common-licenses/GPL-2.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: Zstd

Source: <https://github.com/facebook/zstd>

Files-Excluded: appveyor.yml

build/*

programs/windres/*

.travis.yml

.buckversion

.buckconfig

.circleci/*
.cirrus.yml

Files: *

Copyright: 2013-2018, Yann Collet

2016, Przemyslaw Skibinski

2016-2018, Facebook, Inc.

License: BSD-3-clause and GPL-2

Comment: Starting from 1.3.1 zstd's patent claim is removed

see: <https://github.com/facebook/zstd/pull/801>

Files: zlibWrapper/examples/*.c

Copyright: 1995-2006, 2011 Jean-loup Gailly

License: zlib

Files: zlibWrapper/gz*.c

Copyright: (C) 2004, 2005, 2010, 2011, 2012, 2013 Mark Adler

License: zlib

License: zlib

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

.

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgement in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

Files: lib/dictBuilder/divsufsort.*

Copyright: 2003-2008, Yuta Mori

License: Expat

Files: examples/*

Copyright: 2016-present, Yann Collet, Facebook, Inc.

License: BSD-3-clause and GPL-2

Files: debian/*

Copyright: 2015-2016 Kevin Murray <spam@kdmurray.id.au>

License: Expat

License: Expat

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

License: GPL-2

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License, v2, as published by the Free Software Foundation

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

.

On Debian systems, the complete text of the GNU General Public License version 2 can be found in `~/usr/share/common-licenses/GPL-2`.

License: BSD-3-clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of cereal nor the names of its contributors may be used to endorse or promote products

derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL RANDOLPH VOORHIES OR SHANE GRANT BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

PC/SC Lite v1.8.26

PC/SC Lite License

<pre>

Copyright (c) 1999-2003 David Corcoran <corcoran@linuxnet.com>

Copyright (c) 2001-2011 Ludovic Rousseau <ludovic.rousseau@free.fr>

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

Changes to this license can be made only by the copyright author with explicit written consent.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

</pre>

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: Apache Subversion

Source: <https://subversion.apache.org/download/>

Files: *

Copyright: Apache Software Foundation

2007 Max Bowsher

2005 Greg Stein

2007 David Glasser

License: Apache-2.0

Files: subversion/bindings/swig/python/tests/trac/*

Copyright: 2003, 2004, 2005 Edgewall Software

2003, 2004, 2005 Jonas Borgstrm <jonas@edgewall.com>

2005 Christopher Lenz <cmlenz@gmx.de>

License: BSD-3-clause or Apache-2.0

Files: subversion/libsvn_subr/utf_width.c

Copyright: 2007 Markus Kuhn

License: Utfwidth

Permission to use, copy, modify, and distribute this software for any purpose and without fee is hereby granted. The author disclaims all warranties with regard to this software.

Files: tools/dist/security/_gnupg.py

Copyright: 2008-2014 Vinay Sajip

License: BSD-3-clause

Files: debian/bin/svnwrap

debian/man/svnwrap.1

Copyright: 2006 Peter Samuelson

License: Svnwrap

Permission is granted to everyone to use and distribute this work, without limitation, modified or unmodified, in any way, for any purpose.

Files: debian/contrib/svn-clean

debian/contrib/svn_apply_autoprops.py

debian/contrib/emacs/psvn.el

debian/contrib/emacs/dsvn.el

Copyright: 2004, 2005, 2006 Simon Perreault

2005,2006 Blair Zajac <blair@orcaware.com>

2002-2009 Stefan Reichoer

2006-2010 Virtutech AB

2010 Intel

License: GPL-2+

Files: debian/bin/svn-bisect

debian/man/svn-bisect.1

Copyright: 2008,2009 by Robert Millan

2009 by Peter Samuelson

License: GPL-3+

Files: debian/contrib/svn_load_dirs/*

Copyright: 2002,2003,2004,2005,2006,2007,2009 Dolby. All rights reserved.

License: AFL-3

Files: subversion/libsvn_subr/utf8proc/*

Copyright: 2014-2015 Steven G. Johnson, Jiahao Chen, Tony Kelman, Jonas Fonseca, and other contributors listed in the git history

2009, 2013 Public Software Group e. V., Berlin, Germany

1991-2007 Unicode, Inc.

License: Expat and Unicode

Files: subversion/libsvn_subr/lz4/*

Copyright: 2011-2016, Yann Collet

License: BSD-2-clause

Files: subversion/libsvn_subr/x509.h

subversion/libsvn_subr/x509parse.c

Copyright: 2006-2008 Christophe Devine

2009 Paul Bakker <polarssl_maintainer at polarssl dot org>

License: BSD-3-clause

Files: tools/dev/svnmover/linenoise/*

Copyright: 2010-2013, Peter Noordhuis <pcnoordhuis at gmail dot com>

2010-2014, Salvatore Sanfilippo <anirez at gmail dot com>

License: BSD-2-clause

Files: build/ac-macros/ax_boost_base.m4

build/ac-macros/ax_boost_unit_test_framework.m4

Copyright: 2008 Thome Porschberg <thomas@randspringer.de>

2009 Peter Adolphs

License: BoostAcMacros

License: GPL-2+

On Debian systems, the complete text of the GPL version 2 license can be found in `~/usr/share/common-licenses/GPL-2`.

License: GPL-3+

On Debian systems, the complete text of the GPL version 3 license can be found in `~/usr/share/common-licenses/GPL-3`.

License: Apache-2.0

Licensed to the Apache Software Foundation (ASF) under one or more contributor license agreements. See the NOTICE file distributed with this work for additional information

regarding copyright ownership. The ASF licenses this file to you under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

License: BSD-3-clause

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the the documentation and/or other materials provided with the distribution.
3. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: BSD-2-clause

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

.
* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

.
* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

.
THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: Expat

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.
The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.
THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

License: Unicode

Permission is hereby granted, free of charge, to any person obtaining a copy of the Unicode data files and any associated documentation (the "Data Files") or Unicode software and any associated documentation (the "Software") to deal in the Data Files or Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Data Files or Software, and to permit persons to whom the Data Files or Software are furnished to do so, provided that (a) the above copyright notice(s) and this permission notice appear with all copies of the Data Files or Software, (b) both the

above copyright notice(s) and this permission notice appear in associated documentation, and (c) there is clear notice in each modified Data File or in the Software as well as in the documentation associated with the Data File(s) or Software that the data or software has been modified.

THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in these Data Files or Software without prior written authorization of the copyright holder.

Unicode and the Unicode logo are trademarks of Unicode, Inc., and may be registered in some jurisdictions. All other trademarks and registered trademarks mentioned herein are the property of their respective owners.

License: AFL-3

This Academic Free License (the "License") applies to any original work of authorship (the "Original Work") whose owner (the "Licensor") has placed the following licensing notice adjacent to the copyright notice for the Original Work:

Licensed under the Academic Free License version 3.0

- 1) Grant of Copyright License. Licensor grants You a worldwide, royalty-free, non-exclusive, sublicensable license, for the duration of the copyright, to do the following:
 - a) to reproduce the Original Work in copies, either alone or as part of a collective work;
 - b) to translate, adapt, alter, transform, modify, or arrange the Original Work, thereby creating derivative works ("Derivative Works") based upon the Original Work;
 - c) to distribute or communicate copies of the Original Work and Derivative Works to the public, under any license of your choice that does not contradict the terms and conditions, including Licensor's reserved rights and remedies, in this Academic Free License;
 - d) to perform the Original Work publicly; and
 - e) to display the Original Work publicly.

- 2) Grant of Patent License. Licensor grants You a worldwide, royalty-free, non- exclusive, sublicensable license, under patent claims owned or controlled by the Licensor that are embodied in the Original Work as furnished by the Licensor, for the duration of the patents, to make, use, sell, offer for sale, have made, and import the Original Work and Derivative Works.
- 3) Grant of Source Code License. The term "Source Code" means the preferred form of the Original Work for making modifications to it and all available documentation describing how to modify the Original Work. Licensor agrees to provide a machine-readable copy of the Source Code of the Original Work along with each copy of the Original Work that Licensor distributes. Licensor reserves the right to satisfy this obligation by placing a machine-readable copy of the Source Code in an information repository reasonably calculated to permit inexpensive and convenient access by You for as long as Licensor continues to distribute the Original Work.
- 4) Exclusions From License Grant. Neither the names of Licensor, nor the names of any contributors to the Original Work, nor any of their trademarks or service marks, may be used to endorse or promote products derived from this Original Work without express prior permission of the Licensor. Except as expressly stated herein, nothing in this License grants any license to Licensor's trademarks, copyrights, patents, trade secrets or any other intellectual property. No patent license is granted to make, use, sell, offer for sale, have made, or import embodiments of any patent claims other than the licensed claims defined in Section 2. No license is granted to the trademarks of Licensor even if such marks are included in the Original Work. Nothing in this License shall be interpreted to prohibit Licensor from licensing under terms different from this License any Original Work that Licensor otherwise would have a right to license.
- 5) External Deployment. The term "External Deployment" means the use, distribution, or communication of the Original Work or Derivative Works in any way such that the Original Work or Derivative Works may be used by anyone other than You, whether those works are distributed or communicated to those persons or made available as an application intended for use over a network. As an express condition for the grants of license hereunder, You must treat any External Deployment by You of the Original Work or a Derivative Work as a distribution under section 1(c).
- 6) Attribution Rights. You must retain, in the Source Code of any Derivative Works that You create, all copyright, patent, or trademark notices from the Source Code of the Original Work, as well as any notices of licensing and any descriptive text

identified therein as an "Attribution Notice." You must cause the Source Code for any Derivative Works that You create to carry a prominent Attribution Notice reasonably calculated to inform recipients that You have modified the Original Work.

7) Warranty of Provenance and Disclaimer of Warranty. Licensor warrants that the copyright in and to the Original Work and the patent rights granted herein by Licensor are owned by the Licensor or are sublicensed to You under the terms of this License with the permission of the contributor(s) of those copyrights and patent rights. Except as expressly stated in the immediately preceding sentence, the Original Work is provided under this License on an "AS IS" BASIS and WITHOUT WARRANTY, either express or implied, including, without limitation, the warranties of non-infringement, merchantability or fitness for a particular purpose. THE ENTIRE RISK AS TO THE QUALITY OF THE ORIGINAL WORK IS WITH YOU. This DISCLAIMER OF WARRANTY constitutes an essential part of this License. No license to the Original Work is granted by this License except under this disclaimer.

8) Limitation of Liability. Under no circumstances and under no legal theory, whether in tort (including negligence), contract, or otherwise, shall the Licensor be liable to anyone for any indirect, special, incidental, or consequential damages of any character arising as a result of this License or the use of the Original Work including, without limitation, damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses. This limitation of liability shall not apply to the extent applicable law prohibits such limitation.

9) Acceptance and Termination. If, at any time, You expressly assented to this License, that assent indicates your clear and irrevocable acceptance of this License and all of its terms and conditions. If You distribute or communicate copies of the Original Work or a Derivative Work, You must make a reasonable effort under the circumstances to obtain the express assent of recipients to the terms of this License. This License conditions your rights to undertake the activities listed in Section 1, including your right to create Derivative Works based upon the Original Work, and doing so without honoring these terms and conditions is prohibited by copyright law and international treaty. Nothing in this License is intended to affect copyright exceptions and limitations (including "fair use" or "fair dealing"). This License shall terminate immediately and You may no longer exercise any of the rights granted to You by this License upon your failure to honor the conditions in Section 1(c).

- 10) Termination for Patent Action. This License shall terminate automatically and You may no longer exercise any of the rights granted to You by this License as of the date You commence an action, including a cross-claim or counterclaim, against Licensor or any licensee alleging that the Original Work infringes a patent. This termination provision shall not apply for an action alleging patent infringement by combinations of the Original Work with other software or hardware.
- 11) Jurisdiction, Venue and Governing Law. Any action or suit relating to this License may be brought only in the courts of a jurisdiction wherein the Licensor resides or in which Licensor conducts its primary business, and under the laws of that jurisdiction excluding its conflict-of-law provisions. The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded. Any use of the Original Work outside the scope of this License or after its termination shall be subject to the requirements and penalties of copyright or patent law in the appropriate jurisdiction. This section shall survive the termination of this License.
- 12) Attorneys' Fees. In any action to enforce the terms of this License or seeking damages relating thereto, the prevailing party shall be entitled to recover its costs and expenses, including, without limitation, reasonable attorneys' fees and costs incurred in connection with such action, including any appeal of such action. This section shall survive the termination of this License.
- 13) Miscellaneous. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable.
- 14) Definition of "You" in This License. "You" throughout this License, whether in upper or lower case, means an individual or a legal entity exercising rights under, and complying with all of the terms of, this License. For legal entities, "You" includes any entity that controls, is controlled by, or is under common control with you. For purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.
- 15) Right to Use. You may use the Original Work in all ways not otherwise restricted or conditioned by this License or by law, and Licensor promises not to interfere with or be responsible for such uses by You.

16) Modification of This License. This License is Copyright 2005 Lawrence Rosen. Permission is granted to copy, distribute, or communicate this License without modification. Nothing in this License permits You to modify this License as applied to the Original Work or to Derivative Works. However, You may modify the text of this License and copy, distribute or communicate your modified version (the "Modified License") and apply it to other original works of authorship subject to the following conditions: (i) You may not indicate in any way that your Modified License is the "Academic Free License" or "AFL" and you may not use those names in the name of your Modified License; (ii) You must replace the notice specified in the first paragraph above with the notice "Licensed under <insert your license name here>" or with a notice of your own that is not confusingly similar to the notice in this License; and (iii) You may not claim that your original works are open source software unless your Modified License has been approved by Open Source Initiative (OSI) and You comply with its license review and certification process.

License: BoostAcMacros

Copying and distribution of this file, with or without modification, are permitted in any medium without royalty provided the copyright notice and this notice are preserved. This file is offered as-is, without any warranty.

Independent JPEG Group: JPEG release 6b

JPEG License

<pre>

Must reproduce following license in documentation and/or other materials provided with distribution:

The authors make NO WARRANTY or representation, either express or implied, with respect to this software, its quality, accuracy, merchantability, or fitness for a particular purpose. This software is provided "AS IS", and you, its user, assume the entire risk as to its quality and accuracy.

This software is copyright (C) 1991-1998, Thomas G. Lane.
All Rights Reserved except as specified below.

Permission is hereby granted to use, copy, modify, and distribute this software (or portions thereof) for any purpose, without fee, subject to these conditions:

(1) If any part of the source code for this software is distributed, then this README file must be included, with this copyright and no-warranty notice unaltered; and any additions, deletions, or changes to the original

files must be clearly indicated in accompanying documentation.

(2) If only executable code is distributed, then the accompanying documentation must state that "this software is based in part on the work of the Independent JPEG Group".

(3) Permission for use of this software is granted only if the user accepts full responsibility for any undesirable consequences; the authors accept NO LIABILITY for damages of any kind.

These conditions apply to any software derived from or based on the IJG code, not just to the unmodified library. If you use our work, you ought to acknowledge us.

Permission is NOT granted for the use of any IJG author's name or company name in advertising or publicity relating to this software or products derived from it. This software may be referred to only as "the Independent JPEG Group's software".

We specifically permit and encourage the use of this software as the basis of commercial products, provided that all warranty or liability claims are assumed by the product vendor.

ansi2knr.c is included in this distribution by permission of L. Peter Deutsch, sole proprietor of its copyright holder, Aladdin Enterprises of Menlo Park, CA. ansi2knr.c is NOT covered by the above copyright and conditions, but instead by the usual distribution terms of the Free Software Foundation; principally, that you must include source code if you redistribute it. (See the file ansi2knr.c for full details.) However, since ansi2knr.c is not needed as part of any program generated from the IJG code, this does not limit you more than the foregoing paragraphs do.

The Unix configuration script "configure" was produced with GNU Autoconf. It is copyright by the Free Software Foundation but is freely distributable. The same holds for its supporting scripts (config.guess, config.sub, ltconfig, ltmain.sh). Another support script, install-sh, is copyright by M.I.T. but is also freely distributable.

It appears that the arithmetic coding option of the JPEG spec is covered by patents owned by IBM, AT&T, and Mitsubishi. Hence arithmetic coding cannot legally be used without obtaining one or more licenses. For this reason, support for arithmetic coding has been removed from the free JPEG software. (Since arithmetic coding provides only a marginal gain over the unpatented Huffman mode, it is unlikely that very many implementations will support it.) So far as we are aware, there are no patent restrictions on the remaining code.

The IJG distribution formerly included code to read and write GIF files. To avoid entanglement with the Unisys LZW patent, GIF reading support has been removed altogether, and the GIF writer has been simplified to produce "uncompressed GIFs". This technique does not use the LZW algorithm; the resulting GIF files are larger than usual, but are readable by all standard GIF decoders.

We are required to state that "The Graphics Interchange Format(c) is the Copyright property of CompuServe Incorporated. GIF(sm) is a Service Mark property of CompuServe Incorporated."

</pre>

Format: <http://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: Cyrus SASL

Source: <ftp://ftp.cyrusimap.org/cyrus-sasl/>

Files-Excluded: dlcompat-20010505

doc/rfc*

doc/draft*

Files: *

Copyright: 1998-2003, Carnegie Mellon University

License: BSD-4-clause

Files: debian/*

Copyright: 2002-2004, Dima Barsky <dima@debian.org>

2006-2009, Fabian Fagerholm <fabbe@debian.org>

2006-2011, 2014, Roberto C. Sanchez <roberto@connexer.com>

2015-2016 Ondrej Sur <ondrej@debian.org>

License: GPL-3+

Files: debian/saslfinger/*

Copyright: 2004, Patrick Koetter <p@state-of-mind.de>

License: GPL-3+

Comment: The saslfinger utility was downloaded from

<http://postfix.state-of-mind.de/patrick.koetter/saslfinger/>

Files: debian/gen-auth/*

Copyright: 2002-2006, John Jetmore <jj33@pobox.com>

License: GPL-3+

Comment: The gen-auth utility was downloaded from

<http://jetmore.org/john/code/gen-auth>

License: GPL-3+

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

On Debian systems, the full text of the GNU General Public License version 3 can be found in the file ``/usr/share/common-licenses/GPL-3'`.

License: BSD-4-clause

/*

* Copyright (c) 1998-2003 Carnegie Mellon University. All rights reserved.

*

* Redistribution and use in source and binary forms, with or without
* modification, are permitted provided that the following conditions
* are met:

*

* 1. Redistributions of source code must retain the above copyright
* notice, this list of conditions and the following disclaimer.

*

* 2. Redistributions in binary form must reproduce the above copyright
* notice, this list of conditions and the following disclaimer in
* the documentation and/or other materials provided with the
* distribution.

*

* 3. The name "Carnegie Mellon University" must not be used to
* endorse or promote products derived from this software without
* prior written permission. For permission or any other legal
* details, please contact

* Office of Technology Transfer

* Carnegie Mellon University

* 5000 Forbes Avenue

* Pittsburgh, PA 15213-3890

* (412) 268-4387, fax: (412) 268-7395

* tech-transfer@andrew.cmu.edu

*

* 4. Redistributions of any form whatsoever must retain the following
* acknowledgment:

* "This product includes software developed by Computing Services
* at Carnegie Mellon University (<http://www.cmu.edu/computing/>)."

*

* CARNEGIE MELLON UNIVERSITY DISCLAIMS ALL WARRANTIES WITH REGARD TO
* THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY
* AND FITNESS, IN NO EVENT SHALL CARNEGIE MELLON UNIVERSITY BE LIABLE
* FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES
* WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN

* AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING
* OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

*/

DOM Level 3 Core Specification v1.0

W3C License

<pre>

W3C SOFTWARE NOTICE AND LICENSE

<http://www.w3.org/Consortium/Legal/2002/copyright-software-20021231>

This work (and included software, documentation such as READMEs, or other related items) is being provided by the copyright holders under the following license. By obtaining, using and/or copying this work, you (the licensee) agree that you have read, understood, and will comply with the following terms and conditions.

Permission to copy, modify, and distribute this software and its documentation, with or without modification, for any purpose and without fee or royalty is hereby granted, provided that you include the following on ALL copies of the software and documentation or portions thereof, including modifications:

- 1.The full text of this NOTICE in a location viewable to users of the redistributed or derivative work.
- 2.Any pre-existing intellectual property disclaimers, notices, or terms and conditions. If none exist, the W3C Software Short Notice should be included (hypertext is preferred, text is permitted) within the body of any redistributed or derivative code.
- 3.Notice of any changes or modifications to the files, including the date changes were made. (We recommend you provide URIs to the location from which the code is derived.)

THIS SOFTWARE AND DOCUMENTATION IS PROVIDED "AS IS," AND COPYRIGHT HOLDERS MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE OR DOCUMENTATION WILL NOT INFRINGE ANY THIRD PARTY PATENTS,COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS.

COPYRIGHT HOLDERS WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THE SOFTWARE OR DOCUMENTATION. The name and trademarks of copyright holders may NOT be used in advertising or publicity pertaining to the software without specific, written prior permission. Title to copyright in this software and any associated documentation will at all times remain with copyright holders.

This formulation of W3C's notice and license became active on December 31 2002. This version removes the copyright ownership notice such that this license can be used with materials other than those owned by the W3C, reflects that ERCIM is now a host of the W3C, includes references to this specific dated version of the license, and removes the ambiguous grant of "use". Otherwise, this version is the same as the previous version and is written so as to preserve the Free Software Foundation's assessment of GPL compatibility and OSI's certification under the Open Source Definition. Please see our Copyright FAQ for common questions about using materials from our site, including specific terms and conditions for packages like libwww, Amaya, and Jigsaw. Other questions about this notice can be directed to site-policy@w3.org.

</pre>

This is the Debian prepackaged version of the GNU diffutils package. GNU `diff` was written by Mike Haertel, David Hayes, Richard Stallman, Len Tower, and Paul Eggert. Wayne Davison designed and implemented the unified output format. GNU `diff3` was written by Randy Smith. GNU `sdiff` was written by Thomas Lord. GNU `cmp` was written by Torbjorn Granlund and David MacKenzie.

The source for this release was obtained from

<https://ftp.gnu.org/gnu/diffutils/diffutils-3.7.tar.xz>

Program copyright and license:

=====

Copyright (C) 1988-1996, 1998, 2001-2002, 2004, 2006-2007, 2009-2013, 2015-2018
Free Software Foundation, Inc.

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

On Debian systems, the complete text of the GNU General Public License may be found in `/usr/share/common-licenses/GPL`.

Manual copyright and license:

=====

Copyright (C) 1992-1994, 1998, 2001-2002, 2004, 2006, 2009-2018 Free Software Foundation, Inc.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts.

On Debian systems, the complete text of the GNU Free Documentation License may be found in `/usr/share/common-licenses/GFDL`.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Files:

*

Copyright:

Copyright 2000-2007 Silicon Graphics, Inc.

Copyright 2001-2003,2006-2007,2009 Andreas Gruenbacher

License: GPL-2+

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 2 of the License, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this program. If not, see [<https://www.gnu.org/licenses/>](https://www.gnu.org/licenses/).

Comment:

On Debian systems, the full text of the GNU General Public License can be found in `/usr/share/common-licenses/GPL-2`.

Files:

include/*.h

libattr/*.c

libmisc/*.c

Copyright:

Copyright 2001-2005 Silicon Graphics, Inc.

Copyright 2002,2003,2006-2007,2009 Andreas Gruenbacher

License: LGPL-2+

This program is free software: you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation, either version 2.1 of the License, or

(at your option) any later version.

This program is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License
along with this program. If not, see <<https://www.gnu.org/licenses/>>.

Comment:

On Debian systems, the full text of the GNU Lesser General Public License
can be found in '/usr/share/common-licenses/LGPL-2.1'.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: Expat

Upstream-Contact: Sebastian Pipping <sebastian@pipping.org>

Source: <https://github.com/libexpat/libexpat>

Copyright: Copyright (C) Expat maintainers

Files: *

Copyright:

Copyright (C) 1998-2000 Thai Open Source Software Center Ltd and Clark Cooper

Copyright (C) 2001-2017 Expat maintainers

License: MIT

Files: debian/*

Copyright:

Copyright (C) 1998-2000 Adam Di Carlo <aph@debian.org>

Copyright (C) 2000-2007 Ardo van Rangelrooij <ardo@debian.org>

Copyright (C) 2008-2009 Daniel Leidert (dale) <daniel.leidert@wgdd.de>

Copyright (C) 2013- Laszlo Boszormenyi (GCS) <gcs@debian.org>

License: MIT

License: MIT

Permission is hereby granted, free of charge, to any person obtaining a copy
of this software and associated documentation files (the "Software"), to
deal in the Software without restriction, including without limitation the
rights to use, copy, modify, merge, publish, distribute, sublicense, and/or
sell copies of the Software, and to permit persons to whom the Software is
furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in
all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR
IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,
FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE
AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER
LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING

FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS
IN THE SOFTWARE.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Source: <https://metacpan.org/release/Error>

Upstream-Contact: Shlomi Fish <shlomif@iglu.org.il>

Upstream-Name: Error

Files: *

Copyright: 1997-1998, Graham Barr <gbarr@pobox.com>

2020, Shlomi Fish <https://www.shlomifish.org/>

License: Artistic or GPL-1+

Comment:

Based on my original Error.pm, and Exceptions.pm by Peter Seibel
<peter@weblogic.com> and adapted by Jesse Glick <jglick@sig.bsh.com>.

but modified ***significantly***

Files: lib/Error/Simple.pm

Copyright: 2006, Shlomi Fish <shlomif@iglu.org.il>

License: MIT/X11

Files: debian/*

Copyright: 1999, 2000, 2001, 2002, 2003, Paolo Molaro <lupus@debian.org>

2003, 2004, 2005, Luk Claes <luk@debian.org>

2003, Ardo van Rangelrooij <ardo@debian.org>

2005, 2007, Clint Burfoot <clint@burfoot.info>

2013, CSILLAG Tamas <cstamas@cstamas.hu>

2015-2020, gregor herrmann <gregoa@debian.org>

License: Artistic or GPL-1+

License: Artistic

This program is free software; you can redistribute it and/or modify
it under the terms of the Artistic License, which comes with Perl.

.

On Debian systems, the complete text of the Artistic License can be
found in ``usr/share/common-licenses/Artistic'`.

License: GPL-1+

This program is free software; you can redistribute it and/or modify
it under the terms of the GNU General Public License as published by
the Free Software Foundation; either version 1, or (at your option)
any later version.

.

On Debian systems, the complete text of version 1 of the GNU General
Public License can be found in ``usr/share/common-licenses/GPL-1'`.

License: MIT/X11

Permission is hereby granted, free of charge, to any person obtaining a copy

of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE X CONSORTIUM BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Files: *

Copyright: 1999-2010 Joey Hess <joeyh@debian.org>
2003 Tomohiro KUBOTA <kubota@debian.org>
2004-2010 Colin Watson <cjwatson@debian.org>

License: BSD-2-clause

Files: Debconf/FrontEnd/Passthrough.pm

Copyright: 2000 Randolph Chung <tausq@debian.org>
2000-2010 Joey Hess <joeyh@debian.org>
2005-2010 Colin Watson <cjwatson@debian.org>

License: BSD-2-clause

Files: Debconf/FrontEnd/Qt* Debconf/Element/Qt*

Copyright: 2003 Peter Rockai <mornfall@logisys.dyndns.org>
2003-2010 Colin Watson <cjwatson@debian.org>
2010 Sune Vuorela <sune@debian.org>
2011 Modestas Vainius <modax@debian.org>

License: BSD-2-clause

Files: Debconf/FrontEnd/Kde.pm

Copyright: 2011 Modestas Vainius <modax@debian.org>

License: BSD-2-clause

Files: Debconf/FrontEnd/Gnome.pm

Copyright: Eric Gillespie <epg@debian.org>

License: BSD-2-clause

Files: Debconf/DbDriver/LDAP.pm

Copyright: Matthew Palmer <mjp16@ieee.uow.edu.au>

License: BSD-2-clause

Files: debconf.py
Copyright: 2002 Moshe Zadka <m@moshez.org>
2005 Canonical Ltd.
2005-2010 Colin Watson <cjwatson@debian.org>
License: BSD-2-clause

Files: debconf-show
Copyright: 2001-2010 Joey Hess <joeyh@debian.org>
2003 Sylvain Ferriol <sylvain.ferriol@imag.fr>
License: BSD-2-clause

Files: debconf-get-selections debconf-set-selections
Copyright: 2003 Petter Reinholdtsen <pere@hungry.com>
License: BSD-2-clause

Files: Test/*
Copyright: 2005 Sylvain Ferriol <Sylvain.Ferriol@imag.fr>
License: BSD-2-clause

Files: debconf-apt-progress
Copyright: 2005-2010 Colin Watson <cjwatson@debian.org>
2005-2010 Joey Hess <joeyh@debian.org>
License: BSD-2-clause

License: BSD-2-clause
Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions
are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

.
THIS SOFTWARE IS PROVIDED BY AUTHORS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHORS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

GNU GENERAL PUBLIC LICENSE
Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. <<http://fsf.org/>>

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The GNU General Public License is a free, copyleft license for software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

Developers that use the GNU GPL protect your rights with two steps: (1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer

can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS

0. Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations.

To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To "convey" a work means any kind of propagation that enables other

parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users

can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

2. Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. The output from running a covered work is covered by this License only if the output, given its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law.

You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for you, or provide you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you.

Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing is not allowed; section 10 makes it unnecessary.

3. Protecting Users' Legal Rights From Anti-Circumvention Law.

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

5. Conveying Modified Source Versions.

You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

- a) The work must carry prominent notices stating that you modified it, and giving a relevant date.
- b) The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement modifies the requirement in section 4 to "keep intact all notices".
- c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.
- d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an "aggregate" if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

- a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.
- b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.
- c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.
- d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.
- e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.

A "User Product" is either (1) a "consumer product", which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, "normally used" refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

"Installation Information" for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in

source code form), and must require no special password or key for unpacking, reading or copying.

7. Additional Terms.

"Additional permissions" are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission.

Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

- a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or
- b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or
- c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or
- d) Limiting the use for publicity purposes of names of licensors or authors of the material; or
- e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or
- f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on those licensors and authors.

All other non-permissive additional terms are considered "further restrictions" within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains a further restriction but permits relicensing or conveying under this License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying.

If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

8. Termination.

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

9. Acceptance Not Required for Having Copies.

You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

10. Automatic Licensing of Downstream Recipients.

Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License.

An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity transaction, each party to that transaction who receives a copy of the work also receives whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts.

You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and you may not initiate litigation (including a cross-claim or counterclaim in a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it.

11. Patents.

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, "control" includes the right to grant

patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version.

In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory patent license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily

for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

12. No Surrender of Others' Freedom.

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

13. Use with the GNU Affero General Public License.

Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU Affero General Public License into a single combined work, and to convey the resulting work. The terms of this License will continue to apply to the part which is the covered work, but the special requirements of the GNU Affero General Public License, section 13, concerning interaction through a network will apply to the combination as such.

14. Revised Versions of this License.

The Free Software Foundation may publish revised and/or new versions of the GNU General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies that a certain numbered version of the GNU General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the GNU General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future

versions of the GNU General Public License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Program.

Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

15. Disclaimer of Warranty.

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

17. Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <http://www.gnu.org/licenses/>.

Also add information on how to contact you by electronic and paper mail.

If the program does terminal interaction, make it output a short notice like this when it starts in an interactive mode:

```
<program> Copyright (C) <year> <name of author>  
This program comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, your program's commands might be different; for a GUI interface, you would use an "about box".

You should also get your employer (if you work as a programmer) or school, if any, to sign a "copyright disclaimer" for the program, if necessary. For more information on this, and how to apply and follow the GNU GPL, see <http://www.gnu.org/licenses/>.

The GNU General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License. But first, please read <http://www.gnu.org/philosophy/why-not-lgpl.html>.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: utf8proc

Source: <https://github.com/JuliaStrings/utf8proc>

Files: *

Copyright: 2009, 2013 Public Software Group e. V., Berlin, Germany

2014-2018 Steven G. Johnson, Jiahao Chen, Tony Kelman,

Jonas Fonseca, and other contributors

License: Expat

Files: data/data_generator.rb

Copyright: 2009 Public Software Group e. V., Berlin, Germany

2018 Steven G. Johnson, Tony Kelman, Keno Fischer,

Benito van der Zander, Michal Meyer, and other contributors

1991-2007 Unicode, Inc.

License: Expat and Unicode

Files: utf8proc_data.c

Copyright: 1991-2007 Unicode, Inc.

License: Unicode

Files: debian/*

Copyright: 2015-2016 Peter Colberg <peter@colberg.org>

2017-2018 Graham Inggs <ginggs@debian.org>

2019-2020 Mo Zhou <lumin@debian.org>

License: Expat

License: Expat

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

License: Unicode

Permission is hereby granted, free of charge, to any person obtaining a copy of the Unicode data files and any associated documentation (the "Data Files") or Unicode software and any associated documentation (the "Software") to deal in the Data Files or Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Data Files or Software, and to permit persons to whom the Data Files or Software are furnished to do so, provided that (a) the above copyright notice(s) and this permission notice appear with all copies of the Data Files or Software, (b) both the above copyright notice(s) and this permission notice appear in associated documentation, and (c) there is clear notice in each modified Data File or in the Software as well as in the documentation associated with the Data File(s) or Software that the data or software has been modified.

THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in these Data Files or Software without prior written authorization of the copyright holder.

Mesa 3-D Graphics Library v21.0.3

Mesa License

...

Copyright (C) 1999-2007 Brian Paul All Rights Reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. IN NO EVENT SHALL

THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Attention, Contributors

When contributing to the Mesa project you must agree to the licensing terms of the component to which you're contributing.

The following section lists the primary components of the Mesa distribution and their respective licenses.

Mesa Component Licenses

| Component | Location | License |
|----------------|--------------------|----------------|
| ----- | | |
| Main Mesa code | src/mesa/ | MIT |
| Device drivers | src/mesa/drivers/* | MIT, generally |
| Gallium code | src/gallium/ | MIT |
| Ext headers | GL/gltext.h | Khronos |
| | GL/gltext.h | Khronos |
| | GL/wglext.h | Khronos |
| | KHR/khrplatform.h | Khronos |

include/GL/gl.h :

Mesa 3-D graphics library

Copyright (C) 1999-2006 Brian Paul All Rights Reserved.

Copyright (C) 2009 VMware, Inc. All Rights Reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

```
include/GL/glex.h
include/GL/glxext.h
include/GL/wglxext.h :
```

Copyright (c) 2013 - 2018 The Khronos Group Inc.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and/or associated documentation files (the "Materials"), to deal in the Materials without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Materials, and to permit persons to whom the Materials are furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Materials.

THE MATERIALS ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE MATERIALS OR THE USE OR OTHER DEALINGS IN THE MATERIALS.

```
include/KHR/khrplatform.h :
```

Copyright (c) 2008 - 2018 The Khronos Group Inc.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and/or associated documentation files (the "Materials"), to deal in the Materials without restriction, including without limitation the rights to use, copy, modify, merge, publish,

distribute, sublicense, and/or sell copies of the Materials, and to permit persons to whom the Materials are furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Materials.

THE MATERIALS ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE MATERIALS OR THE USE OR OTHER DEALINGS IN THE MATERIALS.

Little Color Management System (LCMS) v2.12

LCMS License

<pre>

Little Color Management System
Copyright (c) 1998-2020 Marti Maria Saguer

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

</pre>

Format: <http://svn.debian.org/wsvn/dep/web/deps/dep5.mdwn?op=file&rev=202>

Upstream-Name: libunistring

Upstream-Contact: Bruno Haible <bruno@clisp.org>

Source: <http://ftp.gnu.org/gnu/libunistring/>

Files: *

Copyright: 1995-2017 Free Software Foundation, Inc.

License: LGPL-3+ or GPL-2+

Files: gnulib-m4/* m4/*.m4

Copyright: 1995-2017 Free Software Foundation, Inc.

License: FreeSoftware

This file is free software; the Free Software Foundation gives unlimited permission to copy and/or distribute it, with or without modifications, as long as this notice is preserved.

Files: m4/init-package-version.m4

build-aux/ltmain.sh

Copyright: 1992-2009, Free Software Foundation, Inc.

License: GPL-2+ with distribution exception

This file is free software, distributed under the terms of the GNU General Public License. As a special exception to the GNU General Public License, this file may be distributed as part of a program that contains a configuration script generated by Autoconf, under the same distribution terms as the rest of that program.

Files: doc/*

Copyright: 2001-2017 Free Software Foundation, Inc.

License: GPL-3+ or GFDL-1.2+

Files: tests/* woe32dll/* autogen.sh

Copyright: 1990-2017 Free Software Foundation, Inc.

License: GPL-3+

Files: build-aux/*

Copyright: 1995-2017 Free Software Foundation, Inc.

License: GPL-2+

Files: build-aux/texi2html

Copyright: 1999-2005 Patrice Dumas <dumas@centre-cired.fr>,

1999-2005 Derek Price <derek@ximbiot.com>,

1999-2005 Adrian Aichner <adrian@xemacs.org>

License: GPL-2+

Files: build-aux/install-sh

Copyright: 1994, X Consortium

License: MIT

Files: debian/*

Copyright: 2009-2011 Andreas Rottmann <rotty@debian.org>

2017-2020 Jrg Frings-Frst <debian@jff.email>

License: GPL-3+

License: LGPL-3+

This program is free software: you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 3 of the License, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

.

You should have received a copy of the GNU Lesser General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

.

On Debian systems the full text of the GNU Lesser General Public License version 3 can be found in the file `~/usr/share/common-licenses/LGPL-3'`.

License: GPL-3+

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3 of the License, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

.

On Debian systems the full text of the GNU General Public License version 3 can be found in the file `~/usr/share/common-licenses/GPL-3'`.

License: GPL-2+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.
You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

.
On Debian systems the full text of the GNU General Public License version 2 can be found in the file
`/usr/share/common-licenses/GPL-2'.

License: GFDL-1.2+

This manual is covered by the GNU FDL. Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License (FDL), either version 1.2 of the License, or (at your option) any later version published by the Free Software Foundation (FSF); with no Invariant Sections, with no Front-Cover Text, and with no Back-Cover Texts.

.
On Debian systems the full text of the GNU Free Documentation License version 1.2 can be found in the file
`/usr/share/common-licenses/GFDL-1.2'.

License: MIT

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.
The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.
THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE X CONSORTIUM BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

.
Except as contained in this notice, the name of the X Consortium shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from the X Consortium.

This package was debianized by Clint Adams <schizo@debian.org> on
Wed, 25 Jul 2007 20:37:51 +0700

It was downloaded from

Copyright and license:

The following is the license that applies to this copy of the Berkeley DB software. For a license to use the Berkeley DB software under conditions other than those described here, or to purchase support for this software, please contact Oracle at berkeleydb-info_us@oracle.com.

/*

* Copyright (c) 1990, 2010 Oracle and/or its affiliates. All rights reserved.

*

* Redistribution and use in source and binary forms, with or without
* modification, are permitted provided that the following conditions
* are met:

- * 1. Redistributions of source code must retain the above copyright
* notice, this list of conditions and the following disclaimer.
- * 2. Redistributions in binary form must reproduce the above copyright
* notice, this list of conditions and the following disclaimer in the
* documentation and/or other materials provided with the distribution.
- * 3. Redistributions in any form must be accompanied by information on
* how to obtain complete source code for the DB software and any
* accompanying software that uses the DB software. The source code
* must either be included in the distribution or be available for no
* more than the cost of distribution plus a nominal fee, and must be
* freely redistributable under reasonable conditions. For an
* executable file, complete source code means the source code for all
* modules it contains. It does not include source code for modules or
* files that typically accompany the major components of the operating
* system on which the executable file runs.

*

* THIS SOFTWARE IS PROVIDED BY ORACLE ``AS IS" AND ANY EXPRESS OR
* IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED
* WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR
* NON-INFRINGEMENT, ARE DISCLAIMED. IN NO EVENT SHALL ORACLE BE LIABLE
* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR
* CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF
* SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR
* BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY,
* WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE
* OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN
* IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

*/

/*

* Copyright (c) 1990, 1993, 1994, 1995

* The Regents of the University of California. All rights reserved.

*

- * Redistribution and use in source and binary forms, with or without
- * modification, are permitted provided that the following conditions
- * are met:
- * 1. Redistributions of source code must retain the above copyright
- * notice, this list of conditions and the following disclaimer.
- * 2. Redistributions in binary form must reproduce the above copyright
- * notice, this list of conditions and the following disclaimer in the
- * documentation and/or other materials provided with the distribution.
- * 3. Neither the name of the University nor the names of its contributors
- * may be used to endorse or promote products derived from this software
- * without specific prior written permission.

*

* THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND
* ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
* ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE
* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
* SUCH DAMAGE.

*/

/*

* Copyright (c) 1995, 1996
* The President and Fellows of Harvard University. All rights reserved.

*

- * Redistribution and use in source and binary forms, with or without
- * modification, are permitted provided that the following conditions
- * are met:
- * 1. Redistributions of source code must retain the above copyright
- * notice, this list of conditions and the following disclaimer.
- * 2. Redistributions in binary form must reproduce the above copyright
- * notice, this list of conditions and the following disclaimer in the
- * documentation and/or other materials provided with the distribution.
- * 3. Neither the name of the University nor the names of its contributors
- * may be used to endorse or promote products derived from this software
- * without specific prior written permission.

*

* THIS SOFTWARE IS PROVIDED BY HARVARD AND ITS CONTRIBUTORS ``AS IS" AND
* ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
* ARE DISCLAIMED. IN NO EVENT SHALL HARVARD OR ITS CONTRIBUTORS BE LIABLE
* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT

* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
* SUCH DAMAGE.

*/

/**

* ASM: a very small and fast Java bytecode manipulation framework

* Copyright (c) 2000-2005 INRIA, France Telecom

* All rights reserved.

*

* Redistribution and use in source and binary forms, with or without

* modification, are permitted provided that the following conditions

* are met:

* 1. Redistributions of source code must retain the above copyright

* notice, this list of conditions and the following disclaimer.

* 2. Redistributions in binary form must reproduce the above copyright

* notice, this list of conditions and the following disclaimer in the

* documentation and/or other materials provided with the distribution.

* 3. Neither the name of the copyright holders nor the names of its

* contributors may be used to endorse or promote products derived from

* this software without specific prior written permission.

*

* THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS"

* AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE

* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE

* ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE

* LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR

* CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF

* SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS

* INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN

* CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)

* ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF

* THE POSSIBILITY OF SUCH DAMAGE.

*/

ASM Bytecode Manipulation Framework v6.0

ASM License

<pre>

Copyright (c) 2000-2011 France Telecom

All rights reserved.

Redistribution and use in source and binary forms, with or without

modification, are permitted provided that the following conditions

are met:

1. Redistributions of source code must retain the above copyright

notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the copyright holders nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

</pre>

The Unicode Standard, Unicode Character Database, Version 10.0.0

Unicode Character Database

...

UNICODE, INC. LICENSE AGREEMENT - DATA FILES AND SOFTWARE

Unicode Data Files include all data files under the directories

<http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>,

<http://www.unicode.org/cldr/data/>,

<http://source.icu-project.org/repos/icu/>, and

<http://www.unicode.org/utility/trac/browser/>.

Unicode Data Files do not include PDF online code charts under the directory <http://www.unicode.org/Public/>.

Software includes any source code published in the Unicode Standard or under the directories

<http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>,

<http://www.unicode.org/cldr/data/>,

<http://source.icu-project.org/repos/icu/>, and

<http://www.unicode.org/utility/trac/browser/>.

NOTICE TO USER: Carefully read the following legal agreement.

BY DOWNLOADING, INSTALLING, COPYING OR OTHERWISE USING UNICODE INC.'S DATA FILES ("DATA FILES"), AND/OR SOFTWARE ("SOFTWARE"),

YOU UNEQUIVOCALLY ACCEPT, AND AGREE TO BE BOUND BY, ALL OF THE TERMS AND CONDITIONS OF THIS AGREEMENT.
IF YOU DO NOT AGREE, DO NOT DOWNLOAD, INSTALL, COPY, DISTRIBUTE OR USE THE DATA FILES OR SOFTWARE.

COPYRIGHT AND PERMISSION NOTICE

Copyright 1991-2018 Unicode, Inc. All rights reserved.
Distributed under the Terms of Use in <http://www.unicode.org/copyright.html>.

Permission is hereby granted, free of charge, to any person obtaining a copy of the Unicode data files and any associated documentation (the "Data Files") or Unicode software and any associated documentation (the "Software") to deal in the Data Files or Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Data Files or Software, and to permit persons to whom the Data Files or Software are furnished to do so, provided that either
(a) this copyright and permission notice appear with all copies of the Data Files or Software, or
(b) this copyright and permission notice appear in associated Documentation.

THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS.
IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in these Data Files or Software without prior written authorization of the copyright holder.

...

This package was downloaded from:

<<http://www.openldap.org/>>

The upstream distribution has been repackaged to remove the RFCs and Internet-Drafts included in the upstream distribution, since the Internet Society license does not meet the Debian Free Software Guidelines. The schema files that contain verbatim text from RFCs or Internet-Drafts have

similarly been removed and are replaced during the package build with versions stripped of the literal RFC or Internet-Draft text.

Copyright:

Copyright 1998-2016 The OpenLDAP Foundation
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted only as authorized by the OpenLDAP Public License.

A copy of this license is available in the file LICENSE in the top-level directory of the distribution or, alternatively, at <http://www.OpenLDAP.org/license.html>.

OpenLDAP is a registered trademark of the OpenLDAP Foundation.

Individual files and/or contributed packages may be copyright by other parties and/or subject to additional restrictions.

This work is derived from the University of Michigan LDAP v3.3 distribution. Information concerning this software is available at <http://www.umich.edu/~dirsvcs/ldap/ldap.html>.

This work also contains materials derived from public sources.

Additional information about OpenLDAP can be obtained at <http://www.openldap.org/>.

The OpenLDAP Public License
Version 2.8, 17 August 2003

Redistribution and use of this software and associated documentation ("Software"), with or without modification, are permitted provided that the following conditions are met:

1. Redistributions in source form must retain copyright statements and notices,
2. Redistributions in binary form must reproduce applicable copyright statements and notices, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution, and
3. Redistributions must contain a verbatim copy of this document.

The OpenLDAP Foundation may revise this license from time to time. Each revision is distinguished by a version number. You may use this Software under terms of this license revision or under the terms of any subsequent revision of the license.

THIS SOFTWARE IS PROVIDED BY THE OPENLDAP FOUNDATION AND ITS CONTRIBUTORS ``AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OPENLDAP FOUNDATION, ITS CONTRIBUTORS, OR THE AUTHOR(S) OR OWNER(S) OF THE SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The names of the authors and copyright holders must not be used in advertising or otherwise to promote the sale, use or other dealing in this Software without specific, written prior permission. Title to copyright in this Software shall at all times remain with copyright holders.

Noted above is that various files can be copyrighted individually. The licenses found in the OpenLDAP tree are as follows:

CRL

```
-----
# Copyright 1999 Computing Research Labs, New Mexico State University
#
# Permission is hereby granted, free of charge, to any person obtaining a
# copy of this software and associated documentation files (the "Software"),
# to deal in the Software without restriction, including without limitation
# the rights to use, copy, modify, merge, publish, distribute, sublicense,
# and/or sell copies of the Software, and to permit persons to whom the
# Software is furnished to do so, subject to the following conditions:
#
# The above copyright notice and this permission notice shall be included in
# all copies or substantial portions of the Software.
#
# THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR
# IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,
# FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL
# THE COMPUTING RESEARCH LAB OR NEW MEXICO STATE UNIVERSITY BE LIABLE FOR ANY
```


CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT
OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR
THE USE OR OTHER DEALINGS IN THE SOFTWARE.

FSF

Copyright (C) 1994, 1995-8, 1999, 2001 Free Software Foundation, Inc.
This Makefile.in is free software; the Free Software Foundation
gives unlimited permission to copy and/or distribute it,
with or without modifications, as long as this notice is preserved.

This program is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY, to the extent permitted by law; without
even the implied warranty of MERCHANTABILITY or FITNESS FOR A
PARTICULAR PURPOSE.

HC

* Permission is granted to anyone to use this software for any purpose
* on any computer system, and to alter it and redistribute it, subject
* to the following restrictions:
*
* 1. The author is not responsible for the consequences of use of this
* software, no matter how awful, even if they arise from flaws in it.
*
* 2. The origin of this software must not be misrepresented, either by
* explicit claim or by omission. Since few users ever read sources,
* credits should appear in the documentation.
*
* 3. Altered versions must be plainly marked as such, and must not be
* misrepresented as being the original software. Since few users
* ever read sources, credits should appear in the
* documentation.
*
* 4. This notice may not be removed or altered.

IBM

* Portions Copyright (c) 1995 by International Business Machines, Inc.

*
* International Business Machines, Inc. (hereinafter called IBM) grants
* permission under its copyrights to use, copy, modify, and distribute this
* Software with or without fee, provided that the above copyright notice and
* all paragraphs of this notice appear in all copies, and that the name of IBM
* not be used in connection with the marketing of any product incorporating
* the Software or modifications thereof, without specific, written prior
* permission.
*
* To the extent it has a right to do so, IBM grants an immunity from suit
* under its patents, if any, for the use, sale or manufacture of products to
* the extent that such products are used for performing Domain Name System
* dynamic updates in TCP/IP networks by means of the Software. No immunity is
* granted for any product per se or for any other function of any product.
*
* THE SOFTWARE IS PROVIDED "AS IS", AND IBM DISCLAIMS ALL WARRANTIES,
* INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A
* PARTICULAR PURPOSE. IN NO EVENT SHALL IBM BE LIABLE FOR ANY SPECIAL,
* DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER ARISING
* OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE, EVEN
* IF IBM IS APPRISED OF THE POSSIBILITY OF SUCH DAMAGES.

IS

Full Copyright Statement

#

Copyright (C) The Internet Society (1999). All Rights Reserved.

#

This document and translations of it may be copied and furnished to
others, and derivative works that comment on or otherwise explain it
or assist in its implementation may be prepared, copied, published
and distributed, in whole or in part, without restriction of any
kind, provided that the above copyright notice and this paragraph are
included on all such copies and derivative works. However, this
document itself may not be modified in any way, such as by removing
the copyright notice or references to the Internet Society or other
Internet organizations, except as needed for the purpose of
developing Internet standards in which case the procedures for
copyrights defined in the Internet Standards process must be
followed, or as required to translate it into languages other than
English.

#

The limited permissions granted above are perpetual and will not be
revoked by the Internet Society or its successors or assigns.

#

This document and the information contained herein is provided on an
"AS IS" basis and THE INTERNET SOCIETY AND THE INTERNET ENGINEERING
TASK FORCE DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING
BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION
HEREIN WILL NOT INFRINGE ANY RIGHTS OR ANY IMPLIED WARRANTIES OF
MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

This license was present in the copies of several schema files and one LDIF file as distributed upstream. The relevant content has been removed except where it is purely functional (descriptions of an LDAP schema). The copyright notice has been retained with a clarifying comment. The provisions in the above license that prohibit modification therefore should no longer apply to any files distributed with the Debian package.

Several files in libraries/libldap also reference this license as the copyright on ABNF sequences embedded as comments in those files. These too are purely functional interface specifications distributed as part of the LDAP protocol standard and do not contain creative work such as free-form text.

ISC

* Copyright (c) 1996, 1998 by Internet Software Consortium.
*
* Permission to use, copy, modify, and distribute this software for any
* purpose with or without fee is hereby granted, provided that the above
* copyright notice and this permission notice appear in all copies.
*
* THE SOFTWARE IS PROVIDED "AS IS" AND INTERNET SOFTWARE CONSORTIUM DISCLAIMS
* ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES
* OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL INTERNET SOFTWARE
* CONSORTIUM BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL
* DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR
* PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS
* ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS
* SOFTWARE.

JC

* This software is not subject to any license of Silicon Graphics
* Inc. or Purdue University.
*
* Redistribution and use in source and binary forms are permitted

- * without restriction or fee of any kind as long as this notice
- * is preserved.

The following is additional information from Juan C. Gomez on how this license is to be interpreted:

Local-Date: Fri, 06 Jun 2003 13:18:52 -0400
Date: Fri, 6 Jun 2003 10:18:52 -0700
From: Juan Gomez <juang@us.ibm.com>
To: Stephen Frost <sfrost@debian.org>
X-Mailer: Lotus Notes Release 5.0.2a (Intl) 23 November 1999
Subject: Re: Juan C. Gomez license in OpenLDAP Source

Stephen,

"There is no restriction on modifications and derived works" on the work I did for the openldap server as long as this is consistent with the openldap license. Please forward this email to Kurt so he does the appropriate changes to the files to reflect this.

Regards, Juan

MA

- * Copyright (c) 2000, Mark Adamson, Carnegie Mellon. All rights reserved.
- * This software is not subject to any license of Carnegie Mellon University.
- *
- * Redistribution and use in source and binary forms are permitted without
- * restriction or fee of any kind as long as this notice is preserved.
- *
- * The name "Carnegie Mellon" must not be used to endorse or promote
- * products derived from this software without prior written permission.

The following is additional information from Mark Adamson on how this license is to be interpreted:

Local-Date: Thu, 05 Jun 2003 16:53:32 -0400
Date: Thu, 5 Jun 2003 16:53:32 -0400 (EDT)
From: Mark Adamson <adamson@andrew.cmu.edu>
To: Stephen Frost <sfrost@debian.org>
Subject: Re: Mark Adamson license in OpenLDAP source

Hi Stephen,

I don't see how this conflicts with the Debian FSG. The first statement

in the copyright pertaining to CMU say only that we don't license out the software. The second mention denies the right to say things like, "Now! Powered by software from Carnegie Mellon!" There is no restriction on modifications and derived works.

-Mark

MIT

```
# Copyright 1991 by the Massachusetts Institute of Technology
#
# Permission to use, copy, modify, distribute, and sell this software and its
# documentation for any purpose is hereby granted without fee, provided that
# the above copyright notice appear in all copies and that both that
# copyright notice and this permission notice appear in supporting
# documentation, and that the name of M.I.T. not be used in advertising or
# publicity pertaining to distribution of the software without specific,
# written prior permission. M.I.T. makes no representations about the
# suitability of this software for any purpose. It is provided "as is"
# without express or implied warranty.
```

OL2

Copyright 1999-2001 The OpenLDAP Foundation, Redwood City, California, USA. All Rights Reserved. Permission to copy and distribute verbatim copies of this document is granted.

PM

```
* Copyright (C) 2000 Pierangelo Masarati, <ando@sys-net.it>
* All rights reserved.
*
* Permission is granted to anyone to use this software for any purpose
* on any computer system, and to alter it and redistribute it, subject
* to the following restrictions:
*
* 1. The author is not responsible for the consequences of use of this
* software, no matter how awful, even if they arise from flaws in it.
*
* 2. The origin of this software must not be misrepresented, either by
```

* explicit claim or by omission. Since few users ever read sources,
* credits should appear in the documentation.

*

* 3. Altered versions must be plainly marked as such, and must not be
* misrepresented as being the original software. Since few users
* ever read sources, credits should appear in the documentation.

*

* 4. This notice may not be removed or altered.

*

PM2

* Redistribution and use in source and binary forms are permitted only
* as authorized by the OpenLDAP Public License. A copy of this
* license is available at <http://www.OpenLDAP.org/license.html> or
* in file LICENSE in the top-level directory of the distribution.

UoC

* Redistribution and use in source and binary forms are permitted
* provided that the above copyright notice and this paragraph are
* duplicated in all such forms and that any documentation,
* advertising materials, and other materials related to such
* distribution and use acknowledge that the software was developed
* by the University of California, Berkeley. The name of the
* University may not be used to endorse or promote products derived
* from this software without specific prior written permission.
* THIS SOFTWARE IS PROVIDED ``AS IS" AND WITHOUT ANY EXPRESS OR
* IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED
* WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

NOTE: The Regents have since retroactively removed the advertising
clause from above.

UoC2

* Redistribution and use in source and binary forms, with or without
* modification, are permitted provided that the following conditions
* are met:

* 1. Redistributions of source code must retain the above copyright
* notice, this list of conditions and the following disclaimer.

- * 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * 3. All advertising materials mentioning features or use of this software must display the following acknowledgement:
 - * This product includes software developed by the University of California, Berkeley and its contributors.
- * 4. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.
- *
 - * THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NOTE: The Regents have since retroactively removed the advertising clause from above.

See:

<ftp://ftp.cs.berkeley.edu/pub/4bsd/README.Impt.License.Change>

UoM

- * Redistribution and use in source and binary forms are permitted
- * provided that this notice is preserved and that due credit is given
- * to the University of Michigan at Ann Arbor. The name of the University
- * may not be used to endorse or promote products derived from this
- * software without specific prior written permission. This software
- * is provided ``as is" without express or implied warranty.

After discussing this license with the OpenLDAP Foundation we received clarification on it:

- * To: Stephen Frost <sfrost@snowman.net>
- * Subject: Re: OpenLDAP Licenseing issues
- * From: "Kurt D. Zeilenga" <Kurt@OpenLDAP.org>
- * Date: Wed, 28 May 2003 10:55:44 -0700

* Cc: Steve Langasek <vorlon@netexpress.net>,debian-legal@lists.debian.org, openldap-devel@OpenLDAP.org
* In-reply-to: <20030528162613.GB8524@ns.snowman.net>
* Message-id: <5.2.0.9.0.20030528094229.02924780@127.0.0.1>
* Old-return-path: <Kurt@OpenLDAP.org>

Steven,

The OpenLDAP Foundation believes it the Regents' statement grants a license to redistribute derived works and is confident that the University, who is quite aware of our actions (as they actively participate in them), does not consider our actions to infringe on their rights. You are welcomed to your opinions. I suggest, however, that before you rely on your or other people's opinions (including ours), that you consult with a lawyer familiar with applicable law and the particulars of your situation.

The Foundation sees no reason for it to expend its limited resources seeking clarifications which it believes are unnecessary. You are, of course, welcomed to expend time and energy seeking clarifications you think are necessary. I suggest you contact University's general counsel office (<http://www.umich.edu/~vpgc/>).

Regards, Kurt

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>
Upstream-Name: bzip2
Source: <http://www.bzip.org/>

Files: *

Copyright: 1996-2010 Julian R Seward <jseward@bzip.org>

License: BSD-variant

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- .
1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- .
2. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
- .
3. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
- .
4. The name of the author may not be used to endorse or promote products derived from this software without specific prior written

permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Files: debian/*

Copyright: 2018 Nicolas Boulenguez <nicolas.boulenguez@free.fr>

2012-2015 Santiago Ruano Rincn <santiago@debian.org>

2014 Canonical Ltd.

2004-2011 Anibal Monsalve Salazar <anibal@debian.org>

1999-2002 Philippe Troin <phil@fifi.org>

1997-1999 Anthony Fok <foka@debian.org>

License: GPL-2

The full text of the GNU General Public License version 2 can be found in /usr/share/common-licenses/GPL-2.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: GNU Gzip

Upstream-Contact: <http://www.gnu.org/software/gzip/>

Source: <https://ftp.gnu.org/gnu/gzip>

Files: *

Copyright: 1999-2016 Free Software Foundation, Inc.

1992-1993 Jean-loup Gailly and Mark Adler

License: GPL-3+

Files: debian/*

Copyright: 1995-2017 Bdale Garbee <bdale@gag.com>

License: GPL-3+

Files: doc/* NEWS README

Copyright: 1999-2016 Free Software Foundation, Inc. <http://fsf.org/>

1992-1993 Jean-loup Gailly

License: GFDL-1.3+-no-invariant

Files: gzip.1 zless.1

Copyright: 1998-2016 Free Software Foundation, Inc.

1992-1993 Jean-loup Gailly

License: FSF-manpages

License: GPL-3+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

.

On Debian GNU/Linux systems, the complete text of the GNU General Public License can be found in ``usr/share/common-licenses/GPL-3'`.

License: GFDL-1.3+-no-invariant

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, with no Front-Cover Texts, and with no Back-Cover Texts.

.

On Debian GNU/Linux systems, the complete text of the GNU Free Documentation License can be found in ``usr/share/common-licenses/GFDL-3'`.

License: FSF-manpages

Permission is granted to make and distribute verbatim copies of this manual provided the copyright notice and this permission notice are preserved on all copies.

.

Permission is granted to process this file through troff and print the results, provided the printed document carries copying permission notice identical to this one except for the removal of this paragraph (this paragraph not being relevant to the printed manual).

.

Permission is granted to copy and distribute modified versions of this manual under the conditions for verbatim copying, provided that the entire resulting derived work is distributed under the terms of a permission notice identical to this one.

.

Permission is granted to copy and distribute translations of this manual into another language, under the above conditions for modified versions, except that this permission notice may be stated in a translation approved by the Foundation.

xwd v1.0.7

xwd utility

<pre>

This is the copyright for the files in src/java.desktop/unix/native/libawt_xawt:
list.h, multiVis.h, wsutils.h, list.c, multiVis.c

Copyright 1994 Hewlett-Packard Co.

Copyright 1996, 1998 The Open Group

Permission to use, copy, modify, distribute, and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE OPEN GROUP BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of The Open Group shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from The Open Group.

</pre>

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: libfido2

Upstream-Contact: Yubico Open Source Maintainers <ossmaint@yubico.com>

Source: <https://github.com/yubico/libfido2>

Files: *

Copyright: 2018-2019 Yubico AB <ossmaint@yubico.com>

License: BSD-2-clause

Files: debian/*

Copyright: 2018-2019 Yubico AB <ossmaint@yubico.com>

2020 nicoo <nicoo@debian.org>

License: BSD-2-clause

Files: openbsd-compat/strlcpy.c openbsd-compat/strlcat.c

Copyright: 1998 Todd C. Miller <Todd.Miller@courtesan.com>

License: ISC

Files: openbsd-compat/timingsafe_bcmp.c
Copyright: 2010 Damien Miller
License: ISC

Files:
openbsd-compat/bsd-getpagesize.c
openbsd-compat/err.h
openbsd-compat/explicit_bzero.c
openbsd-compat/explicit_bzero_win32.c
openbsd-compat/types.h
Copyright: Public domain
License: public-domain

Files: openbsd-compat/reallocarray.c
Copyright: 2008, 2017 Otto Moerbeek <otto@drijf.net>
License: ISC

Files: openbsd-compat/readpassphrase.h
Copyright: 2000, 2002 Todd C. Miller <Todd.Miller@courtesan.com>
License: ISC

Files: openbsd-compat/readpassphrase.c
Copyright: 2000-2002, 2007, 2010 Todd C. Miller <Todd.Miller@courtesan.com>
License: ISC

Files: openbsd-compat/getopt.h
Copyright: 2000 The NetBSD Foundation, Inc. All rights reserved.
License: BSD-2-clause

Files: openbsd-compat/getopt_long.c
Copyright: 2002 Todd C. Miller <Todd.Miller@courtesan.com>
2000 The NetBSD Foundation, Inc. All rights reserved.
License: ISC and BSD-2-clause

License: BSD-2-clause
Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions are
met:

- .
- 1. Redistributions of source code must retain the above copyright
notice, this list of conditions and the following disclaimer.
- 2. Redistributions in binary form must reproduce the above copyright
notice, this list of conditions and the following disclaimer in
the documentation and/or other materials provided with the
distribution.
- .

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: public-domain

Public domain.

License: ISC

Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

.
THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Harfbuzz v2.8

Harfbuzz License

<https://github.com/harfbuzz/harfbuzz/blob/master/COPYING>

<pre>

HarfBuzz is licensed under the so-called "Old MIT" license. Details follow.
For parts of HarfBuzz that are licensed under different licenses see individual files names COPYING in subdirectories where applicable.

Copyright 2010,2011,2012,2013,2014,2015,2016,2017,2018,2019,2020 Google, Inc.

Copyright 2018,2019,2020 Ebrahim Byagowi

Copyright 2019,2020 Facebook, Inc.

Copyright 2012 Mozilla Foundation

Copyright 2011 Codethink Limited

Copyright 2008,2010 Nokia Corporation and/or its subsidiary(-ies)

Copyright 2009 Keith Stribley

Copyright 2009 Martin Hosken and SIL International

Copyright 2007 Chris Wilson

Copyright 2006 Behdad Esfahbod
Copyright 2005 David Turner
Copyright 2004,2007,2008,2009,2010 Red Hat, Inc.
Copyright 1998-2004 David Turner and Werner Lemberg

For full copyright notices consult the individual files in the package.

Permission is hereby granted, without written agreement and without license or royalty fees, to use, copy, modify, and distribute this software and its documentation for any purpose, provided that the above copyright notice and the following two paragraphs appear in all copies of this software.

IN NO EVENT SHALL THE COPYRIGHT HOLDER BE LIABLE TO ANY PARTY FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF THIS SOFTWARE AND ITS DOCUMENTATION, EVEN IF THE COPYRIGHT HOLDER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

THE COPYRIGHT HOLDER SPECIFICALLY DISCLAIMS ANY WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE SOFTWARE PROVIDED HEREUNDER IS ON AN "AS IS" BASIS, AND THE COPYRIGHT HOLDER HAS NO OBLIGATION TO PROVIDE MAINTENANCE, SUPPORT, UPDATES, ENHANCEMENTS, OR MODIFICATIONS.

All source code, except for one section, is licensed as above. The one exception is licensed with a slightly different MIT variant:

The contents of this directory are licensed under the following terms:

Copyright (C) 2012 Grigori Goronzy <greg@kinoho.net>

Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

</pre>

This is the Debian prepackaged version of "unzip", Info-Zip's fast, portable, zipfile decompression utility.

This package is currently maintained by Santiago Vila <sanvila@debian.org>
and built from sources obtained from:

<ftp://ftp.info-zip.org/pub/infozip/src/unzip60.tgz>

The changes were fairly minimal, and consisted solely of adding various debian/* files to the distribution, plus several miscellaneous fixes as reflected in the Debian changelog.

Copyright and license:

This is version 2009-Jan-02 of the Info-ZIP license.

The definitive version of this document should be available at <ftp://ftp.info-zip.org/pub/infozip/license.html> indefinitely and a copy at <http://www.info-zip.org/pub/infozip/license.html>.

Copyright (c) 1990-2009 Info-ZIP. All rights reserved.

For the purposes of this copyright and license, "Info-ZIP" is defined as the following set of individuals:

Mark Adler, John Bush, Karl Davis, Harald Denker, Jean-Michel Dubois, Jean-loup Gailly, Hunter Goatley, Ed Gordon, Ian Gorman, Chris Herborth, Dirk Haase, Greg Hartwig, Robert Heath, Jonathan Hudson, Paul Kienitz, David Kirschbaum, Johnny Lee, Onno van der Linden, Igor Mandrichenko, Steve P. Miller, Sergio Monesi, Keith Owens, George Petrov, Greg Roelofs, Kai Uwe Rommel, Steve Salisbury, Dave Smith, Steven M. Schweda, Christian Spieler, Cosmin Truta, Antoine Verheijen, Paul von Behren, Rich Wales, Mike White.

This software is provided "as is," without warranty of any kind, express or implied. In no event shall Info-ZIP or its contributors be held liable for any direct, indirect, incidental, special or consequential damages arising out of the use of or inability to use this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the above disclaimer and the following restrictions:

1. Redistributions of source code (in whole or in part) must retain the above copyright notice, definition, disclaimer, and this list of conditions.
2. Redistributions in binary form (compiled executables and libraries) must reproduce the above copyright notice, definition, disclaimer, and this list of conditions in documentation and/or other materials provided with the distribution. Additional documentation is not needed

for executables where a command line license option provides these and a note regarding this option is in the executable's startup banner. The sole exception to this condition is redistribution of a standard UnZipSFX binary (including SFXWiz) as part of a self-extracting archive; that is permitted without inclusion of this license, as long as the normal SFX banner has not been removed from the binary or disabled.

3. Altered versions--including, but not limited to, ports to new operating systems, existing ports with new graphical interfaces, versions with modified or added functionality, and dynamic, shared, or static library versions not from Info-ZIP--must be plainly marked as such and must not be misrepresented as being the original source or, if binaries, compiled from the original source. Such altered versions also must not be misrepresented as being Info-ZIP releases--including, but not limited to, labeling of the altered versions with the names "Info-ZIP" (or any variation thereof, including, but not limited to, different capitalizations), "Pocket UnZip," "WiZ" or "MacZip" without the explicit permission of Info-ZIP. Such altered versions are further prohibited from misrepresentative use of the Zip-Bugs or Info-ZIP e-mail addresses or the Info-ZIP URL(s), such as to imply Info-ZIP will provide support for the altered versions.

4. Info-ZIP retains the right to use the names "Info-ZIP," "Zip," "UnZip," "UnZipSFX," "WiZ," "Pocket UnZip," "Pocket Zip," and "MacZip" for its own source and binary releases.

This package was debianized by

Christian Schwarz <schwarz@monet.m.isar.de> on Mon, 18 Nov 1996 00:59:57 +0100

J. Ramos Goncalves <ramos@debian.org> on Thu, 13 Feb 1997 23:15:18 +0000

Nicols Lichtmaier <nick@debian.org> on Sat, 18 Oct 1997 21:23:12 -0300

Nol Kthe <noel@debian.org> on Mon, 18 Feb 2002 09:53:00 +0100

It was downloaded from <ftp://ftp.gnu.org/gnu/wget/>

Homepage: <http://www.gnu.org/directory/wget.html>

<http://www.gnu.org/software/wget/wget.html>

Upstream Author: Giuseppe Scrivano <gscrivano@gnu.org>

Copyright: (C) 2007 Free Software Foundation, Inc.

Released under the terms of the GPL; see
</usr/share/common-licenses/GPL-3>.

"In addition, as a special exception, the Free Software Foundation gives permission to link the code of its release of Wget with the OpenSSL project's "OpenSSL" library (or with modified versions of it that use the same license as the "OpenSSL" library), and distribute the linked executables. You must obey the GNU General Public License in all respects for all of the code used other than "OpenSSL". If you

modify this file, you may extend this exception to your version of the file, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version."

The wget(1) manpage and the wget info page are distributed under the terms of the GNU Free Documentation License ; see

</usr/share/common-licenses/GFDL-1.2>

This package was debianized by Thom May <thom@debian.org> on Wed, 17 Nov 2004 11:27:14 -0800

It was downloaded from <http://httpd.apache.org/download.cgi>

Upstream Authors: The Apache Software Foundation - <http://apr.apache.org/>

Copyright:

Licensed to the Apache Software Foundation (ASF) under one or more contributor license agreements. The ASF licenses this work to You under the Apache License, Version 2.0 (the "License"); you may not use this work except in compliance with the License. You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

On a Debian system, the license can be found at </usr/share/common-licenses/Apache-2.0> .

APACHE PORTABLE RUNTIME SUBCOMPONENTS:

The Apache Portable Runtime includes a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the following licenses.

From strings/apr_fnmatch.c, include/apr_fnmatch.h, misc/unix/getopt.c, file_io/unix/mktemp.c, strings/apr_strings.c:

/*

* Copyright (c) 1987, 1993, 1994

* The Regents of the University of California. All rights reserved.

*

* Redistribution and use in source and binary forms, with or without

* modification, are permitted provided that the following conditions

* are met:

* 1. Redistributions of source code must retain the above copyright

* notice, this list of conditions and the following disclaimer.

* 2. Redistributions in binary form must reproduce the above copyright

* notice, this list of conditions and the following disclaimer in the

- * documentation and/or other materials provided with the distribution.
- * 3. All advertising materials mentioning features or use of this software
- * must display the following acknowledgement:
- * This product includes software developed by the University of
- * California, Berkeley and its contributors.
- * 4. Neither the name of the University nor the names of its contributors
- * may be used to endorse or promote products derived from this software
- * without specific prior written permission.
- *
- * THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND
- * ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
- * IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
- * ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE
- * FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
- * DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
- * OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
- * HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
- * LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
- * OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
- * SUCH DAMAGE.

From network_io/unix/inet_ntop.c, network_io/unix/inet_pton.c:

- /* Copyright (c) 1996 by Internet Software Consortium.
- *
- * Permission to use, copy, modify, and distribute this software for any
- * purpose with or without fee is hereby granted, provided that the above
- * copyright notice and this permission notice appear in all copies.
- *
- * THE SOFTWARE IS PROVIDED "AS IS" AND INTERNET SOFTWARE CONSORTIUM DISCLAIMS
- * ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES
- * OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL INTERNET SOFTWARE
- * CONSORTIUM BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL
- * DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR
- * PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS
- * ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS
- * SOFTWARE.

From dso/aix/dso.c:

- * Based on libdl (dlfcn.c/dlfcn.h) which is
- * Copyright (c) 1992,1993,1995,1996,1997,1988
- * Jens-Uwe Mager, Helios Software GmbH, Hannover, Germany.
- *
- * Not derived from licensed software.
- *
- * Permission is granted to freely use, copy, modify, and redistribute
- * this software, provided that the author is not construed to be liable

- * for any results of using the software, alterations are clearly marked
- * as such, and this notice is not modified.

From strings/apr_strnatcmp.c, include/apr_strings.h:

strnatcmp.c -- Perform 'natural order' comparisons of strings in C.
Copyright (C) 2000 by Martin Pool <mbp@humblebug.org.au>

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

From test/CuTest.c, test/CuTest.h:

- * Copyright (c) 2002-2006 Asim Jalis
- *
- * This library is released under the zlib/libpng license as described at
- *
- * <http://www.opensource.org/licenses/zlib-license.html>
- *
- * Here is the statement of the license:
- *
- * This software is provided 'as-is', without any express or implied warranty.
- * In no event will the authors be held liable for any damages arising from
- * the use of this software.
- *
- * Permission is granted to anyone to use this software for any purpose,
- * including commercial applications, and to alter it and redistribute it
- * freely, subject to the following restrictions:
- *
- * 1. The origin of this software must not be misrepresented; you must not
- * claim that you wrote the original software. If you use this software in a
- * product, an acknowledgment in the product documentation would be
- * appreciated but is not required.
- *

* 2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.

*

* 3. This notice may not be removed or altered from any source distribution.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: libssh2

Upstream-Contact: Daniel Stenberg <daniel@haxx.se>

Source: <https://libssh2.org/>

Files: *

Copyright: (c) 2004-2007 Sara Golemon <sarag@libssh2.org>

(c) 2005,2006 Mikhail Gusarov <dottedmag@dottedmag.net>

(c) 2006-2007 The Written Word, Inc.

(c) 2007 Eli Fant <elifantu@mail.ru>

(c) 2009 Daniel Stenberg

(C) 2008, 2009 Simon Josefsson

License: BSD3

Files: debian/*

Copyright: 2007-2018 Mikhail Gusarov <dottedmag@debian.org>

2020 Nicolas Mora <babelouest@debian.org>

License: BSD3

License: BSD3

* Redistribution and use in source and binary forms,
* with or without modification, are permitted provided
* that the following conditions are met:

*

* Redistributions of source code must retain the above
* copyright notice, this list of conditions and the
* following disclaimer.

*

* Redistributions in binary form must reproduce the above
* copyright notice, this list of conditions and the following
* disclaimer in the documentation and/or other materials
* provided with the distribution.

*

* Neither the name of the copyright holder nor the names
* of any other contributors may be used to endorse or
* promote products derived from this software without
* specific prior written permission.

*

* THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND
* CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES,
* INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES
* OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
* ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR
* CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,

* SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING,
* BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR
* SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS
* INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY,
* OF SUCH DAMAGE.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: xxhash

Source: <https://github.com/Cyan4973/xxHash>

Comment: The library files `xxhash.c` and `xxhash.h` are BSD licensed.

The utility `xxhsum` is GPL licensed.

Files: *

Copyright: 2012-2014 Yann Collet

License: BSD-2-clause

Files: xxhsum.c

Copyright: 2012-2014 Yann Collet

License: GPL-2

Files: debian/*

Copyright: 2018 Norbert Preining

License: GPL-2

License: BSD-2-clause

Redistribution and use in source and binary forms, with or without modification,
are permitted provided that the following conditions are met:

.

* Redistributions of source code must retain the above copyright notice, this
list of conditions and the following disclaimer.

.

* Redistributions in binary form must reproduce the above copyright notice, this
list of conditions and the following disclaimer in the documentation and/or
other materials provided with the distribution.

.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND
ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED
WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE
DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR
ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES
(INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES;
LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON
ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS
SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: GPL-2

This program is free software; you can redistribute it and/or modify
it under the terms of the GNU General Public License as published by

the Free Software Foundation; either version 2 of the License, or
(at your option) any later version.

This program is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
GNU General Public License for more details.

You should have received a copy of the GNU General Public License along
with this program; if not, write to the Free Software Foundation, Inc.,
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

The full text of the GPLv can be found in
`/usr/share/common-licenses/GPL-2`
This is the Debian GNU/Linux prepackaged version of libxcrypt.

It has been packaged by Marco d'Itri <md@linux.it>.

Original sources were obtained from:
<https://github.com/besser82/libxcrypt>

On Debian systems the complete text of the licenses can be found in
`/usr/share/common-licenses/`.

Detailed copyright and licensing information for libxcrypt

The overall license for libxcrypt is the GNU Lesser General Public
License, version 2.1 (or, at your option, any later version); see
the file COPYING.LIB for the full terms of this license.

Many individual files are under other licenses. This file provides an
inventory of the copyright holders and licenses of all files in the
source tree. For specific licensing terms consult the files themselves.

* Copyright Thorsten Kukuk, Bjrn Esser, Zack Weinberg; LGPL (v2.1 or later):
`crypt.c, crypt-static.c, crypt-gensalt-static.c, crypt-port.h`

* Copyright Free Software Foundation, Inc.; LGPL (v2.1 or later):
`crypt.h, crypt-obsolete.h, crypt-md5.c,`
`test-badsalt.c, test-crypt-nonnull.c`

* Copyright David Burren et al.; 3-clause BSD:
`alg-des.h, alg-des.c, alg-des-tables.c,`
`crypt-des.c, crypt-des-obsolete.c, gen-des-tables.c`

* Public domain, written by Ulrich Drepper et al.:
`crypt-sha256.c, crypt-sha512.c`

- * Public domain, written by Solar Designer et al.:
alg-md4.h, alg-md4.c, alg-md5.h, alg-md5.c,
crypt-bcrypt.c, crypt-gensalt.c, test-crypt-bcrypt.c
- * Copyright Solar Designer, Colin Percival; 0-clause BSD:
alg-yescrypt-common.c, alg-yescrypt-platform.c
- * Copyright Solar Designer, Colin Percival; 2-clause BSD:
alg-sha256.c, alg-sha256.h, alg-yescrypt.h, alg-yescrypt-opt.c,
alg-yescrypt-sysendian.h
- * Copyright Colin Percival; 2-clause BSD:
alg-sha512.h, alg-sha512.c
- * Copyright Alexey Degtyarev; 2-clause BSD:
alg-gost3411-2012-const.h, alg-gost3411-2012-core.c,
alg-gost3411-2012-core.h, alg-gost3411-2012-precalc.h,
alg-gost3411-2012-ref.h
- * Copyright Vitaly Chikunov, Bjrn Esser; 0-clause BSD:
alg-gost3411-2012-hmac.c, alg-gost3411-2012-hmac.h,
crypt-gost-yescrypt.c, test-alg-gost3411-2012.c,
test-alg-gost3411-2012-hmac.c, test-crypt-gost-yescrypt.c,
test-crypt-scrypt.c
- * Copyright Alexander Peslyak; 0-clause BSD:
test-alg-yescrypt.c
- * Copyright Alexander Peslyak, Bjrn Esser; 0-clause BSD:
crypt-scrypt.c
- * Copyright Bjrn Esser; 0-clause BSD:
crypt-common.c, test-checksalt.c, test-compile-strong-alias.c,
test-gensalt-nthash.c, test-short-outbuf.c, test-special-char-salt.c
- * Copyright Michael Bretterkieber, Bjrn Esser et al.; 2-clause BSD:
crypt-nthash.c
- * Copyright Zack Weinberg; 2-clause BSD:
crypt-sunmd5.c
- * Public domain, written by Steve Reid et al.:
alg-sha1.c, alg-sha1.h, test-alg-sha1.c
- * Copyright Juniper Networks, Inc.; 3-clause BSD:
crypt-pbkdf1-sha1.c, crypt-pbkdf1-sha1.c

- * Copyright Bjrn Esser; 2-clause BSD:
alg-hmac-sha1.c, alg-hmac-sha1.h, test-alg-hmac-sha1.c

- * Public domain, written by Zack Weinberg et al.:
byteorder.h, randombytes.c, test-byteorder.c
test-alg-pbkdf-hmac-sha256.c
test-badsetting.c, test-crypt-badargs.c, test-getrandom-fallbacks.c,
test-getrandom-interface.c, test-symbols-compat.sh,
test-symbols-renames.sh, test-symbols-static.sh,
build-aux/gen-crypt-h, build-aux/gen-crypt-symbol-vers-h,
build-aux/gen-libcrypt-map, build-aux/skip-if-exec-format-error,
build-aux/zw_alignment.m4, build-aux/zw_static_assert.m4,
build-aux/zw_endianness.m4, build-aux/zw_ld_wrap.m4

- * Copyright Zack Weinberg and Free Software Foundation, Inc;
GPL (v3 or later), with Autoconf exception:
build-aux/zw_automodern.m4, build-aux/zw_simple_warnings.m4

- * Copyright <vt at altlinux.org>; 0-clause BSD:
crypt-yescrypt.c, test-crypt-yescrypt.c

- * Copyright Kevin Cernekee; FSF All Permissive License:
build-aux/ax_check_vscript.m4

- * Copyright Maarten Bosmans; FSF All Permissive License:
build-aux/ax_append_compile_flags.m4

- * Copyright Guido U. Draheim, Maarten Bosmans;
FSF All Permissive License:
build-aux/ax_append_flag.m4, build-aux/ax_check_compile_flag.m4

- * Copyright Mike Frysinger; FSF All Permissive License:
build-aux/ax_require_defined.m4

- * Copyright Scott James Remnant, Dan Nicholson;
GPL (v2 or later), with Autoconf exception:
build-aux/pkg_installdir_compat.m4

- * Copyright Tim Toolan; FSF All Permissive License:
build-aux/ax_compare_version.m4

- * Copyright Philip Withnall; FSF All Permissive License:
build-aux/ax_valgrind_check.m4

- * Copyright Steven G. Johnson, Daniel Richard G.;
GPL (v3 or later), with Autoconf exception:
build-aux/ax_pthread.m4

* Copyright Francesco Salvestrini; FSF All Permissive License:

build-aux/ax_prog_python_version.m4

* Copyright Andrew Collier; FSF All Permissive License:

build-aux/ax_python_module.m4

* Copyright holders unknown, no statement of license (all of these files are part of the testsuite and do not contribute to the installed library or its headers):

test-alg-des.c, test-alg-md4.c (adaption of test-alg-md5.c),
test-alg-md5.c, test-alg-sha256.c, test-alg-sha512.c, test-crypt-des.c,
test-crypt-md5.c, test-crypt-sha256.c, test-crypt-sha512.c,
test-des-cases.h, test-des-obsolete{,_r}.c, test-gensalt.c,
test-crypt-nthash.c (adaption of test-crypt-des.c),
test-crypt-sunmd5.c (adaption of test-crypt-des.c),
test-crypt-pbkdf1-sha1.c (adaption of test-crypt-des.c)

* The NEWS file formerly contained the following copyright assertions:

Copyright 2002, 2003, 2004 SuSE Linux AG, Germany

Copyright 2005, 2008, 2009 2011 SUSE LINUX Products GmbH, Germany

Copyright 2015 Bjrn Esser

These were meant to apply to the library as a whole rather than specific files or portions of files.

Format: <http://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: zlib

Upstream-Contact: zlib@gzip.org

Source: <http://zlib.net/>

Comment: This is the pre-packaged Debian Linux version of the zlib compression library. It was packaged by Michael Alan Dorman <mdorman@debian.org> from sources originally retrieved from <ftp.uu.net> in the directory </pub/archiving/zip/zlib> as the file [zlib-1.0.4.tar.gz](#).

.

The deflate format used by zlib was defined by Phil Katz. The deflate and zlib specifications were written by Peter Deutsch. Thanks to all the people who reported problems and suggested various improvements in zlib; they are too numerous to cite here.

Files-Excluded:

contrib/ada

contrib/amd64

contrib/asm686

contrib/blast

contrib/delphi

contrib/dotzlib

contrib/gcc_gymat64

contrib/infback9

contrib/inflate86

contrib/iostream
contrib/iostream2
contrib/iostream3
contrib/masmx64
contrib/masmx86
contrib/pascal
contrib/puff
contrib/testzlib
contrib/untgz
contrib/vstudio
doc/rfc1950.txt
doc/rfc1951.txt
doc/rfc1952.txt

Files: *

Copyright: 1995-2013 Jean-loup Gailly and Mark Adler

License: Zlib

Files: amiga/Makefile.pup

Copyright: 1998 by Andreas R. Kleinert

License: Zlib

Files: contrib/minizip/*

Copyright: 1998-2010 Gilles Vollant

2007-2008 Even Rouault

2009-2010 Mathias Svensson

License: Zlib

Files: debian/*

Copyright: 2000-2017 Mark Brown

License: Zlib

License: Zlib

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

.

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

.
Jean-loup Gailly Mark Adler
jloup@gzip.org madler@alumni.caltech.edu
.

If you use the zlib library in a product, we would appreciate *not* receiving lengthy legal documents to sign. The sources are provided for free but without warranty of any kind. The library has been entirely written by Jean-loup Gailly and Mark Adler; it does not include third-party code.

.
If you redistribute modified sources, we would appreciate that you include in the file ChangeLog history information documenting your changes. Please read the FAQ for more information on the distribution of modified source versions.
Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>
Upstream-Name: serf
Source: <https://serf.apache.org/>

Files: *
Copyright: serf contributors
License: Apache

Files: debian/*
Copyright: help by the contributors mentioned in debian/changelog
License: Apache

Files: test/CuTest*
Copyright: 2003 Asim Jalis
License: Zlib

License: Apache
Licensed to the Apache Software Foundation (ASF) under one or more contributor license agreements. See the NOTICE file distributed with this work for additional information regarding copyright ownership. The ASF licenses this file to you under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

.
<http://www.apache.org/licenses/LICENSE-2.0>
.

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

.
On Debian systems, the complete text of the Apache version 2.0 license can be found in `~/usr/share/common-licenses/Apache-2.0`.

License: Zlib

Copyright (c) 2003 Asim Jalis

.
This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

.
Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

.
1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.

.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.

.
3. This notice may not be removed or altered from any source distribution.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: dpkg

Files: *

Copyright:

Copyright 1994 Ian Murdock <imurdock@debian.org>

Copyright 1994 Matt Welsh <mdw@sunsite.unc.edu>

Copyright 1994 Carl Streeter <streeter@cae.wisc.edu>

Copyright 1994-1999, 2007-2008 Ian Jackson <ijackson@chiark.greenend.org.uk>

Copyright 1995 Bruce Perens <bruce@pixar.com>

Copyright 1995-1996 Erick Branderhorst <branderhorst@heel.fgg.eur.nl>

Copyright 1996 Michael Shields <shields@crosslink.net>

Copyright 1996 Klee Dienes <klee@debian.org>

Copyright 1996 Kim-Minh Kaplan <kkaplan@cdfhp3.in2p3.fr>

Copyright 1996-1998 Miquel van Smoorenburg <miquels@cistron.nl>

Copyright 1997-1998 Charles Briscoe-Smith <cpbs@debian.org>

Copyright 1997-1998 Juho Vuori <javuori@cc.helsinki.fi>

Copyright 1998 Koichi Sekido <sekido@mbox.kyoto-inet.or.jp>

Copyright 1998 Jim Van Zandt <jrv@vanzandt.mv.com>

Copyright 1998 Juan Céspedes <cespedes@debian.org>

Copyright 1998 Nils Rennebarth <n timer@debian.org>

Copyright 1998 Heiko Schlittermann <hs@schlittermann.de>

Copyright 1998-1999, 2001, 2003, 2006 Martin Schulze <joe@infodrom.org>

Copyright 1999 Roderick Shertler <roderick@argon.org>

Copyright 1999 Ben Collins <bcollins@debian.org>

Copyright 1999 Richard Kettlewell <rjk@sfer.e.greenend.org.uk>

Copyright 1999-2001 Marcus Brinkmann <brinkmd@debian.org>
Copyright 1999-2002 Wichert Akkerman <wakkerma@debian.org>
Copyright 2001, 2007, 2010 Joey Hess <joeyh@debian.org>
Copyright 2004-2005, 2007-2008, 2010 Canonical Ltd.
Copyright 2004-2005 Scott James Remnant <scott@netsplit.com>
Copyright 2006-2008 Frank Lichtenheld <djpig@debian.org>
Copyright 2006-2021 Guillem Jover <guillem@debian.org>
Copyright 2007-2012, 2014, 2016 Raphal Hertzog <hertzog@debian.org>
Copyright 2007 Nicolas Francois <nicolas.francois@centraliens.net>
Copyright 2007 Don Armstrong <don@donarmstrong.com>
Copyright 2007 Colin Watson <cjwatson@debian.org>
Copyright 2007, 2008 Tollef Fog Heen <tfheen@err.no>
Copyright 2007-2010 Canonical Ltd.
Copyright 2008 James Westby <jw+debian@jameswestby.net>
Copyright 2008 Zack Weinberg <zackw@panix.com>
Copyright 2008 Pierre Habouzit <madcoder@debian.org>
Copyright 2009 Romain Francoise <rfrancoise@debian.org>
Copyright 2009-2010 Modestas Vainius <modax@debian.org>
Copyright 2009-2011 Kees Cook <kees@debian.org>
Copyright 2010 Charles Plessy <plessy@debian.org>
Copyright 2010 Oxan van Leeuwen <oxan@oxanvanleeuwen.nl>
Copyright 2010 Russ Allbery <rra@debian.org>
Copyright 2011 Linaro Limited
Copyright 2011 Matt Kraai <kraai@ftbfs.org>
Copyright 2014 Bill Allombert <ballombe@debian.org>
Copyright 2014-2015 Jrmly Bobbio <lunar@debian.org>
Copyright 2020 Helmut Grohne <helmut@subdivi.de>
License: GPL-2+

Files:

lib/compat/getopt*
lib/compat/gettext.h
lib/compat/obstack.*
lib/compat/strnlen.c

Copyright:

Copyright 1987-2006 Free Software Foundation, Inc.

License: GPL-2+

Files:

dselect/methods/Dselect/Ftp.pm
dselect/methods/ftp/*

Copyright:

Copyright 1996 Andy Guy <awpguy@acs.ualgary.ca>

Copyright 1998 Martin Schulze <joe@infodrom.org>

Copyright 1999-2001, 2005-2006, 2009 Raphal Hertzog <hertzog@debian.org>

License: GPL-2

Files:

scripts/Dpkg/Gettext.pm

Copyright:

Copyright 2000 Joey Hess <joeyh@debian.org>

Copyright 2007, 2009-2010, 2012-2015 Guillem Jover <guillem@debian.org>

License: BSD-2-clause

Files:

utils/start-stop-daemon.c

Copyright:

Copyright 1999 Marek Michalkiewicz <marekm@i17linuxb.ists.pwr.wroc.pl>

Copyright 1999 Christian Schwarz <schwarz@monet.m.isar.de>

Copyright 1999 Klee Dienes <klee@debian.org>

Copyright 1999 Ben Collins <bcollins@debian.org>

Copyright 1999-2002 Wichert Akkerman <wakkerma@debian.org>

Copyright 2000-2003 Adam Heath <doogie@debian.org>

Copyright 2001 Sontri Tomo Huynh <huynh.29@osu.edu>

Copyright 2001 Andreas Schuldei <andreas@schuldei.org>

Copyright 2001 Ian Jackson <ijackson@chiark.greenend.org.uk>

Copyright 2004-2005 Scott James Remnant <keybuk@debian.org>

Copyright 2006-2014 Guillem Jover <guillem@debian.org>

Copyright 2008 Samuel Thibault <samuel.thibault@ens-lyon.org>

Copyright 2008 Andreas Pahlsson <andreas.pahlsson@xcerion.com>

Copyright 2009 Chris Coulson <chrisccoulson@googlemail.com>

Copyright 2012 Carsten Hey <carsten@debian.org>

Copyright 2014 Nir Soffer <nirs@hyperms.com>

License: public-domain-s-s-d

Written by Marek Michalkiewicz <marekm@i17linuxb.ists.pwr.wroc.pl>,

public domain. Based conceptually on start-stop-daemon.pl, by Ian

Jackson <ijackson@gnu.ai.mit.edu>. May be used and distributed

freely for any purpose. Changes by Christian Schwarz

<schwarz@monet.m.isar.de>, to make output conform to the Debian

Console Message Standard, also placed in public domain. Minor

changes by Klee Dienes <klee@debian.org>, also placed in the Public

Domain.

.

Changes by Ben Collins <bcollins@debian.org>, added --chuid, --background

and --make-pidfile options, placed in public domain as well.

Files: lib/compat/md5.*

Copyright:

Copyright 1993 Colin Plumb

License: public-domain-md5

This code implements the MD5 message-digest algorithm.

The algorithm is due to Ron Rivest. This code was

written by Colin Plumb in 1993, no copyright is claimed.

This code is in the public domain; do with it what you wish.

.

Equivalent code is available from RSA Data Security, Inc.

This code has been tested against that, and is equivalent, except that you don't need to include two pages of legalese with every copy.

License: GPL-2+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this program. If not, see <<https://www.gnu.org/licenses/>>.

Comment:

On Debian systems, the complete text of the GNU General Public License can be found in /usr/share/common-licenses/GPL-2 or in the dpkg source as the file COPYING.

License: GPL-2

This is free software; you can redistribute it and/or modify it under the terms of version 2 of the GNU General Public License version 2 as published by the Free Software Foundation.

.

This is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this program. If not, see <<https://www.gnu.org/licenses/>>.

License: BSD-2-clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

.

THIS SOFTWARE IS PROVIDED BY AUTHORS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE

ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHORS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This is the Debian GNU/Linux prepackaged version of the Common Error Description library. It is currently distributed together with the EXT2 file system utilities, which are otherwise packaged as "e2fsprogs".

This package was put together by Yann Dirson <dirson@debian.org>, from sources obtained from a mirror of:
tsx-11.mit.edu:/pub/linux/packages/ext2fs/

From the original distribution:

Copyright 1987, 1988 by the Student Information Processing Board of the Massachusetts Institute of Technology

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the names of M.I.T. and the M.I.T. S.I.P.B. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. M.I.T. and the M.I.T. S.I.P.B. make no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

This is the Debian GNU/Linux prepackaged version of the GNU compiler collection, containing Ada, C, C++, D, Fortran 95, Go, Objective-C, Objective-C++, and Modula-2 compilers, documentation, and support libraries. In addition, Debian provides the gm2 compiler, either in the same source package, or built from a separate same source package.

Packaging is done by the Debian GCC Maintainers <debian-gcc@lists.debian.org>, with sources obtained from:

ftp://gcc.gnu.org/pub/gcc/releases/ (for full releases)
svn://gcc.gnu.org/svn/gcc/ (for prereleases)
ftp://sourceware.org/pub/newlib/ (for newlib)
git://git.savannah.gnu.org/gm2.git (for Modula-2)

The current gcc-9 source package is taken from the SVN gcc-9-branch.

Changes: See changelog.Debian.gz

Debian splits the GNU Compiler Collection into packages for each language, library, and documentation as follows:

| Language | Compiler package | Library package | Documentation |
|---------------|------------------|-----------------|------------------|
| Ada | gnat-9 | libgnat-9 | gnat-9-doc |
| BRIG | gccbrig-9 | libhsail-rt0 | |
| C | gcc-9 | | gcc-9-doc |
| C++ | g++-9 | libstdc++6 | libstdc++6-9-doc |
| D | gdc-9 | | |
| Fortran 95 | gfortran-9 | libgfortran3 | gfortran-9-doc |
| Go | gccgo-9 | libgo0 | |
| Objective C | gobjc-9 | libobjc2 | |
| Objective C++ | gobjc++-9 | | |
| Modula-2 | gm2-9 | libgm2 | |

For some language run-time libraries, Debian provides source files, development files, debugging symbols and libraries containing position-independent code in separate packages:

| Language | Sources | Development | Debugging | Position-Independent |
|----------|-----------------|------------------|------------------|----------------------|
| C++ | | libstdc++6-9-dev | libstdc++6-9-dbg | libstdc++6-9-pic |
| D | libphobos-9-dev | | | |

Additional packages include:

All languages:

| | |
|---------------------------|-------------------------------------|
| libgcc1, libgcc2, libgcc4 | GCC intrinsics (platform-dependent) |
| gcc-9-base | Base files common to all compilers |
| gcc-9-soft-float | Software floating point (ARM only) |
| gcc-9-source | The sources with patches |

Ada:

libgnatvsn-dev, libgnatvsn9 GNAT version library

C:

| | |
|----------------------|---------------------------------------|
| cpp-9, cpp-9-doc | GNU C Preprocessor |
| libssp0-dev, libssp0 | GCC stack smashing protection library |
| libquadmath0 | Math routines for the __float128 type |
| fixincludes | Fix non-ANSI header files |

C, C++ and Fortran 95:

| | |
|------------------------|-----------------------------------|
| libgomp1-dev, libgomp1 | GCC OpenMP (GOMP) support library |
| libitm1-dev, libitm1 | GNU Transactional Memory Library |

Biarch support: On some 64-bit platforms which can also run 32-bit code,

Debian provides additional packages containing 32-bit versions of some libraries. These packages have names beginning with 'lib32' instead of 'lib', for example lib32stdc++6. Similarly, on some 32-bit platforms which can also run 64-bit code, Debian provides additional packages with names beginning with 'lib64' instead of 'lib'. These packages contain 64-bit versions of the libraries. (At this time, not all platforms and not all libraries support biarch.) The license terms for these lib32 or lib64 packages are identical to the ones for the lib packages.

COPYRIGHT STATEMENTS AND LICENSING TERMS

GCC is Copyright (C) 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019
Free Software Foundation, Inc.

GCC is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3, or (at your option) any later version.

GCC is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

Files that have exception clauses are licensed under the terms of the GNU General Public License; either version 3, or (at your option) any later version.

On Debian GNU/Linux systems, the complete text of the GNU General Public License is in `/usr/share/common-licenses/GPL`, version 3 of this license in `/usr/share/common-licenses/GPL-3`.

The following runtime libraries are licensed under the terms of the GNU General Public License (v3 or later) with version 3.1 of the GCC Runtime Library Exception (included in this file):

- libgcc (libgcc/, gcc/libgcc2.[ch], gcc/unwind*, gcc/gthr*, gcc/coretypes.h, gcc/crtstuff.c, gcc/defaults.h, gcc/dwarf2.h, gcc/emults.c, gcc/gbl-ctors.h, gcc/gcov-io.h, gcc/libgcov.c, gcc/tsystem.h, gcc/typeclass.h).
- libatomic
- libdecnumber
- libgomp
- libitm

- libssp
- libstdc++-v3
- libobjc
- libgfortran
- The libgnat-9 Ada support library and libgnatvsn library.
- Various config files in gcc/config/ used in runtime libraries.
- libvtv

The libbacktrace library is licensed under the following terms:

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- (1) Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- (2) Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- (3) The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The libsanitizer libraries (libasan, liblsan, libtsan, libubsan) are licensed under the following terms:

Copyright (c) 2009-2014 by the LLVM contributors.

All rights reserved.

Developed by:

LLVM Team

University of Illinois at Urbana-Champaign

<http://llvm.org>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal with the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimers.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimers in the documentation and/or other materials provided with the distribution.
- * Neither the names of the LLVM Team, University of Illinois at Urbana-Champaign, nor the names of its contributors may be used to endorse or promote products derived from this Software without specific prior written permission.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE CONTRIBUTORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS WITH THE SOFTWARE.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM,

OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

The libffi library is licensed under the following terms:

libffi - Copyright (c) 1996-2003 Red Hat, Inc.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL CYGNUS SOLUTIONS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

The documentation is licensed under the GNU Free Documentation License (v1.2). On Debian GNU/Linux systems, the complete text of this license is in `/usr/share/common-licenses/GFDL-1.2`.

GCC RUNTIME LIBRARY EXCEPTION

Version 3.1, 31 March 2009

Copyright (C) 2009 Free Software Foundation, Inc. <<http://fsf.org/>>

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

This GCC Runtime Library Exception ("Exception") is an additional permission under section 7 of the GNU General Public License, version 3 ("GPLv3"). It applies to a given file (the "Runtime Library") that bears a notice placed by the copyright holder of the file stating that the file is governed by GPLv3 along with this Exception.

When you use GCC to compile a program, GCC may combine portions of certain GCC header files and runtime libraries with the compiled program. The purpose of this Exception is to allow compilation of non-GPL (including proprietary) programs to use, in this way, the header files and runtime libraries covered by this Exception.

0. Definitions.

A file is an "Independent Module" if it either requires the Runtime Library for execution after a Compilation Process, or makes use of an interface provided by the Runtime Library, but is not otherwise based on the Runtime Library.

"GCC" means a version of the GNU Compiler Collection, with or without modifications, governed by version 3 (or a specified later version) of the GNU General Public License (GPL) with the option of using any subsequent versions published by the FSF.

"GPL-compatible Software" is software whose conditions of propagation, modification and use would permit combination with GCC in accord with the license of GCC.

"Target Code" refers to output from any compiler for a real or virtual target processor architecture, in executable form or suitable for input to an assembler, loader, linker and/or execution phase. Notwithstanding that, Target Code does not include data in any format that is used as a compiler intermediate representation, or used for producing a compiler intermediate representation.

The "Compilation Process" transforms code entirely represented in non-intermediate languages designed for human-written code, and/or in Java Virtual Machine byte code, into Target Code. Thus, for example, use of source code generators and preprocessors need not be considered part of the Compilation Process, since the Compilation Process can be understood as starting with the output of the generators or preprocessors.

A Compilation Process is "Eligible" if it is done using GCC, alone or with other GPL-compatible software, or if it is done without using any work based on GCC. For example, using non-GPL-compatible Software to optimize any GCC intermediate representations would not qualify as an Eligible Compilation Process.

1. Grant of Additional Permission.

You have permission to propagate a work of Target Code formed by combining the Runtime Library with Independent Modules, even if such propagation would otherwise violate the terms of GPLv3, provided that

all Target Code was generated by Eligible Compilation Processes. You may then convey such a combination under terms of your choice, consistent with the licensing of the Independent Modules.

2. No Weakening of GCC Copyleft.

The availability of this Exception does not imply any general presumption that third-party software is unaffected by the copyleft requirements of the license of GCC.

libquadmath/*.`[hc]`:

Copyright (C) 2010 Free Software Foundation, Inc.
Written by Francois-Xavier Coudert <fxcoudert@gcc.gnu.org>
Written by Tobias Burnus <burnus@net-b.de>

This file is part of the libiberty library.
Libiberty is free software; you can redistribute it and/or modify it under the terms of the GNU Library General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

Libiberty is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Library General Public License for more details.

libquadmath/math:

atanq.c, expm1q.c, j0q.c, j1q.c, log1pq.c, logq.c:
Copyright 2001 by Stephen L. Moshier <moshier@na-net.ornl.gov>

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

coshq.c, erfq.c, jnq.c, lgammaq.c, powq.c, roundq.c:
Changes for 128-bit `__float128` are
Copyright (C) 2001 Stephen L. Moshier <moshier@na-net.ornl.gov>
and are incorporated herein by permission of the author. The author reserves the right to distribute this material elsewhere under different

copying permissions. These modifications are distributed here under the following terms:

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

ldexpq.c:

- * Conversion to long double by Ulrich Drepper,
- * Cygnus Support, drepper@cygnus.com.

cosq_kernel.c, expq.c, sincos_table.c, sincosq.c, sincosq_kernel.c, sinq_kernel.c, truncq.c:

Copyright (C) 1997, 1999 Free Software Foundation, Inc.

The GNU C Library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

The GNU C Library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

isinfq.c:

- * Written by J.T. Conklin <jtc@netbsd.org>.
- * Change for long double by Jakub Jelinek <jj@ultra.linux.cz>
- * Public domain.

llroundq.c, lroundq.c, tgammaq.c:

Copyright (C) 1997, 1999, 2002, 2004 Free Software Foundation, Inc.

This file is part of the GNU C Library.

Contributed by Ulrich Drepper <drepper@cygnus.com>, 1997 and
Jakub Jelinek <jj@ultra.linux.cz>, 1999.

The GNU C Library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

The GNU C Library is distributed in the hope that it will be useful,

but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

log10q.c:

Cephes Math Library Release 2.2: January, 1991

Copyright 1984, 1991 by Stephen L. Moshier

Adapted for glibc November, 2001

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

remaining files:

* Copyright (C) 1993 by Sun Microsystems, Inc. All rights reserved.

*

* Developed at SunPro, a Sun Microsystems, Inc. business.

* Permission to use, copy, modify, and distribute this

* software is freely granted, provided that this notice

* is preserved.

gcc/go/gofrontend, libgo:

Copyright (c) 2009 The Go Authors. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of Google Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS

"AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

D:

gdc-9 GNU D Compiler
libphobos-9-dev D standard runtime library

The D source package is made up of the following components.

The D front-end for GCC:

- d/*

Copyright (C) 2004-2007 David Friedman

Modified by Vincenzo Ampolo, Michael Parrot, Iain Buclaw, (C) 2009, 2010

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

On Debian GNU/Linux systems, the complete text of the GNU General Public License is in ``/usr/share/common-licenses/GPL'`, version 2 of this license in ``/usr/share/common-licenses/GPL-2'`.

The DMD Compiler implementation of the D programming language:

- d/dmd/*

Copyright (c) 1999-2010 by Digital Mars

All Rights Reserved

written by Walter Bright

<http://www.digitalmars.com>

License for redistribution is by either the Artistic License or the GNU General Public License (v1).

On Debian GNU/Linux systems, the complete text of the GNU General Public License is in ``/usr/share/common-licenses/GPL'`, the Artistic license in ``/usr/share/common-licenses/Artistic'`.

The Zlib data compression library:

- d/phobos/etc/c/zlib/*

(C) 1995-2004 Jean-loup Gailly and Mark Adler

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

The Phobos standard runtime library:

- d/phobos/*

Unless otherwise marked within the file, each file in the source is under the following licenses:

Copyright (C) 2004-2005 by Digital Mars, www.digitalmars.com

Written by Walter Bright

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, in both source and binary form, subject to the following restrictions:

- o The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
- o Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
- o This notice may not be removed or altered from any source

distribution.

By plainly marking modifications, something along the lines of adding to each file that has been changed a "Modified by Foo Bar" line underneath the "Written by" line would be adequate.

The libhsail-rt library is licensed under the following terms:

Copyright (C) 2015-2017 Free Software Foundation, Inc.
Contributed by Pekka Jaaskelainen <pekka.jaaskelainen@parmance.com>
for General Processor Tech.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

libhsail-rt/rt/fp16.c is licensed under the following terms:

Copyright (C) 2008-2017 Free Software Foundation, Inc.
Contributed by CodeSourcery.

This file is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3, or (at your option) any later version.

This file is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

Under Section 7 of GPL version 3, you are granted additional permissions described in the GCC Runtime Library Exception, version

3.1, as published by the Free Software Foundation.

You should have received a copy of the GNU General Public License and a copy of the GCC Runtime Library Exception along with this program; see the files COPYING3 and COPYING.RUNTIME respectively. If not, see <http://www.gnu.org/licenses/>.

gcc/gm2:

Copyright (C) 2007-2019 Free Software Foundation, Inc.

Contributed by Gaius Mulley <gaius@glam.ac.uk>.

This file is part of GNU Modula-2.

GNU Modula-2 is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3, or (at your option) any later version.

GNU Modula-2 is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

gcc/gm2/**/*.*.texi:

Copyright (C) 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2012, 2013 Free Software Foundation, Inc.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts.

gcc/gm2/gm2-coroutines:

Copyright (C) 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010
Free Software Foundation, Inc.

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

gcc/gm2/ulm-lib-gm2:

Copyright (C) 2004, 2005, 2006, 2007, 2008, 2009, 2010

Free Software Foundation, Inc.

GNU Modula-2 is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3, or (at your option) any later version.

This file was originally part of the University of Ulm library

Ulm's Modula-2 Library

Copyright (C) 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005
by University of Ulm, SAI, D-89069 Ulm, Germany

gcc/gm2/ulm-lib-gm2/std/M2RTS.mod:
gcc/gm2/ulm-lib-gm2/std/Storage.mod:
gcc/gm2/ulm-lib-gm2/std/RTEExceptions.mod:

Copyright (C) 2005, 2006, 2007, 2008, 2009, 2010 Free Software Foundation, Inc.

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU
Lesser General Public License for more details.

gcc/gm2/gm2-libs:
Copyright (C) 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010
Free Software Foundation, Inc.

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU
Lesser General Public License for more details.

./gm2-libs/cbuiltin.def:
./gm2-libs/MathLib0.def:
./gm2-libs/SYSTEM.def:
./gm2-libs/sckt.def:

./gm2-libs/Indexing.def:
./gm2-libs/Builtins.mod:
./gm2-libs/SFIO.mod:
./gm2-libs/MathLib0.mod:
./gm2-libs/gdbif.mod:
./gm2-libs/M2EXCEPTION.mod:
./gm2-libs/SFIO.def:
./gm2-libs/StringConvert.mod:
./gm2-libs/StringConvert.def:
./gm2-libs/config-host.in:
./gm2-libs/Indexing.mod:
./gm2-libs/errno.def:

Copyright (C) 2001-2019 Free Software Foundation, Inc.
Contributed by Gaius Mulley <gaius.mulley@southwales.ac.uk>.

GNU Modula-2 is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3, or (at your option) any later version.

GNU Modula-2 is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

./gm2-libs/M2EXCEPTION.def:
Library module defined by the International Standard
Information technology - programming languages
BS ISO/IEC 10514-1:1996E Part 1: Modula-2, Base Language.

Copyright ISO/IEC (International Organization for Standardization and International Electrotechnical Commission) 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010

gcc/gm2/gm2-libiberty/
Copyright (C) 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010
Free Software Foundation, Inc.

GNU Modula-2 is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3, or (at your option) any later version.

GNU Modula-2 is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

gcc/gm2/gm2-libs-iso/:

This has a mix of licenses, both LGPL-2.1 and GPL-3.0, plus the apparently unmodified definition modules from ISO/IEC.

gcc/gm2/gm2-libs-iso/*.def:

Library module defined by the International Standard
Information technology - programming languages
BS ISO/IEC 10514-1:1996E Part 1: Modula-2, Base Language.

Copyright ISO/IEC (International Organization for Standardization
and International Electrotechnical Commission) 1996, 1997, 1998,
1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010

gcc/gm2/gm2-libs-iso/*.def:

Copyright (C) 2008, 2009, 2010 Free Software Foundation, Inc.

gcc/gm2/gm2-libs-iso/*.def:

This library is free software; you can redistribute it and/or
modify it under the terms of the GNU Lesser General Public
License as published by the Free Software Foundation; either
version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU
Lesser General Public License for more details.

gcc/gm2/gm2-libs-iso/*.mod:

Copyright (C) 2012 Free Software Foundation, Inc.

GNU Modula-2 is free software; you can redistribute it and/or modify it under
the terms of the GNU General Public License as published by the Free
Software Foundation; either version 3, or (at your option) any later
version.

GNU Modula-2 is distributed in the hope that it will be useful, but WITHOUT ANY
WARRANTY; without even the implied warranty of MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License
for more details.

gcc/gm2/gm2-libs-iso/*.mod:

Copyright (C) 2009, 2010 Free Software Foundation, Inc.

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

gcc/gm2/gm2-libs-min/*:
Copyright (C) 2001-2019 Free Software Foundation, Inc.
mix of GPL-3.0 and LGPL-3.0

gcc/gm2/gm2-libs-pim/*:
Copyright (C) 2001-2019 Free Software Foundation, Inc.
mix of GPL-3.0 and LGPL-2.1/3

gcc/gm2/gm2-libs-ch/*:
Copyright (C) 2001-2019 Free Software Foundation, Inc.
mix of GPL-3.0 and LGPL-2.1/3

gcc/gm2/examples:
Copyright (C) 2005-2015 Free Software Foundation, Inc.
Mix of LGPL-2.1 and GPL-3.0.

gcc/gm2/images:
GPL-3+

gcc/gm2/el/gm2-mode.el:
;; Everyone is granted permission to copy, modify and redistribute
;; GNU Emacs, but only under the conditions described in the
;; GNU Emacs General Public License. A copy of this license is
;; supposed to have been given to you along with GNU Emacs so you
;; can know your rights and responsibilities. It should be in a
;; file named COPYING. Among other things, the copyright notice
;; and this notice must be preserved on all copies.

gcc/gm2/mc-boot/
Copyright (C) 2001-2018 Free Software Foundation, Inc.
Contributed by Gaius Mulley <gaius@glam.ac.uk>.
Mix of GPL-3 and LGPL-2.1.

gcc/testsuite/gm2/
Copyright (C) 2001-2019 Free Software Foundation, Inc.
Mix of GPL-2+ and GPL-3+

libgm2:

libgm2/libiso/:

Copyright (C) 2008, 2009, 2010 Free Software Foundation, Inc.

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

libgm2/libpim/:

Copyright (C) 2005-2014 Free Software Foundation, Inc.

Mix of LGPL-2.1, LGPL-3 and GPL-3.

libgm2/liblog/:

Copyright (C) 2005-2018 Free Software Foundation, Inc.

Mix of LGPL-2.1 and LGPL-3.

libgm2/libpth/:

Copyright: (C) 1999-2006 Ralf S. Engelschall <rse@gnu.org>

License: LGPL-2.1+

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Library General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Library General Public License for more details.

libgm2/libulm/:

Copyright (C) 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010

Free Software Foundation, Inc.

GNU Modula-2 is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3, or (at your option) any later version.

GNU Modula-2 is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

libgm2/libcor/:

Copyright (C) 2005-2019 Free Software Foundation, Inc.

Contributed by Gaius Mulley <gaius@glam.ac.uk>.

GNU Modula-2 is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3, or (at your option) any later version.

GNU Modula-2 is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

libgm2/libmin/:

Copyright (C) 2010, 2011, 2012, 2013 Free Software Foundation, Inc.

GNU Modula-2 is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3, or (at your option) any later version.

GNU Modula-2 is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

libgm2/p2c/:

Copyright (C) 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010

Free Software Foundation, Inc.

GNU Modula-2 is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3, or (at your option) any later version.

GNU Modula-2 is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

newlib-X.Y.Z/:

Upstream Authors:

newlib@sources.redhat.com

Jeff Johnston <jjohnstn@redhat.com>

Tom Fitzsimmons <fitzsim@redhat.com>

The newlib subdirectory is a collection of software from several sources. Each file may have its own copyright/license that is embedded in the source file.

This list documents those licenses which are more restrictive than a BSD-like license or require the copyright notice to be duplicated in documentation and/or other materials associated with the distribution. Certain licenses documented here only apply to specific targets. Certain clauses only apply if you are building the code as part of your binary.

Note that this list may omit certain licenses that only pertain to the copying/modifying of the individual source code. If you are distributing the source code, then you do not need to worry about these omitted licenses, so long as you do not modify the copyright information already in place.

Parts of this work are licensed under the terms of the GNU General Public License. On Debian systems, the complete text of this license can be found in `/usr/share/common-licenses/GPL`.

Parts of this work are licensed under the terms of the GNU Library General Public License. On Debian systems, the complete text of this license be found in `/usr/share/common-licenses/LGPL`.

(1) University of California, Berkeley

[1a]

Copyright (c) 1990 The Regents of the University of California.
All rights reserved.

Redistribution and use in source and binary forms are permitted provided that the above copyright notice and this paragraph are duplicated in all such forms and that any documentation, and other materials related to such distribution and use acknowledge that the software was developed by the University of California, Berkeley. The name of the University may not be used to endorse or promote products derived from this software without specific prior written permission.
THIS SOFTWARE IS PROVIDED ``AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

[1b]

Copyright (c) 1990 The Regents of the University of California.

All rights reserved.

Redistribution and use in source and binary forms are permitted provided that the above copyright notice and this paragraph are duplicated in all such forms and that any documentation, advertising materials, and other materials related to such distribution and use acknowledge that the software was developed by the University of California, Berkeley. The name of the University may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

[1c]

Copyright (c) 1981, 1983, 1986, 1988, 1989, 1991, 1992, 1993, 1994
The Regents of the University of California.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:
This product includes software developed by the University of California, Berkeley and its contributors.
4. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

[1d]

Copyright (c) 1988, 1990, 1993 Regents of the University of California.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

[1e]

Copyright (c) 1982, 1986, 1989, 1991, 1993, 1994
The Regents of the University of California. All rights reserved.
(c) UNIX System Laboratories, Inc.

All or some portions of this file are derived from material licensed to the University of California by American Telephone and Telegraph Co. or Unix System Laboratories, Inc. and are reproduced herein with the permission of UNIX System Laboratories, Inc.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software

must display the following acknowledgement:

This product includes software developed by the University of California, Berkeley and its contributors.

4. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

[1f]

Copyright (c) 1987, 1988, 2000 Regents of the University of California.
All rights reserved.

Redistribution and use in source and binary forms are permitted provided that: (1) source distributions retain this entire copyright notice and comment, and (2) distributions including binaries display the following acknowledgement: ``This product includes software developed by the University of California, Berkeley and its contributors" in the documentation or other materials provided with the distribution and in all advertising materials mentioning features or use of this software. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Please note that in some of the above alternate licenses, there is a statement regarding that acknowledgement must be made in any advertising materials for products using the code. This restriction no longer applies due to the following license change:

<ftp://ftp.cs.berkeley.edu/pub/4bsd/README.Impt.License.Change>

In some cases the defunct clause has been removed in modified newlib code and in some cases, the clause has been left as-is.

(2) Cygwin (cygwin targets only)

Copyright 2001 Red Hat, Inc.

This software is a copyrighted work licensed under the terms of the Cygwin license. Please consult the file "CYGWIN_LICENSE" for details.

(3) David M. Gay at AT&T

The author of this software is David M. Gay.

Copyright (c) 1991 by AT&T.

Permission to use, copy, modify, and distribute this software for any purpose without fee is hereby granted, provided that this entire notice is included in all copies of any software which is or includes a copy or modification of this software and in all copies of the supporting documentation for such software.

THIS SOFTWARE IS BEING PROVIDED "AS IS", WITHOUT ANY EXPRESS OR IMPLIED WARRANTY. IN PARTICULAR, NEITHER THE AUTHOR NOR AT&T MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND CONCERNING THE MERCHANTABILITY OF THIS SOFTWARE OR ITS FITNESS FOR ANY PARTICULAR PURPOSE.

(4) Advanced Micro Devices

Copyright 1989, 1990 Advanced Micro Devices, Inc.

This software is the property of Advanced Micro Devices, Inc (AMD) which specifically grants the user the right to modify, use and distribute this software provided this notice is not removed or altered. All other rights are reserved by AMD.

AMD MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, WITH REGARD TO THIS SOFTWARE. IN NO EVENT SHALL AMD BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING FROM THE FURNISHING, PERFORMANCE, OR USE OF THIS SOFTWARE.

So that all may benefit from your experience, please report any problems or suggestions about this software to the 29K Technical Support Center at 800-29-29-AMD (800-292-9263) in the USA, or 0800-89-1131 in the UK, or 0031-11-1129 in Japan, toll free. The direct dial number is 512-462-4118.

Advanced Micro Devices, Inc.

29K Support Products

Mail Stop 573
5900 E. Ben White Blvd.
Austin, TX 78741
800-292-9263

(5) C.W. Sandmann

Copyright (C) 1993 C.W. Sandmann

This file may be freely distributed as long as the author's name remains.

(6) Eric Backus

(C) Copyright 1992 Eric Backus

This software may be used freely so long as this copyright notice is left intact. There is no warrantee on this software.

(7) Sun Microsystems

Copyright (C) 1993 by Sun Microsystems, Inc. All rights reserved.

Developed at SunPro, a Sun Microsystems, Inc. business.

Permission to use, copy, modify, and distribute this software is freely granted, provided that this notice is preserved.

(8) Hewlett Packard

(c) Copyright 1986 HEWLETT-PACKARD COMPANY

To anyone who acknowledges that this file is provided "AS IS" without any express or implied warranty:

permission to use, copy, modify, and distribute this file for any purpose is hereby granted without fee, provided that the above copyright notice and this notice appears in all copies, and that the name of Hewlett-Packard Company not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. Hewlett-Packard Company makes no representations about the suitability of this software for any purpose.

(9) Hans-Peter Nilsson

Copyright (C) 2001 Hans-Peter Nilsson

Permission to use, copy, modify, and distribute this software is freely granted, provided that the above copyright notice, this notice

and the following disclaimer are preserved with no changes.

THIS SOFTWARE IS PROVIDED ``AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

(10) Stephane Carrez (m68hc11-elf/m68hc12-elf targets only)

Copyright (C) 1999, 2000, 2001, 2002 Stephane Carrez (stcarrez@nerim.fr)

The authors hereby grant permission to use, copy, modify, distribute, and license this software and its documentation for any purpose, provided that existing copyright notices are retained in all copies and that this notice is included verbatim in any distributions. No written agreement, license, or royalty fee is required for any of the authorized uses. Modifications to this software may be copyrighted by their authors and need not follow the licensing terms described here, provided that the new terms are clearly indicated on the first page of each file where they apply.

(11) Christopher G. Demetriou

Copyright (c) 2001 Christopher G. Demetriou
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(12) SuperH, Inc.

Copyright 2002 SuperH, Inc. All rights reserved

This software is the property of SuperH, Inc (SuperH) which specifically grants the user the right to modify, use and distribute this software provided this notice is not removed or altered. All other rights are reserved by SuperH.

SUPERH MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, WITH REGARD TO THIS SOFTWARE. IN NO EVENT SHALL SUPERH BE LIABLE FOR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING FROM THE FURNISHING, PERFORMANCE, OR USE OF THIS SOFTWARE.

So that all may benefit from your experience, please report any problems or suggestions about this software to the SuperH Support Center via e-mail at softwaresupport@superh.com .

SuperH, Inc.
405 River Oaks Parkway
San Jose
CA 95134
USA

(13) Royal Institute of Technology

Copyright (c) 1999 Kungliga Tekniska Hgskolan
(Royal Institute of Technology, Stockholm, Sweden).
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of KTH nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY KTH AND ITS CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR

PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL KTH OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(14) Alexey Zelkin

Copyright (c) 2000, 2001 Alexey Zelkin <phantom@FreeBSD.org>
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(15) Andrey A. Chernov

Copyright (C) 1997 by Andrey A. Chernov, Moscow, Russia.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(16) FreeBSD

Copyright (c) 1997-2002 FreeBSD Project.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(17) S. L. Moshier

Author: S. L. Moshier.

Copyright (c) 1984,2000 S.L. Moshier

Permission to use, copy, modify, and distribute this software for any purpose without fee is hereby granted, provided that this entire notice is included in all copies of any software which is or includes a copy

or modification of this software and in all copies of the supporting documentation for such software.

THIS SOFTWARE IS BEING PROVIDED "AS IS", WITHOUT ANY EXPRESS OR IMPLIED WARRANTY. IN PARTICULAR, THE AUTHOR MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND CONCERNING THE MERCHANTABILITY OF THIS SOFTWARE OR ITS FITNESS FOR ANY PARTICULAR PURPOSE.

(18) Citrus Project

Copyright (c)1999 Citrus Project,
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(19) Todd C. Miller

Copyright (c) 1998 Todd C. Miller <Todd.Miller@courtesan.com>
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name of the author may not be used to endorse or promote products

derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(20) DJ Delorie (i386)

Copyright (C) 1991 DJ Delorie
All rights reserved.

Redistribution and use in source and binary forms is permitted provided that the above copyright notice and following paragraph are duplicated in all such forms.

This file is distributed WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

(21) Free Software Foundation LGPL License (*-linux* targets only)

Copyright (C) 1990-1999, 2000, 2001
Free Software Foundation, Inc.
This file is part of the GNU C Library.
Contributed by Mark Kettenis <kettenis@phys.uva.nl>, 1997.

The GNU C Library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

The GNU C Library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with the GNU C Library; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA

(22) Xavier Leroy LGPL License (i[3456]86-*-linux* targets only)

Copyright (C) 1996 Xavier Leroy (Xavier.Leroy@inria.fr)

This program is free software; you can redistribute it and/or modify it under the terms of the GNU Library General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Library General Public License for more details.

(23) Intel (i960)

Copyright (c) 1993 Intel Corporation

Intel hereby grants you permission to copy, modify, and distribute this software and its documentation. Intel grants this permission provided that the above copyright notice appears in all copies and that both the copyright notice and this permission notice appear in supporting documentation. In addition, Intel grants this permission provided that you prominently mark as "not part of the original" any modifications made to this software or documentation, and that the name of Intel Corporation not be used in advertising or publicity pertaining to distribution of the software or the documentation without specific, written prior permission.

Intel Corporation provides this AS IS, WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Intel makes no guarantee or representations regarding the use of, or the results of the use of, the software and documentation in terms of correctness, accuracy, reliability, currentness, or otherwise; and you rely on the software, documentation and results solely at your own risk.

IN NO EVENT SHALL INTEL BE LIABLE FOR ANY LOSS OF USE, LOSS OF BUSINESS, LOSS OF PROFITS, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY KIND. IN NO EVENT SHALL INTEL'S TOTAL LIABILITY EXCEED THE SUM PAID TO INTEL FOR THE PRODUCT LICENSED HEREUNDER.

(24) Hewlett-Packard (hppa targets only)

(c) Copyright 1986 HEWLETT-PACKARD COMPANY

To anyone who acknowledges that this file is provided "AS IS" without any express or implied warranty:

permission to use, copy, modify, and distribute this file

for any purpose is hereby granted without fee, provided that the above copyright notice and this notice appears in all copies, and that the name of Hewlett-Packard Company not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. Hewlett-Packard Company makes no representations about the suitability of this software for any purpose.

(25) Henry Spencer (only *-linux targets)

Copyright 1992, 1993, 1994 Henry Spencer. All rights reserved.
This software is not subject to any license of the American Telephone and Telegraph Company or of the Regents of the University of California.

Permission is granted to anyone to use this software for any purpose on any computer system, and to alter it and redistribute it, subject to the following restrictions:

1. The author is not responsible for the consequences of use of this software, no matter how awful, even if they arise from flaws in it.
2. The origin of this software must not be misrepresented, either by explicit claim or by omission. Since few users ever read sources, credits must appear in the documentation.
3. Altered versions must be plainly marked as such, and must not be misrepresented as being the original software. Since few users ever read sources, credits must appear in the documentation.
4. This notice may not be removed or altered.

(26) Mike Barcroft

Copyright (c) 2001 Mike Barcroft <mike@FreeBSD.org>
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE

ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(27) Konstantin Chuguev (--enable-newlib-iconv)

Copyright (c) 1999, 2000

Konstantin Chuguev. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

iconv (Charset Conversion Library) v2.0

(27) Artem Bityuckiy (--enable-newlib-iconv)

Copyright (c) 2003, Artem B. Bityuckiy, SoftMine Corporation.

Rights transferred to Franklin Electronic Publishers.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright

notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

(28) Red Hat Incorporated

Unless otherwise stated in each remaining newlib file, the remaining files in the newlib subdirectory default to the following copyright. It should be noted that Red Hat Incorporated now owns copyrights belonging to Cygnus Solutions and Cygnus Support.

Copyright (c) 1994, 1997, 2001, 2002, 2003, 2004 Red Hat Incorporated. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

The name of Red Hat Incorporated may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL RED HAT INCORPORATED BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS

SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: gdbm

Upstream-Contact: bug-gdbm@gnu.org

Source: <https://www.gnu.org.ua/software/gdbm/download.html>

Files: *

Copyright: 1990-2020 Free Software Foundation, Inc.

License: GPL-3+

Files: tests/*

Copyright: 2011, 2016-2020 Free Software Foundation, Inc.

License: GPL-2+

Files: git2chg.awk

Copyright: 2007, 2009-2014 Sergey Poznyakoff

License: GPL-3+

Files: debian/*

Copyright: 1995 Ray Dassen.

1996,1997 Mark Eichin

1996,1997 Christoph Lameter.

1998-2006 James Troup.

2016 Dmitry Bogatov <KAction@gnu.org>

License: GPL-3+

Files: doc/*

Copyright: 1989-1999, 2007-2011, 2013, 2016-2020 Free Software Foundation, Inc.

License: GFDL-NIV-1.3+

License: GPL-3+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3 of the License, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

.

On Debian system, copy of GNU Lesser General Public License version 3 is also located at `/usr/share/common-licenses/GPL-3'`

License: GPL-2+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

On Debian system, copy of GNU Lesser General Public License version 2 is also located at `^/usr/share/common-licenses/GPL-2'`

License: GFDL-NIV-1.3+

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover texts, and no Back-Cover texts. A copy of the license is included in the section entitled ``GNU Free Documentation License".

This is Debian GNU's GnuPG keyrings of archive keys.

This package was originally put together by Michael Vogt
<mvo@debian.org>

The keys in the keyrings don't fall under any copyright. Everything else in the package is covered by the GNU GPL.

Debian support files Copyright (C) 2006 Michael Vogt <mvo@debian.org>
based on the debian-keyring package maintained by James Troup

Debian support files for debian-archive-keyring are free software; you can redistribute them and/or modify them under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2, or (at your option) any later version.

Debian support files for debian-archive-keyring are distributed in the hope that they will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License with your Debian system, in `/usr/share/common-licenses/GPL`, or with the Debian GNU debian-archive-keyring source package as the file `COPYING`. If not, write to the Free Software Foundation, Inc., 51 Franklin Street,

Fifth Floor, Boston, MA 02110-1301 USA.

International Components for Unicode (ICU4J) v60.2

ICU4J License

...

UNICODE, INC. LICENSE AGREEMENT - DATA FILES AND SOFTWARE

Unicode Data Files include all data files under the directories

<http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>,

<http://www.unicode.org/cldr/data/>,

<http://source.icu-project.org/repos/icu/>, and

<http://www.unicode.org/utility/trac/browser/>.

Unicode Data Files do not include PDF online code charts under the directory <http://www.unicode.org/Public/>.

Software includes any source code published in the Unicode Standard or under the directories

<http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>,

<http://www.unicode.org/cldr/data/>,

<http://source.icu-project.org/repos/icu/>, and

<http://www.unicode.org/utility/trac/browser/>.

NOTICE TO USER: Carefully read the following legal agreement.

BY DOWNLOADING, INSTALLING, COPYING OR OTHERWISE USING UNICODE INC.'S DATA FILES ("DATA FILES"), AND/OR SOFTWARE ("SOFTWARE"), YOU UNEQUIVOCALLY ACCEPT, AND AGREE TO BE BOUND BY, ALL OF THE TERMS AND CONDITIONS OF THIS AGREEMENT.

IF YOU DO NOT AGREE, DO NOT DOWNLOAD, INSTALL, COPY, DISTRIBUTE OR USE THE DATA FILES OR SOFTWARE.

COPYRIGHT AND PERMISSION NOTICE

Copyright 1991-2018 Unicode, Inc. All rights reserved.

Distributed under the Terms of Use in <http://www.unicode.org/copyright.html>.

Permission is hereby granted, free of charge, to any person obtaining a copy of the Unicode data files and any associated documentation (the "Data Files") or Unicode software and any associated documentation (the "Software") to deal in the Data Files or Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Data Files or Software, and to permit persons to whom the Data Files or Software are furnished to do so, provided that either

- (a) this copyright and permission notice appear with all copies of the Data Files or Software, or
- (b) this copyright and permission notice appear in associated

Documentation.

THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS.

IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in these Data Files or Software without prior written authorization of the copyright holder.

...

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Source: <https://salsa.debian.org/debian/media-types>

Files: *

Copyright: public-domain

License: ad-hoc

This package contains public information compiled from around the 'net and many people.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Files: *

Copyright: 2013 Michael Stapelberg

License: BSD-3-clause

Files: debian/*

Copyright: 2013 Michael Stapelberg <stapelberg@debian.org>

License: BSD-3-clause

Files: script/service man8/service.rst

Copyright: 2006 Red Hat, Inc

2008 Canonical Ltd

License: GPL-2+

Files: script/invoke-rc.d man8/invoke-rc.d.rst

Copyright: 2000,2001 Henrique de Moraes Holschuh <hnh@debian.org>

License: GPL-2+

Files: script/update-rc.d man8/update-rc.d.rst

Copyright: 1997-2005 Miquel van Smoorenburg <miquels@cistron.nl>

Members of the pkg-sysvinit project

License: GPL-2+

License: GPL-2+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

.

On Debian systems, the complete text of the GNU General Public License version 2 can be found in /usr/share/common-licenses/GPL-2.

License: BSD-3-clause

Copyright 2013 Michael Stapelberg

All rights reserved.

.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

.

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

.

- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

.

- * Neither the name of Michael Stapelberg nor the names of contributors may be used to endorse or promote products derived from this software without specific prior written permission.

.

THIS SOFTWARE IS PROVIDED BY Michael Stapelberg "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL Michael Stapelberg BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS

SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This package was debianized by Matthias Klose <doko@debian.org>

on Mon, 10 Mar 2008 05:46:40 +0000.

It was downloaded from <ftp://sourceware.org/pub/libffi/>

Upstream Authors:

Anthony Green <green@redhat.com>

GCC developers

See the README and below in the list of copyright holders for a more complete list.

Copyright:

Copyright (c) 1996-2011 Red Hat, Inc.

Copyright (C) 1996-2011 Anthony Green

Copyright (C) 1996-2010 Free Software Foundation, Inc

Copyright (c) 2003, 2004, 2006, 2007, 2008 Kaz Kojima

Copyright (c) 2010, 2011, Plausible Labs Cooperative , Inc.

Copyright (c) 2010 CodeSourcery

Copyright (c) 1998 Andreas Schwab

Copyright (c) 2000 Hewlett Packard Company

Copyright (c) 2009 Bradley Smith

Copyright (c) 2008 David Daney

Copyright (c) 2004 Simon Posnjak

Copyright (c) 2005 Axis Communications AB

Copyright (c) 1998 Cygnus Solutions

Copyright (c) 2004 Renesas Technology

Copyright (c) 2002, 2007 Bo Thorsen <bo@suse.de>

Copyright (c) 2002 Ranjit Mathew

Copyright (c) 2002 Roger Sayle

Copyright (c) 2000, 2007 Software AG

Copyright (c) 2003 Jakub Jelinek

Copyright (c) 2000, 2001 John Hornkvist

Copyright (c) 1998 Geoffrey Keating

Copyright (c) 2008 Bjrn Knig

License:

libffi - Copyright (c) 1996-2010 Red Hat, Inc and others.

See source files for details.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the ``Software''), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to

the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED ``AS IS'', WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Documentation:

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2, or (at your option) any later version. A copy of the license is included in the section entitled ``GNU General Public License''.

doc/*:

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2, or (at your option) any later version. A copy of the license is included in the section entitled ``GNU General Public License''.

On Debian GNU/Linux systems, the complete text of the GNU General Public License is in `/usr/share/common-licenses/GPL`.

The Debian packaging is (C) 2008, 2011 Matthias Klose <doko@debian.org> and is licensed under the GPL, see `/usr/share/common-licenses/GPL`.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: auditd

Source: <https://people.redhat.com/sgrubb/audit/>

Files: *

Copyright: 2012-2016 Steve Grubb <sgrubb@redhat.com>

2006-2012 Rik Faith

License: GPL-2

Files: src/libev/*

Copyright: 2007-2009 Marc Alexander Lehmann

License: GPL-2

Files: lib/*

Copyright: 2005-2008 Steve Grubb <sgrubb@redhat.com>

License: LGPL-2.1

The audit daemon's library libaudit.* is released under LGPL
so that it may be linked with 3rd party software.

.
On Debian systems, refer to /usr/share/common-licenses/LGPL-2.1
for the complete text of the GNU Lesser General Public License.

Files: debian/*

Copyright: 2007-2011 Philipp Matthias Hahn <pmhahn@debian.org>

2012-2016 Laurent Bigonville <bigon@debian.org>

License: GPL-2

License: GPL-2

This package is free software; you can redistribute it and/or modify
it under the terms of the GNU General Public License version 2,
as published by the Free Software Foundation.

.
This package is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
GNU General Public License for more details.

.
You should have received a copy of the GNU General Public License
along with this package; if not, write to the Free Software
Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA

.
On Debian systems, the complete text of the GNU General
Public License can be found in /usr/share/common-licenses/GPL-1'.
This is the Debian GNU/Linux prepackaged version of GNU tar. GNU
tar, heavily based on John Gilmore's public domain version of tar,
was originally written by Graham Todd. It is now maintained by
Paul Eggert <eggert@twinsun.com>.

This package is maintained for Debian by Janos Lenart <ocsi@debian.org>, and
was built from the sources found at:

<ftp://ftp.gnu.org/gnu/tar/>

More recently, I'm directly using the upstream source repository at

<http://git.savannah.gnu.org/cgit/tar.git>

GNU tar is

Copyright (C) 1988, 1992, 1993, 1994, 1995, 1996, 1997, 1999, 2000,
2001, 2003, 2004, 2005, 2006, 2007 Free Software Foundation, Inc.

This program is free software; you can redistribute it and/or modify it
under the terms of the GNU General Public License as published by the

Free Software Foundation; either version 3, or (at your option) any later version.

On Debian GNU/Linux systems, the complete text of the GNU General Public License version 3 can be found in /usr/share/common-licenses/GPL-3.

The Debian packaging is

Copyright (C) 2006, 2007 Bdale Garbee <bdale@gag.com>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2, or (at your option) any later version.

On Debian GNU/Linux systems, the complete text of the GNU General Public License version 2 can be found in /usr/share/common-licenses/GPL-2.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: libnsl

Upstream-Contact: Thorsten Kukuk <kukuk@thkukuk.de>

Source: <https://github.com/thkukuk/libnsl>

Files: debian/*

Copyright: 2020, Aurelien Jarno

License: LGPL-2.1+

Files: AUTHORS

configure.ac

config.h.in

libnsl.pc.in

Makefile.am

NEWS

README

src/Makefile.am

src/do_ypcall.c

src/internal.h

src/libnsl.map

src/nisplus/nis_error.c

src/taddr2host.c

src/taddr2ipstr.c

src/taddr2port.c

src/yp_first.c

src/yp_get_default_domain.c

src/yp_maplist.c

src/yp_master.c

src/yp_match.c

src/yp_next.c

src/yp_order.c

src/ypbinderr_string.c

src/yperr_string.c

src/ypprot_err.c

Copyright: 2014, 2015, 2017-2018, Thorsten Kukuk

License: LGPL-2.1

Files: src/libc-lock.h

src/nisplus/nis_add.c

src/nisplus/nis_addmember.c

src/nisplus/nis_call.c

src/nisplus/nis_callback.c

src/nisplus/nis_checkpoint.c

src/nisplus/nis_clone_dir.c

src/nisplus/nis_clone_obj.c

src/nisplus/nis_clone_res.c

src/nisplus/nis_creategroup.c

src/nisplus/nis_defaults.c

src/nisplus/nis_destroygroup.c

src/nisplus/nis_domain_of.c

src/nisplus/nis_domain_of_r.c

src/nisplus/nis_file.c

src/nisplus/nis_findserv.c

src/nisplus/nis_free.c

src/nisplus/nis_getservlist.c

src/nisplus/nis_hash.c

src/nisplus/nis_intern.h

src/nisplus/nis_ismember.c

src/nisplus/nis_local_names.c

src/nisplus/nis_lookup.c

src/nisplus/nis_mkdir.c

src/nisplus/nis_modify.c

src/nisplus/nis_ping.c

src/nisplus/nis_print.c

src/nisplus/nis_print_group_entry.c

src/nisplus/nis_remove.c

src/nisplus/nis_removemember.c

src/nisplus/nis_rmdir.c

src/nisplus/nis_server.c

src/nisplus/nis_subr.c

src/nisplus/nis_table.c

src/nisplus/nis_util.c

src/nisplus/nis_verifygroup.c

src/nisplus/nis_xdr.c

src/nisplus/nis_xdr.h

src/rpcsvc/nislib.h

src/rpcsvc/ypclnt.h

Copyright: 1996-2015, Free Software Foundation, Inc.

License: LGPL-2.1+

Files: src/rpcsvc/nis_callback.h

src/rpcsvc/nis_callback.x

src/rpcsvc/nis_object.x

src/rpcsvc/nis_tags.h

src/rpcsvc/nis.h

src/rpcsvc/nis.x

src/rpcsvc/yp.h

src/rpcsvc/yp.x

src/rpcsvc/yp_prot.h

src/rpcsvc/yppasswd.h

src/rpcsvc/yppasswd.x

src/rpcsvc/ypupd.h

src/yp_xdr.c

Copyright: 2010, Oracle America, Inc.

License: BSD-3-clause

Files: INSTALL

Copyright: 1994-1996, 1999-2002, 2004-2016 Free Software Foundation, Inc.

License: permissive-fsf

Files: Makefile.in

src/Makefile.in

Copyright: 1994-2020 Free Software Foundation, Inc.

License: permissive-makefile-in

Files: aclocal.m4

Copyright: 1996-2017 Free Software Foundation, Inc.

License: permissive-autoconf-m4-no-warranty

Files: config.sub

config.guess

Copyright: 1992-2018 Free Software Foundation, Inc.

License: GPL-3+-autoconf-exception

Files: configure

Copyright: 1992-1996, 1998-2012 Free Software Foundation, Inc.

License: permissive-configure

Files: compile

depcomp

missing

test-driver

Copyright: 1999-2017 Free Software Foundation, Inc.

License: GPL-2+-autoconf-exception

Files: install-sh

Copyright: 1994 X Consortium

License: MIT

Files: ltmain.sh

Copyright: 1996-2015 Free Software Foundation, Inc.

License: GPL-2+-libtool-exception

Files: config.rpath

m4/gettext.m4

m4/host-cpu-c-abi.m4

m4/iconv.m4

m4/intlmacosx.m4

m4/lib-ld.m4

m4/lib-link.m4

m4/lib-prefix.m4

m4/libtool.m4

m4/ltoptions.m4

m4/ltsugar.m4

m4/ltversion.m4

m4/lt~obsolete.m4

m4/nls.m4

m4/po.m4

m4/progtest.m4

Copyright: 1995-2020 Free Software Foundation, Inc.

License: permissive-autoconf-m4

Files: ABOUT-NLS

po/Makefile.in.in

po/Makevars

po/POTFILES.in

po/Rules-quot

po/boldquot.sed

po/en@boldquot.header

po/en@quot.header

po/insert-header.sin

po/libnsl.pot

po/quot.sed

po/remove-potcdate.sin

po/stamp-po

Copyright: 1995-1997, 2000-2007, 2009-2010 Ulrich Drepper

License: permissive-fsf

License: BSD-3-clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

.

* Redistributions of source code must retain the above copyright

notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of the "Oracle America, Inc." nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: GPL-2+-autoconf-exception

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

As a special exception to the GNU General Public License, if you distribute this file as part of a program that contains a configuration script generated by Autoconf, you may include it under the same distribution terms that you use for the rest of that program.

On Debian systems, the complete text of the GNU General Public License version 2 can be found in `~/usr/share/common-licenses/GPL-2'`.

License: GPL-2+-libtool-exception

GNU Libtool is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or

(at your option) any later version.

.
As a special exception to the GNU General Public License, if you distribute this file as part of a program or library that is built using GNU Libtool, you may include this file under the same distribution terms that you use for the rest of that program.

.
GNU Libtool is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.
You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

.
On Debian systems, the complete text of the GNU General Public License version 2 can be found in ``/usr/share/common-licenses/GPL-2'`.

License: GPL-3+-autoconf-exception

This file is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3 of the License, or (at your option) any later version.

.
This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.
You should have received a copy of the GNU General Public License along with this program; if not, see <<http://www.gnu.org/licenses/>>.

.
As a special exception to the GNU General Public License, if you distribute this file as part of a program that contains a configuration script generated by Autoconf, you may include it under the same distribution terms that you use for the rest of that program. This Exception is an additional permission under section 7 of the GNU General Public License, version 3 ("GPLv3").

.
On Debian systems, the complete text of the GNU General Public License Version 3 can be found in ``/usr/share/common-licenses/GPL-3'`.

License: LGPL-2.1

This library is free software: you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License in version 2.1 as published by the Free Software Foundation.

.
This library is distributed in the hope that it will be useful,

but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

On Debian systems, the complete text of the GNU Lesser General Public License version 2.1 can be found in "/usr/share/common-licenses/LGPL-2.1".

License: LGPL-2.1+

The GNU C Library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

The GNU C Library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with the GNU C Library; if not, see <<http://www.gnu.org/licenses/>>.

On Debian systems, the complete text of the GNU Lesser General Public License version 2.1 can be found in "/usr/share/common-licenses/LGPL-2.1".

License: MIT

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE X CONSORTIUM BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of the X Consortium shall not be used in advertising or otherwise to promote the sale, use or other deal-

ings in this Software without prior written authorization from the X Consortium.

License: permissive-autoconf-m4

This file is free software; the Free Software Foundation gives unlimited permission to copy and/or distribute it, with or without modifications, as long as this notice is preserved.

License: permissive-autoconf-m4-no-warranty

This file is free software; the Free Software Foundation gives unlimited permission to copy and/or distribute it, with or without modifications, as long as this notice is preserved.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY, to the extent permitted by law; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

License: permissive-configure

This configure script is free software; the Free Software Foundation gives unlimited permission to copy, distribute and modify it.

License: permissive-fsf

Copying and distribution of this file, with or without modification, are permitted in any medium without royalty provided the copyright notice and this notice are preserved. This file is offered as-is, without any warranty.

License: permissive-makefile-in

This Makefile.in is free software; the Free Software Foundation gives unlimited permission to copy and/or distribute it, with or without modifications, as long as this notice is preserved.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY, to the extent permitted by law; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

GIFLIB v5.2.1

GIFLIB License

``

The GIFLIB distribution is Copyright (c) 1997 Eric S. Raymond

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell

copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

<https://sourceforge.net/p/giflib/code/ci/master/tree/openbsd-reallocarray.c>

Copyright (c) 2008 Otto Moerbeek <otto@drijf.net>

SPDX-License-Identifier: MIT

A. HISTORY OF THE SOFTWARE

=====

Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see <http://www.cwi.nl>) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others.

In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see <http://www.cnri.reston.va.us>) in Reston, Virginia where he released several versions of the software.

In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see <https://www.python.org/psf/>) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF.

All Python releases are Open Source (see <http://www.opensource.org> for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases.

| Release | Derived | Year | Owner | GPL- |
|---------|---------|------|-------|-----------------|
| | from | | | compatible? (1) |

| | | | | |
|----------------|-----------|-----------|------------|---------|
| 0.9.0 thru 1.2 | | 1991-1995 | CWI | yes |
| 1.3 thru 1.5.2 | 1.2 | 1995-1999 | CNRI | yes |
| 1.6 | 1.5.2 | 2000 | CNRI | no |
| 2.0 | 1.6 | 2000 | BeOpen.com | no |
| 1.6.1 | 1.6 | 2001 | CNRI | yes (2) |
| 2.1 | 2.0+1.6.1 | 2001 | PSF | no |
| 2.0.1 | 2.0+1.6.1 | 2001 | PSF | yes |
| 2.1.1 | 2.1+2.0.1 | 2001 | PSF | yes |
| 2.1.2 | 2.1.1 | 2002 | PSF | yes |
| 2.1.3 | 2.1.2 | 2002 | PSF | yes |
| 2.2 and above | 2.1.1 | 2001-now | PSF | yes |

Footnotes:

(1) GPL-compatible doesn't mean that we're distributing Python under the GPL. All Python licenses, unlike the GPL, let you distribute a modified version without making your changes open source. The GPL-compatible licenses make it possible to combine Python with other software that is released under the GPL; the others don't.

(2) According to Richard Stallman, 1.6.1 is not GPL-compatible, because its license has a choice of law clause. According to CNRI, however, Stallman's lawyer has told CNRI's lawyer that 1.6.1 is "not incompatible" with the GPL.

Thanks to the many outside volunteers who have worked under Guido's direction to make these releases possible.

B. TERMS AND CONDITIONS FOR ACCESSING OR OTHERWISE USING PYTHON

=====

Python software and documentation are licensed under the Python Software Foundation License Version 2.

Starting with Python 3.8.6, examples, recipes, and other code in the documentation are dual licensed under the PSF License Version 2 and the Zero-Clause BSD license.

Some software incorporated into Python is under different licenses. The licenses are listed with code falling under that license.

PYTHON SOFTWARE FOUNDATION LICENSE VERSION 2

1. This LICENSE AGREEMENT is between the Python Software Foundation ("PSF"), and the Individual or Organization ("Licensee") accessing and

otherwise using this software ("Python") in source or binary form and its associated documentation.

2. Subject to the terms and conditions of this License Agreement, PSF hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python alone or in any derivative version, provided, however, that PSF's License Agreement and PSF's notice of copyright, i.e., "Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021 Python Software Foundation; All Rights Reserved" are retained in Python alone or in any derivative version prepared by Licensee.

3. In the event Licensee prepares a derivative work that is based on or incorporates Python or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python.

4. PSF is making Python available to Licensee on an "AS IS" basis. PSF MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, PSF MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

5. PSF SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

6. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

7. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between PSF and Licensee. This License Agreement does not grant permission to use PSF trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party.

8. By copying, installing or otherwise using Python, Licensee agrees to be bound by the terms and conditions of this License Agreement.

BEOPEN.COM LICENSE AGREEMENT FOR PYTHON 2.0

BEOPEN PYTHON OPEN SOURCE LICENSE AGREEMENT VERSION 1

1. This LICENSE AGREEMENT is between BeOpen.com ("BeOpen"), having an office at 160 Saratoga Avenue, Santa Clara, CA 95051, and the Individual or Organization ("Licensee") accessing and otherwise using this software in source or binary form and its associated documentation ("the Software").
2. Subject to the terms and conditions of this BeOpen Python License Agreement, BeOpen hereby grants Licensee a non-exclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use the Software alone or in any derivative version, provided, however, that the BeOpen Python License is retained in the Software, alone or in any derivative version prepared by Licensee.
3. BeOpen is making the Software available to Licensee on an "AS IS" basis. BEOPEN MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, BEOPEN MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.
4. BEOPEN SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF THE SOFTWARE FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF USING, MODIFYING OR DISTRIBUTING THE SOFTWARE, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.
5. This License Agreement will automatically terminate upon a material breach of its terms and conditions.
6. This License Agreement shall be governed by and interpreted in all respects by the law of the State of California, excluding conflict of law provisions. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between BeOpen and Licensee. This License Agreement does not grant permission to use BeOpen trademarks or trade names in a trademark sense to endorse or promote products or services of Licensee, or any third party. As an exception, the "BeOpen Python" logos available at <http://www.pythonlabs.com/logos.html> may be used according to the permissions granted on that web page.
7. By copying, installing or otherwise using the software, Licensee agrees to be bound by the terms and conditions of this License Agreement.

CNRI LICENSE AGREEMENT FOR PYTHON 1.6.1

1. This LICENSE AGREEMENT is between the Corporation for National Research Initiatives, having an office at 1895 Preston White Drive, Reston, VA 20191 ("CNRI"), and the Individual or Organization ("Licensee") accessing and otherwise using Python 1.6.1 software in source or binary form and its associated documentation.

2. Subject to the terms and conditions of this License Agreement, CNRI hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python 1.6.1 alone or in any derivative version, provided, however, that CNRI's License Agreement and CNRI's notice of copyright, i.e., "Copyright (c) 1995-2001 Corporation for National Research Initiatives; All Rights Reserved" are retained in Python 1.6.1 alone or in any derivative version prepared by Licensee. Alternately, in lieu of CNRI's License Agreement, Licensee may substitute the following text (omitting the quotes): "Python 1.6.1 is made available subject to the terms and conditions in CNRI's License Agreement. This Agreement together with Python 1.6.1 may be located on the Internet using the following unique, persistent identifier (known as a handle): 1895.22/1013. This Agreement may also be obtained from a proxy server on the Internet using the following URL: <http://hdl.handle.net/1895.22/1013>".

3. In the event Licensee prepares a derivative work that is based on or incorporates Python 1.6.1 or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python 1.6.1.

4. CNRI is making Python 1.6.1 available to Licensee on an "AS IS" basis. CNRI MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, CNRI MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON 1.6.1 WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

5. CNRI SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON 1.6.1 FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON 1.6.1, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

6. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

7. This License Agreement shall be governed by the federal intellectual property law of the United States, including without

limitation the federal copyright law, and, to the extent such U.S. federal law does not apply, by the law of the Commonwealth of Virginia, excluding Virginia's conflict of law provisions. Notwithstanding the foregoing, with regard to derivative works based on Python 1.6.1 that incorporate non-separable material that was previously distributed under the GNU General Public License (GPL), the law of the Commonwealth of Virginia shall govern this License Agreement only as to issues arising under or with respect to Paragraphs 4, 5, and 7 of this License Agreement. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between CNRI and Licensee. This License Agreement does not grant permission to use CNRI trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party.

8. By clicking on the "ACCEPT" button where indicated, or by copying, installing or otherwise using Python 1.6.1, Licensee agrees to be bound by the terms and conditions of this License Agreement.

ACCEPT

CWI LICENSE AGREEMENT FOR PYTHON 0.9.0 THROUGH 1.2

Copyright (c) 1991 - 1995, Stichting Mathematisch Centrum Amsterdam, The Netherlands. All rights reserved.

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Stichting Mathematisch Centrum or CWI not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

STICHTING MATHEMATISCH CENTRUM DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL STICHTING MATHEMATISCH CENTRUM BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

ZERO-CLAUSE BSD LICENSE FOR CODE IN THE PYTHON DOCUMENTATION

Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted.

THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

This is the Debian GNU/Linux packaged version of the GNU core utilities.

This package is maintained by Michael Stone <mstone@debian.org> and built from sources obtained from:
ftp://ftp.gnu.org/gnu/coreutils/coreutils-8.24.tar.xz

This debian package was first created by Michael Stone <mstone@debian.org>, from coreutils 4.5.1.

Changes:

- * added Debian GNU/Linux package maintenance system files
- * at times, bug fixes awaiting inclusion in the upstream source

Authors

=====

See the file AUTHORS.

Copyright Holders and License

=====

lib/fts.c

Copyright (C) 2004, 2005, 2006, 2007, 2008 Free Software Foundation, Inc.

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>. */

/*-

* Copyright (c) 1990, 1993, 1994

* The Regents of the University of California. All rights reserved.

*

* Redistribution and use in source and binary forms, with or without
* modification, are permitted provided that the following conditions
* are met:

* 1. Redistributions of source code must retain the above copyright
* notice, this list of conditions and the following disclaimer.

* 2. Redistributions in binary form must reproduce the above copyright
* notice, this list of conditions and the following disclaimer in the
* documentation and/or other materials provided with the distribution.

* 4. Neither the name of the University nor the names of its contributors
* may be used to endorse or promote products derived from this software
* without specific prior written permission.

*

* THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND
* ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
* ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE
* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
* SUCH DAMAGE.

*/

lib/fts_.h

Copyright (C) 2004, 2005, 2006, 2007 Free Software Foundation, Inc.

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <http://www.gnu.org/licenses/>. */

/*

* Copyright (c) 1989, 1993

* The Regents of the University of California. All rights reserved.

*

* Redistribution and use in source and binary forms, with or without

* modification, are permitted provided that the following conditions

* are met:

* 1. Redistributions of source code must retain the above copyright

* notice, this list of conditions and the following disclaimer.

* 2. Redistributions in binary form must reproduce the above copyright

* notice, this list of conditions and the following disclaimer in the

* documentation and/or other materials provided with the distribution.

* 4. Neither the name of the University nor the names of its contributors

* may be used to endorse or promote products derived from this software

* without specific prior written permission.

*

* THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND

* ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE

* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE

* ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE

* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL

* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS

* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)

* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT

* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY

* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF

* SUCH DAMAGE.

lib/rand-isaac.[ch]

Copyright (C) 1999-2006 Free Software Foundation, Inc.

Copyright (C) 1997, 1998, 1999 Colin Plumb.

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

lib/inet_ntop.c

Copyright (C) 2005, 2006 Free Software Foundation, Inc.

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA. */

/*

* Copyright (c) 1996-1999 by Internet Software Consortium.

*

* Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

*

* THE SOFTWARE IS PROVIDED "AS IS" AND INTERNET SOFTWARE CONSORTIUM DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL INTERNET SOFTWARE CONSORTIUM BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

*/

m4/autobuild.m4

dnl Copyright (C) 2004, 2006, 2007 Free Software Foundation, Inc.

dnl This file is free software; the Free Software Foundation
dnl gives unlimited permission to copy and/or distribute it,
dnl with or without modifications, as long as this notice is preserved.

dnl From Simon Josefsson

src/cut.c

Copyright (C) 1997-2007 Free Software Foundation, Inc.

Copyright (C) 1984 David M. Ihnat

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>. */

src/dircolors.c

Copyright (C) 1996-2007 Free Software Foundation, Inc.

Copyright (C) 1994, 1995, 1997, 1998, 1999, 2000 H. Peter Anvin

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>. */

src/paste.c

Copyright (C) 1997-2005 Free Software Foundation, Inc.

Copyright (C) 1984 David M. Ihnat

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>. */

src/shred.c

Copyright (C) 1999-2007 Free Software Foundation, Inc.
Copyright (C) 1997, 1998, 1999 Colin Plumb.

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

doc/coreutils.texi (The GNU Coreutils Manual)

Copyright © 1994-1996, 2000-2008 Free Software Foundation, Inc.

Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.2 or any later version published by the Free Software Foundation; with no Invariant Sections, with no Front-Cover Texts, and with no Back-Cover Texts. A copy of the license is included in the section entitled "GNU Free Documentation License".

all other files

Copyright (C) 1984-2008 Free Software Foundation, Inc.

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

On Debian systems, the complete text of the GNU General Public License can be found in `~/usr/share/common-licenses/GPL-3`. This package was debianized by Matthew Vernon <matthew@debian.org>, with sources downloaded from:
<ftp://ftp.csx.cam.ac.uk/pub/software/programming/pcre/>

PCRE2 LICENCE

PCRE2 is a library of functions to support regular expressions whose syntax and semantics are as close as possible to those of the Perl 5 language.

Release 10 of PCRE2 is distributed under the terms of the "BSD" licence, as specified below. The documentation for PCRE2, supplied in the "doc" directory, is distributed under the same terms as the software itself. The data in the testdata directory is not copyrighted and is in the public domain.

The basic library functions are written in C and are freestanding. Also included in the distribution is a just-in-time compiler that can be used to optimize pattern matching. This is an optional feature that can be omitted when the library is built.

THE BASIC LIBRARY FUNCTIONS

Written by: Philip Hazel
Email local part: ph10
Email domain: cam.ac.uk

University of Cambridge Computing Service,
Cambridge, England.

Copyright (c) 1997-2015 University of Cambridge
All rights reserved.

PCRE2 JUST-IN-TIME COMPILATION SUPPORT

Written by: Zoltan Herczeg
Email local part: hzmester
Email domain: freemail.hu

Copyright(c) 2010-2015 Zoltan Herczeg
All rights reserved.

STACK-LESS JUST-IN-TIME COMPILER

Written by: Zoltan Herczeg
Email local part: hzmester
Email domain: freemail.hu

Copyright(c) 2009-2015 Zoltan Herczeg
All rights reserved.

THE "BSD" LICENCE

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice,
this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright
notice, this list of conditions and the following disclaimer in the
documentation and/or other materials provided with the distribution.
- * Neither the name of the University of Cambridge nor the names of any
contributors may be used to endorse or promote products derived from this
software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS"

AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

End

This package was debianized by Christoph Martin martin@uni-mainz.de on Fri, 22 Nov 1996 21:29:51 +0100.

Copyright (c) 1998-2004 The OpenSSL Project

Copyright (c) 1995-1998 Eric A. Young, Tim J. Hudson

The upstream sources were obtained from <https://www.openssl.org/>

LICENSE ISSUES

=====

The OpenSSL toolkit stays under a dual license, i.e. both the conditions of the OpenSSL License and the original SSLeay license apply to the toolkit. See below for the actual license texts. Actually both licenses are BSD-style Open Source licenses. In case of any license issues related to OpenSSL please contact openssl-core@openssl.org.

OpenSSL License

/* =====

* Copyright (c) 1998-2004 The OpenSSL Project. All rights reserved.

*

* Redistribution and use in source and binary forms, with or without
* modification, are permitted provided that the following conditions
* are met:

*

* 1. Redistributions of source code must retain the above copyright
* notice, this list of conditions and the following disclaimer.

*

* 2. Redistributions in binary form must reproduce the above copyright
* notice, this list of conditions and the following disclaimer in
* the documentation and/or other materials provided with the
* distribution.

*

- * 3. All advertising materials mentioning features or use of this
- * software must display the following acknowledgment:
- * "This product includes software developed by the OpenSSL Project
- * for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)"
- *
- * 4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to
- * endorse or promote products derived from this software without
- * prior written permission. For written permission, please contact
- * openssl-core@openssl.org.
- *
- * 5. Products derived from this software may not be called "OpenSSL"
- * nor may "OpenSSL" appear in their names without prior written
- * permission of the OpenSSL Project.
- *
- * 6. Redistributions of any form whatsoever must retain the following
- * acknowledgment:
- * "This product includes software developed by the OpenSSL Project
- * for use in the OpenSSL Toolkit (<http://www.openssl.org/>)"
- *
- * THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS'' AND ANY
- * EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
- * IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR
- * PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR
- * ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,
- * SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT
- * NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES;
- * LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
- * HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT,
- * STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)
- * ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED
- * OF THE POSSIBILITY OF SUCH DAMAGE.
- * =====
- *
- * This product includes cryptographic software written by Eric Young
- * (ey@cryptsoft.com). This product includes software written by Tim
- * Hudson (tjh@cryptsoft.com).
- *
- */

Original SSLeay License

- /* Copyright (C) 1995-1998 Eric Young (ey@cryptsoft.com)
- * All rights reserved.
- *
- * This package is an SSL implementation written
- * by Eric Young (ey@cryptsoft.com).
- * The implementation was written so as to conform with Netscapes SSL.

*
 * This library is free for commercial and non-commercial use as long as
 * the following conditions are adhered to. The following conditions
 * apply to all code found in this distribution, be it the RC4, RSA,
 * lhash, DES, etc., code; not just the SSL code. The SSL documentation
 * included with this distribution is covered by the same copyright terms
 * except that the holder is Tim Hudson (tjh@cryptsoft.com).
 *
 * Copyright remains Eric Young's, and as such any Copyright notices in
 * the code are not to be removed.
 * If this package is used in a product, Eric Young should be given attribution
 * as the author of the parts of the library used.
 * This can be in the form of a textual message at program startup or
 * in documentation (online or textual) provided with the package.
 *
 * Redistribution and use in source and binary forms, with or without
 * modification, are permitted provided that the following conditions
 * are met:
 * 1. Redistributions of source code must retain the copyright
 * notice, this list of conditions and the following disclaimer.
 * 2. Redistributions in binary form must reproduce the above copyright
 * notice, this list of conditions and the following disclaimer in the
 * documentation and/or other materials provided with the distribution.
 * 3. All advertising materials mentioning features or use of this software
 * must display the following acknowledgement:
 * "This product includes cryptographic software written by
 * Eric Young (eay@cryptsoft.com)"
 * The word 'cryptographic' can be left out if the routines from the library
 * being used are not cryptographic related :-).
 * 4. If you include any Windows specific code (or a derivative thereof) from
 * the apps directory (application code) you must include an acknowledgement:
 * "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"
 *
 * THIS SOFTWARE IS PROVIDED BY ERIC YOUNG ``AS IS" AND
 * ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
 * IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
 * ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE
 * FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
 * DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
 * OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
 * HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
 * LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
 * OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
 * SUCH DAMAGE.
 *
 * The licence and distribution terms for any publically available version or
 * derivative of this code cannot be changed. i.e. this code cannot simply be
 * copied and put under another distribution licence

* [including the GNU Public Licence.]

*/

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: util-linux

Upstream-Contact: util-linux@vger.kernel.org

Source: <https://www.kernel.org/pub/linux/utils/util-linux/>

Files: *

Copyright: Michal Luscon <mluscon@redhat.com>

1986 Gary S. Brown

1990 Gordon Irlam (gordoni@cs.ua.oz.au)

1991, 1992 Linus Torvalds

1991-2004 Miquel van Smoorenburg

1992 A. V. Le Blanc (LeBlanc@mcc.ac.uk)

1992-1997 Michael K. Johnson, johnsonm@redhat.com

1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002,

2003, 2004, 2005, 2008 Theodore Ts'o <tytso@mit.edu>

1994 Kevin E. Martin (martin@cs.unc.edu)

1994 Salvatore Valente <svalente@mit.edu>

1994,1996 Alessandro Rubini (rubini@ipvvis.unipv.it)

1994-2005 Jeff Tranter (tranter@pobox.com)

1995, 1999, 2000 Andries E. Brouwer <aeb@cw.nl>

1997-2005 Frodo Looijaard <frodo@frodo.looijaard.name>

1998 Danek Duvall <duvall@alumni.princeton.edu>

1999 Andreas Dilger

1999-2002 Transmeta Corporation

1999, 2000, 2002-2009, 2010, 2011, 2012, 2014 Red Hat, Inc.

2000 Werner Almesberger

2004-2006 Michael Holzt, kju -at- fqdn.org

2005 Adrian Bunk

2007-2020 Karel Zak <kzak@redhat.com>

2007, 2011, 2012, 2016 SuSE LINUX Products GmbH

2008 Cai Qian <qcai@redhat.com>

2008 Hayden A. James (hayden.james@gmail.com)

2008 James Youngman <jay@gnu.org>

2008 Roy Peled, the.roy.peled -at- gmail.com

2009 Mikhail Gusarov <dottedmag@dottedmag.net>

2010, 2011, 2012 Davidlohr Bueso <dave@gnu.org>

2010 Jason Borden <jborden@bluehost.com>A

2010 Hajime Taira <htaira@redhat.com>

2010 Masatake Yamato <yamato@redhat.com>

2011 IBM Corp.

2012 Andy Lutomiński <luto@amacapital.net>

2012 Lennart Poettering

2012 Sami Kerola <kerolasa@iki.fi>

2012 Cody Maloney <cmaloney@theoreticalchaos.com>

2012 Werner Fink <werner@suse.de>

2013,2014 Ondrej Oprala <ooprala@redhat.com>

License: GPL-2+

Files: schedutils/ionice.c

Copyright: 2005 Jens Axboe <jens@axboe.dk>

License: GPL-2

Files: schedutils/chrt.c

 schedutils/taskset.c

Copyright: 2004 Robert Love <rml@tech9.net>

 2010 Karel Zak <kzak@redhat.com>

License: GPL-2

Files: disk-utils/raw.c

Copyright: 1999, 2000, Red Hat Software

License: GPL-2

Files: sys-utils/nsenter.c

Copyright: 2012-2013 Eric Biederman <ebiederm@xmission.com>

License: GPL-2

Files: disk-utils/mkfs.minix.c

 disk-utils/mkswap.c

Copyright: 1991, 1992 Linus Torvalds

License: GPL-2

Files: lib/at.c

 lib/blkdev.c

 lib/loopdev.c

 lib/sysfs.c

 lib/ttyutils.c

 lib/xgetpass.c

 misc-utils/mcookie.c

 sys-utils/setuid.c

 text-utils/line.c

Copyright: n/a

License: public-domain

Files: login-utils/vipw.c

 misc-utils/cal.c

 misc-utils/kill.c

 misc-utils/logger.c

 misc-utils/look.c

 misc-utils/whereis.c

 sys-utils/renice.c

 term-utils/mesg.c

 term-utils/script.c

 term-utils/ttymsg.c

 term-utils/wall.c

term-utils/write.c
text-utils/col.c
text-utils/colcrt.c
text-utils/colrm.c
text-utils/column.c
text-utils/hexdump.c
text-utils/hexdump.h
text-utils/hexdump-conv.c
text-utils/hexdump-display.c
text-utils/hexdump-parse.c
text-utils/rev.c
text-utils/ul.c

Copyright: 1980, 1983, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994

The Regents of the University of California

2014 Sami Kerola <kerolasa@iki.fi>

2014 Karel Zak <kzak@redhat.com>

License: BSD-4-clause

Files: text-utils/tailf.c

Copyright: 1996, 2003 Rickard E. Faith (faith@acm.org)

License: MIT

Files: sys-utils/flock.c

Copyright: 2003-2005 H. Peter Anvin

License: MIT

Files: text-utils/pg.c

Copyright: 2000-2001 Gunnar Ritter

License: BSD-2-clause

Files: login-utils/last-deprecated.c

Copyright: 1987 Regents of the University of California

License: BSD-2-clause

Files: login-utils/login.c

Copyright: 1980, 1987, 1988 The Regents of the University of California.

2011 Karel Zak <kzak@redhat.com>

License: BSD-2-clause

Files: login-utils/logindefs.c

Copyright: 2003, 2004, 2005 Thorsten Kukuk

License: BSD-3-clause

Files: libuuid/*

libuuid/src/*

libuuid/man/*

Copyright: 1996, 1997, 1998, 1999, 2007 Theodore Ts'o.

1999 Andreas Dilger (adilger@enel.ucalgary.ca)

License: BSD-3-clause

Files: lib/procutils.c
include/xalloc.h

Copyright: 2010, 2011 Davidlohr Bueso <dave@gnu.org>

License: LGPL-2+

Files: */colors.*

Copyright: 2012 Ondrej Oprala <ooprala@redhat.com>

2012-2014 Karel Zak <kzak@redhat.com>

License: LGPL-2+

Files: login-utils/setpwnam.h
login-utils/setpwnam.c

Copyright: 1994 Martin Schulze <joe@infodrom.north.de>

1994 Salvatore Valente <svalente@mit.edu>

License: LGPL-2+

Files: libfdisk/*

libfdisk/src/*

Copyright: 2007-2013 Karel Zak <kzak@redhat.com>

2012 Davidlohr Bueso <dave@gnu.org>

License: LGPL-2.1+

Files: lib/cpuset.c

/match.

lib/canonicalize.c

include/at.h

Copyright: 2008-2009, 2010, 2011, 2012 Karel Zak <kzak@redhat.com>

License: LGPL-2.1+

Files: */mbsalign.*

Copyright: 2009-2010 Free Software Foundation, Inc.

2010-2013 Karel Zak <kzak@redhat.com>

License: LGPL-2.1+

Files: */readutmp.*

Copyright: 1992-2007, 2009-2014 Free Software Foundation, Inc.

License: GPL-3+

Files: */timeutils.*

Copyright: 2010 Lennart Poettering

License: LGPL-2.1+

Files: include/list.h

Copyright: 2008 Karel Zak <kzak@redhat.com>

1999-2008 by Theodore Ts'o

License: LGPL

Files: libblkid/*

libblkid/src/*

libblkid/samples/*

libblkid/src/partitions/*

libblkid/src/superblocks/*

libblkid/src/topology/*

Copyright: 1999, 2001 Andries Brouwer

1995, 1995, 1996, 1997, 1999, 2000, 2001, 2002, 2003, 2004

Theodore Ts'o.

2001 Andreas Dilger (adilger@turbolinux.com)

2004-2008 Kay Sievers <kay.sievers@vrfy.org>

2008-2013 Karel Zak <kzak@redhat.com>

2009 Bastian Friedrich <bastian.friedrich@collax.com>

2009 Corentin Chary <corentincj@iksaif.net>

2009 Mike Hommey <mh@glandium.org>

2009 Red Hat, Inc.

2009-2010 Andreas Dilger <adilger@sun.com>

2010 Andrew Nayenko <resver@gmail.com>

2010 Jeroen Oortwijn <oortwijn@gmail.com>

2010 Jiro SEKIBA <jir@unicus.jp>

2011 Philipp Marek <philipp.marek@linbit.com>

2012 Milan Broz <mbroz@redhat.com>

2013 Alejandro Martinez Ruiz <alex@nowcomputing.com>

2013 Eric Sandeen <sandeen@redhat.com>

2013 Rolf Fokkens <rolf@fokkens.nl>

2013 Zeeshan Ali (Khattak) <zeeshanak@gnome.org>

License: LGPL-2.1+

Files: include/cpuset.h

lib/randutils.c

Copyright: *unknown*

License: LGPL

Files: misc-utils/blkid.c

Copyright: 2001 Andreas Dilger

License: LGPL

Files: libmount/*

libmount/src/*

Copyright: 2008-2012 Karel Zak <kzak@redhat.com>

License: LGPL-2.1+

Files: libmount/python/*

Copyright: 2013, Red Hat, Inc.

License: LGPL-3+

Files: libsmartcols/*

Copyright: 2009-2014 Karel Zak <kzak@redhat.com>

2014 Ondrej Oprala <oprala@redhat.com>

License: LGPL-2.1+

Files: debian/*

Copyright: Guy Maor <maor@debian.org>

Sean 'Shaleh' Perry <shaleh@debian.org>

Adrian Bunk <bunk@stusta.de>

LaMont Jones <lamont@debian.org>

1996-2003 Martin Mitchell (martin@debian.org)

2008-2012 Frank Lichtenheld (djpig@debian.org)

2014 Andreas Henriksson <andreas@fatal.se>

2017-2020 Michael Biebl <biebl@debian.org>

2019 Petter Reinholdtsen <pere@debian.org>

2017-2020 Chris Hofstaedtler <zeha@debian.org>

License: GPL-2+

Files: debian/po/*

Copyright: Aiet Kolkhi <aietkolkhi@gmail.com>

Anton Gladky <gladky.anton@gmail.com>

Arief S F (arief@gurame.fisika.ui.ac.id)

Armin Beirovi <armin@linux.org.ba>

astur <malditoastur@gmail.com>

Axel Bojer <axelb@skolelinux.no>

Bart Cornelis <cobaco@skolelinux.no>

Bartosz Feski <fenio@o2.pl>

Basil Shubin <bashu@surgut.ru>

Baurzhan Muftakhidinov <baurthefirst@gmail.com>

Bjorn Steensrud <bjornst@powertech.no>

Claus Hindsgaul <claus_h@image.dk>

Clytie Siddall <clytie@riverland.net.au>

Dafydd Tomos <110n@da.fydd.org>

Damyan Ivanov <dam@modsoftsys.com>

Daniel Franganillo <dfranganillo@gmail.com>

Daniel Nylander <po@danielnylander.se>

Danishka Navin <danishka@gmail.com>

Dauren Sarsenov <daur88@inbox.ru>

Dominik Zablotny <dominz@wp.pl>

Dr.T.Vasudevan <agnihot3@gmail.com>

Eddy Petrisor <eddy.petrisor@gmail.com>

Eder L. Marques <frolic@debian-ce.org>

Elian Myftiu <elian.myftiu@gmail.com>

Emmanuel Galatoulas <galas@tee.gr>

Esko Arajrvi <edu@iki.fi>

Frank Lichtenheld <djpig@debian.org>

Frdric Bothamy <frederic.bothamy@free.fr>

Gabor Burjan <buga@buvoshetes.hu>

George Papamichelakis <george@step.gr>

Hans Fredrik Nordhaug <hans@nordhaug.priv.no>
Hvard Korsvoll <korsvoll@gmail.com>
Hideki Yamane <henrich@samba.gr.jp>
Hleb Rubanau <g.rubanau@gmail.com>
I Gede Wijaya S <gwijayas@yahoo.com>
Ivan Masr <helix84@centrum.sk>
Jacobo Tarrio <jtarrio@debian.org>
Jamil Ahmed <jamil@ankur.org.bd>
Janos Guljas <janos@resenje.org>
Jordi Mallach <jordi@debian.org>
Josip Rodin <joy+ditrans@linux.hr>
Karolina Kalic <karolina@resenje.org>
Kartik Mistry <kartik.mistry@gmail.com>
Kstutis Bilinas <kebil@kaunas.init.lt>
Kevin Scannell <kscanne@gmail.com>
Khoem Sokhem <khoemsokhem@khmeros.info>
Klaus Ade Johnstad <klaus@skolelinux.no>
Knut Yrvin <knuty@skolelinux.no>
Konstantinos Margaritis <markos@debian.org>
Kostas Papadimas <pkst@gnome.org>
Kumar Appaiah <a.kumar@alumni.iitm.ac.in>
Lior Kaplan <kaplan@debian.org>
Luiz Portella <lfpor@lujz.org>
Mallikarjuna <Mallikarjunasj@gmail.com>
Mert Dirik <mertdirik@gmail.com>
Milo Casagrande <milo@ubuntu.com>
Ming Hua <minghua@ubuntu.com>
Miroslav Kure <kurem@debian.cz>
Mouhamadou Mamoune Mbacke <mouhamadoumamoune@gmail.com>
Nabin Gautam <nabin@mpp.org.np>
Ossama M. Khayat <okhayat@yahoo.com>
Ovidiu Damian <deelerious@gmail.com>
Parlin Imanuel Toh <parlin_i@yahoo.com>
Pavel Piatruk <berserker@neolocation.com>
Piarres Beobide <pi@beobide.net>
Praveen| A| <pravi.a@gmail.com>
Rdolfo Mazurs <rudolfo.mazurs@gmail.com>
Sahran <Sahran.ug@gmail.com>
Sampada Nakhare <sampadanakhare@gmail.com>
Setyo Nugroho <setyo@gmx.net>
Simo Pedro Cardoso <pthell@gmail.com>
Stefano Melchior <stefano.melchior@openlabs.it>
Sunjae Park <darehanl@gmail.com>
Sveinn Felli <sveinki@nett.is>
Tetralet <tetralet@gmail.com>
Theppitak Karoonboonyanan <thep@linux.thai.net>
Tshewang Norbu <bumthap2006@hotmail.com>
Vahid Ghaderi <vahid_male1384@yahoo.com>

Vanja Cvelbar <cvelbar@gmail.com>
Veeven <veeven@gmail.com>
Vikram Vincent <vincentvikram@gmail.com>
Yoppy Hidayanto <yoppy.hidayanto@gmail.com>

License: GPL-2+

License: public-domain

The files tagged with this license contains the following paragraphs:

.

No copyright is claimed. This code is in the public domain; do with it what you wish.

.

Written by Karel Zak <kzak@redhat.com>

License: GPL-2

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License, v2, as published by the Free Software Foundation

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

.

On Debian systems, the complete text of the GNU General Public License version 2 can be found in `~/usr/share/common-licenses/GPL-2`.

License: GPL-2+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

.

On Debian systems, the complete text of the GNU General Public

License version 2 can be found in ``usr/share/common-licenses/GPL-2'`.

License: GPL-3+

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 3 of the License, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this program. If not, see <http://www.gnu.org/licenses/>.

.

On Debian systems, the complete text of the GNU General Public License version 3 can be found in ``usr/share/common-licenses/GPL-3'`.

License: BSD-2-clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

License: BSD-3-clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

.

1) Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

.

2) Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

.

3) Neither the name of the ORGANIZATION nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE

LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: BSD-4-clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:
This product includes software developed by the University of California, Berkeley and its contributors.
4. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: LGPL

This file may be redistributed under the terms of the GNU Lesser General Public License.

On Debian systems, the complete text of the GNU Lesser General Public License can be found in `/usr/share/common-licenses/LGPL`.

License: LGPL-2+

This program is free software: you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation, either version 2 of the License, or

(at your option) any later version.

.
This program is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
GNU Lesser General Public License for more details.

.
You should have received a copy of the GNU Lesser General Public License
along with this program. If not, see <<http://www.gnu.org/licenses/>>.

.
The complete text of the GNU Lesser General Public License
can be found in /usr/share/common-licenses/LGPL-2 file.

License: LGPL-2.1+

This program is free software; you can redistribute it and/or modify
it under the terms of the GNU Lesser General Public License as published by
the Free Software Foundation; either version 2.1, or (at your option)
any later version.

.
This program is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
GNU Lesser General Public License for more details.

.
You should have received a copy of the GNU Lesser General Public License along
with this program; if not, write to the Free Software Foundation,
Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

.
On Debian systems, the complete text of the GNU Lesser General Public
License version 2.1 can be found in /usr/share/common-licenses/LGPL-2.1.

License: LGPL-3+

This package is free software; you can redistribute it and/or
modify it under the terms of the GNU Lesser General Public
License as published by the Free Software Foundation; either
version 3 of the License, or (at your option) any later version.

.
This package is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU
Lesser General Public License for more details.

.
You should have received a copy of the GNU General Public License
along with this program. If not, see <<http://www.gnu.org/licenses/>>.

.
On Debian systems, the complete text of the GNU Lesser General
Public License can be found in "/usr/share/common-licenses/LGPL-3".

License: MIT

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: Pinentry

Upstream-Contact: gnupg-devel@gnupg.org

Source: <https://gnupg.org/ftp/gcrypt/pinentry/>

Files: *

Copyright: 2002-2015, g10 Code GmbH

License: GPL-2+

Files: fltk/*

Copyright: 2016 Anatoly madRat L. Berenblit

License: GPL-2+

Files: tqt/Makefile.am tqt/main.cpp tqt/pinentrydialog.h tqt/pinentrydialog.cpp

Copyright: 2002-2015 g10 Code GmbH

2002 Klarlvdalens Datakonsult AB

License: GPL-2+

Files: tqt/secqinternal.cpp tqt/secqinternal_p.h

Copyright: 1992-2000 Trolltech AS

License: GPL-2

Files: tqt/secqlineedit.cpp tqt/secqlineedit.h tqt/secqstring.cpp tqt/secqstring.h

Copyright: 1992-2002 Trolltech AS

2003 g10 Code GmbH

License: GPL-2

Files: build-aux/* depcomp doc/mdate-sh doc/texinfo.tex m4/curses.m4 m4/iconv.m4 missing secmem/secmem.c

Copyright: 1996-2007, Free Software Foundation

License: GPL-2+

Files: install-sh

Copyright: 1994 X Consortium

License: X11

Files: gtk+-2/pinentry-gtk-2.c

Copyright: 1999 Robert Bihlmeyer <robbe@orcus.priv.at>

2001, 2002, 2007 g10 Code GmbH

2004 Albrecht Dre

License: GPL-2+

Files: m4/pkg.m4

Copyright: 2004 Scott James Remnant <scott@netsplit.com>

License: GPL-2+

Files: m4/qt.m4

Copyright: 1997 Janos Farkas (chexum@shadow.banki.hu)o

1997,98,99 Stephan Kulow (coolo@kde.org)

2002 g10 Code GmbH

License: GPL-2+

Files: pinentry/argparse.c

Copyright: 1998-2001, 2006-2008, 2012 Free Software Foundation, Inc.

1997-2001, 2006-2008, 2013-2015 Werner Koch

License: LGPL-3+ or GPL-2+

Files: configure.ac secmem/util.*

Copyright: 1999, Robert Bihlmeyer <robbe@orcus.priv.at>

2001, 2002, 2003, 2004, 2007 g10 Code GmbH

License: GPL-2+

Files: secmem/memory.h

Copyright: 1998,1999 Free Software Foundation, Inc.

1999,2000 Robert Bihlmeyer <robbe@orcus.priv.at>

License: GPL-2+

Files: secmem/secmem++.h

Copyright: 2008 Marc Mutz <marc@kdab.com>

License: GPL-2+

Files: tty/pinentry-tty.c

Copyright: 2014 Serge Voilokov

License: GPL-2+

Files: qt/pinentrydialog.*

Copyright: 2002, 2008 Klaralvdalens Datakonsult AB <steffen@klaralvdalens-datakonsult.se>

2007 Ingo Klcker

License: GPL-2+

Files: qt/pinentryconfirm.*

Copyright: 2011 Ben Kibbey <bjk@luxsci.net>

License: GPL-2+

Files: qt/main.cpp

Copyright: 2002, 2008 Klarlvdalens Datakonsult AB (KDAB)

2003 g10 Code GmbH

2007 Ingo Klcker

License: GPL-2+

Files: qt/Makefile.am

Copyright: 2002 Klarlvdalens Datakonsult AB (KDAB)

2008 g10 Code GmbH

License: GPL-2+

Files: debian/*

Copyright: 2004-2015 Peter Eisentraut <petere@debian.org>

Marcus Brinkmann

Michael Brame

Daniel Kahn Gillmor <dkg@fifthhorseman.net>

License: GPL-2+

License: X11

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE X CONSORTIUM BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

.

Except as contained in this notice, the name of the X Consortium shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from the X Consortium.

License: GPL-2+

This is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

.

It is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

On Debian systems, the full text of the GNU General Public License version 2 can be found in the file ``usr/share/common-licenses/GPL-2'.`

License: GPL-2

This is free software; you can redistribute it and/or modify it under the terms of version 2 of the GNU General Public License as published by the Free Software Foundation.

.

It is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

On Debian systems, the full text of the GNU General Public License version 2 can be found in the file ``usr/share/common-licenses/GPL-2'.`

License: LGPL-3+

This is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 3 of the License, or (at your option) any later version.

.

It is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

.

On Debian systems, the full text of the GNU General Public License version 2.1 can be found in the file ``usr/share/common-licenses/LGPL-3'.`

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: ucf

Upstream-Contact: Manoj Srivastava <srivasta@debian.org>

Source: <https://anonscm.debian.org/users/srivasta/debian/ucf.git>

Copyright: 2002, 2003, 2003, 2004, 2005, 2006, 2015 Manoj Srivastava <srivasta@debian.org>

License: GPL-2

Files: *

Copyright: 2002, 2003, 2003, 2004, 2005, 2006, 2015 Manoj Srivastava <srivasta@debian.org>

License: GPL-2

Files: debian/po/ca.po

Copyright: 2004 Aleix Badia i Bosch <abadia@ica.es>

2008, 2009, 2010 Jordi Mallach <jordi@debian.org>

License: GPL-2

Files: debian/po/cs.po

Copyright: 2014 Miroslav Kure <kurem@debian.cz>

License: GPL-2

Files: debian/po/da.po

Copyright: 2005, 2007 Claus Hindsgaul <claus.hindsgaul@gmail.com>

2010, 2014, 2018 Joe Hansen <joedalton2@yahoo.dk>

License: GPL-2

Files: debian/po/de.po

Copyright: 2004-2009 Erik Schanze <eriks@debian.org>

2014, 2018 Holger Wansing <linux@wansing-online.de>

License: GPL-2

Files: debian/po/es.po

Copyright: 2004 Lucas Wall <kthulhu@usa.net>

2007, 2010 Javier Fernandez-Sanguino <jfs@debian.org>

2014, 2018 Matias Bellone <matiasbellone+debian@gmail.com>

License: GPL-2

Files: debian/po/eu.po

Copyright: 2007, 2009 Piarres Beobide <pi@beobide.net>, 2007, 2009

2009, 2014 Iaki Larraaga Murgoitio <dooteo@zundan.com>

License: GPL-2

Files: debian/po/fi.po

Copyright: 2009, 2014 Esko Arajrvi <edu@iki.fi>

License: GPL-2

Files: debian/po/fr.po

Copyright: 2007 Eric Madesclair <eric-m@wanadoo.fr>

2009, 2014 Christian Perrier <bubulle@debian.org>

2018 Jean-Pierre Giraud <jean-pierregiraud@neuf.fr>

License: GPL-2

Files: debian/po/gl.po

Copyright: 2006, 2007 Jacobo Tarrío <jtarrío@debian.org>

2009 Marce Villarino <mvillarino@gmail.com>
License: GPL-2

Files: debian/po/it.po
Copyright: 2005-2010 Luca Bruno <lucab@debian.org>
License: GPL-2

Files: debian/po/ja.po
Copyright: 2018 Kenshi Muto <kmuto@debian.org>
License: GPL-2

Files: debian/po/nl.po
Copyright: 2006 Kurt De Bree <kdebree@telenet.be>
2011 Jeroen Schot <schot@a-eskwadraat.nl>
2016 Frans Spiesschaert <Frans.Spiesschaert@yucom.be>
License: GPL-2

Files: debian/po/pl.po
Copyright: 2007 Wojciech Zarba <wojtekz@comp.waw.pl>
2012, 2014 Micha Kuach <michal.kulach@gmail.com>
License: GPL-2

Files: debian/po/pt_BR.po
Copyright: 2010 Flamarion Jorge <jorge.flamarion@gmail.com>
2014-2018 Adriano Rafael Gomes <adrianorg@debian.org>
License: GPL-2

Files: debian/po/pt.po
Copyright: 2007 Bruno Queiros <brunomiguelqueiros@sapo.pt>
2010-2018 Amrico Monteiro <a_monteiro@gmx.com>
License: GPL-2

Files: debian/po/ru.po
Copyright: 2006, 2007 Yuri Kozlov <kozlov.y@gmail.com>
2009, 2014, 2018 Yuri Kozlov <yuray@komyakino.ru>
License: GPL-2

Files: debian/po/sk.po
Copyright: 2011, 2014 Slavko <linux@slavino.sk>
License: GPL-2

Files: debian/po/sv.po
Copyright: 2007 Daniel Nylander <po@danielnylander.se>
2009, 2014 Martin Bagge <brother@bsnet.se>
License: GPL-2

Files: debian/po/vi.po
Copyright: 2005-2009 Clytie Siddall <clytie@riverland.net.au>

License: GPL-2

License: GPL-2

ucf is Copyright (C) 2002, 2003, 2003, 2004, 2005, 2006 Manoj
Srivastava <srivasta@debian.org>

.
This program is free software; you can redistribute it and/or modify
it under the terms of the GNU General Public License as published by
the Free Software Foundation; version 2 dated June, 1991.

.
This program is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
GNU General Public License for more details.

.
On Debian GNU/Linux systems, the complete text of the GNU General
Public License can be found in `usr/share/common-licenses/GPL-2`.

.
A copy of the GNU General Public License is also available at
<URL:<http://www.gnu.org/copyleft/gpl.html>>. You may also obtain
it by writing to the Free Software Foundation, Inc., 51 Franklin
St, Fifth Floor, Boston, MA 02110-1301 USA

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: libpsl

Source: <https://github.com/rockdaboot/libpsl>

Files: *

Copyright: 2014-2016 Tim RUEHSEN

License: MIT

Files: debian/*

Copyright: 2014-2016 Daniel Kahn Gillmor

License: MIT

Files: src/psl-make-dafsa src/lookup_string_in_fixed_set.c

Copyright: 2014-2015 The Chromium Authors

License: Chromium

License: MIT

- * Permission is hereby granted, free of charge, to any person obtaining a
- * copy of this software and associated documentation files (the "Software"),
- * to deal in the Software without restriction, including without limitation
- * the rights to use, copy, modify, merge, publish, distribute, sublicense,
- * and/or sell copies of the Software, and to permit persons to whom the
- * Software is furnished to do so, subject to the following conditions:
- *
* The above copyright notice and this permission notice shall be included in
- * all copies or substantial portions of the Software.

*

* THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR
* IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,
* FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE
* AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER
* LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING
* FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER
* DEALINGS IN THE SOFTWARE.

License: Chromium

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions are
met:

* Redistributions of source code must retain the above copyright
notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above
copyright notice, this list of conditions and the following disclaimer
in the documentation and/or other materials provided with the
distribution.

* Neither the name of Google Inc. nor the names of its
contributors may be used to endorse or promote products derived from
this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS
"AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT
LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR
A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT
OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,
SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Apache Portable Runtime Utility Library

Copyright (c) 2000-2016 The Apache Software Foundation.

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

Portions of this software were developed at the National Center
for Supercomputing Applications (NCSA) at the University of
Illinois at Urbana-Champaign.

This software contains code derived from the RSA Data Security
Inc. MD5 Message-Digest Algorithm, including various
modifications by Spyglass Inc., Carnegie Mellon University, and

Bell Communications Research, Inc (Bellcore).

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: keyutils

Upstream-Contact: David Howells <dhowells@redhat.com>

Source: <http://people.redhat.com/~dhowells/keyutils/>

Files: *

Copyright: 2005-2018, Red Hat <<http://www.redhat.com/>>

License: GPL-2+

Files: keyutils.*

Copyright: 2005-2018, Red Hat <<http://www.redhat.com/>>

License: LGPL-2+

Files: debian/*

Copyright: 2006-2013, Daniel Baumann <mail@daniel-baumann.ch>

2013, Luk Claes <luk@debian.org>

2014-2019, Christian Kastner <cck@debian.org>

License: LGPL-2+

License: GPL-2+

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 2 of the License, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

.

The complete text of the GNU General Public License can be found in /usr/share/common-licenses/GPL-2 file.

License: LGPL-2+

This program is free software: you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation, either version 2 of the License, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

.

You should have received a copy of the GNU Lesser General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

The complete text of the GNU Lesser General Public License can be found in /usr/share/common-licenses/LGPL-2 file.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: dash

Upstream-Contact: dash@vger.kernel.org

Source: <http://gondor.apana.org.au/~herbert/dash/>

Files: *

Copyright:

1989-1994 The Regents of the University of California. All rights reserved.

1997 Christos Zoulas. All rights reserved.

1997-2018 Herbert Xu <herbert@gondor.apana.org.au>. All rights reserved.

Comment:

This code is derived from software contributed to Berkeley by Kenneth Almquist.

License: BSD-3-Clause

Files: Makefile.in

Copyright: 1994-2011, Free Software Foundation, Inc.

License: FSFULLR

Files: aclocal.m4

Copyright: 1996-2011, Free Software Foundation, Inc.

License: FSFULLR

Files: configure

Copyright: 1992-1996, 1998-2012, Free Software Foundation, Inc.

License: FSFUL

Files: debian/*

Copyright:

1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, Herbert Xu <herbert@debian.org>

2004, 2005, 2006, 2007, 2008, 2009, 2010, 2012, 2014, Gerrit Pape <pape@smarden.org>

2009, Luk Claes <luk@debian.org>

2010, 2011, Jonathan Nieder <jrnieder@gmail.com>

2010, Adam D. Barratt <adam@adam-barratt.org.uk>

2010, Christian Perrier <bubulle@debian.org>

2013, Michael Gilbert <mgilbert@debian.org>

2016, Helmut Grohne <helmut@subdivi.de>

2016, Mattia Rizzolo <mattia@debian.org>

2016, Niels Thykier <niels@thykier.net>

2017, Adam Borowski <kilobyte@angband.pl>

2017, Ximin Luo <infinity0@debian.org>

2018, 2019, Andrej Shadura <andrewsh@debian.org>

License: BSD-3-clause

Files: debian/po/bg.po
Copyright: 2008, 2009, Damyan Ivanov <dmn@debian.org>
License: BSD-3-clause

Files: debian/po/eu.po
Copyright:
2008, Xabier Bilbao <xabidu@gmail.com>
2008, 2010, Iaki Larraaga Murgoitio <dooteo@euskalgnu.org>
License: BSD-3-clause

Files: debian/po/tr.po
Copyright: 2008, 2011, Mert Dirik <mertdirik@gmail.com>
License: BSD-3-clause

Files: debian/po/da.po
Copyright:
2004, Claus Hindsgaul <claus_h@image.dk>
2006, Claus Hindsgaul <claus.hindsgaul@gmail.com>
2010, Joe Hansen <joedalton2@yahoo.dk>
License: BSD-3-clause

Files: debian/po/de.po
Copyright: 2006-2009, Helge Kreutzmann <debian@helgefjell.de>
License: BSD-3-clause

Files: debian/po/es.po
Copyright:
2008, 2009, Software in the Public Interest
2008, Fernando Cerezal Lpez <kryptos21@gmail.com>
2009, Francisco Javier Cuadrado <fcocuadrado@gmail.com>
License: BSD-3-clause

Files: debian/po/fr.po
Copyright: 2009, Julien Patriarca <patriarcaj@gmail.com>
License: BSD-3-clause

Files: debian/po/nl.po
Copyright:
2008, Thijs Kinkhorst <thijs@debian.org>
2010, Eric Spreen <erispre@gmail.com>
License: BSD-3-clause

Files: debian/po/pt.po
Copyright:
2008, Andr Lus Lopes <andrelop@debian.org>
2008-2010, Adriano Rafael Gomes <adrianorg@gmail.com>
License: BSD-3-clause

Files: debian/po/pt_BR.po
Copyright:
2008, Andr Lus Lopes <andrelop@debian.org>
2008-2010, Adriano Rafael Gomes <adrianorg@gmail.com>
License: BSD-3-clause

Files: debian/po/sk.po
Copyright:
2011, Slavko <linux@slavino.sk>
License: BSD-3-clause

Files: debian/po/ro.po
Copyright:
2008, Eddy Petrior <eddy.petrisor@gmail.com>
2012, Andrei Popescu <andreimpopescu@gmail.com>
License: BSD-3-clause

Files: debian/po/sr.po
Copyright:
2011, Zlatan Todori <zlatan.todoric@gmail.com>
License: BSD-3-clause

Files: debian/po/sv.po
Copyright:
2008, Martin gren <martin.agren@gmail.com>
2009, Martin Bagge <brother@bsnet.se>
License: BSD-3-clause

Files: debian/po/vi.po
Copyright:
2005-2010, Clytie Siddall <clytie@riverland.net.au>
2010, Free Software Foundation, Inc.
License: BSD-3-clause

Files: install-sh
Copyright: 1994, X Consortium
License: Expat

Files:
depcomp
missing
Copyright: 1999, 2000, 20032012, Free Software Foundation, Inc.
License: GPL-2+ or BSD-3-clause

Files: src/bltin/test.c
Copyright: Erik Baalbergen, Eric Gisin, Arnold Robbins, J.T. Conklin
License: public-domain

Files: src/*

Copyright: 1997-2005, 2007, Herbert Xu <herbert@gondor.apana.org.au>.

1989, 1991, 1993, 1995, The Regents of the University of California.

License: BSD-3-clause

Files: src/Makefile.in

Copyright: 1994-2011, Free Software

License: FSFULLR

Files: src/mksignames.c

Copyright: 1992, 1996, 1997, 1999, 2000, 2002-2012, Free Software Foundation, Inc.

Comment: This file is not directly linked with dash. However, its output is.

License: GPL-2+

License: BSD-3-clause

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: FSFUL

This configure script is free software; the Free Software Foundation gives unlimited permission to copy, distribute and modify it.

License: FSFULLR

This file is free software; the Free Software Foundation gives unlimited permission to copy and/or distribute it, with or without modifications, as long as this notice is preserved.

This program is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY, to the extent permitted by law; without
even the implied warranty of MERCHANTABILITY or FITNESS FOR A
PARTICULAR PURPOSE.

License: Expat

Permission is hereby granted, free of charge, to any person obtaining a copy
of this software and associated documentation files (the "Software"), to
deal in the Software without restriction, including without limitation the
rights to use, copy, modify, merge, publish, distribute, sublicense, and/or
sell copies of the Software, and to permit persons to whom the Software is
furnished to do so, subject to the following conditions:

.

The above copyright notice and this permission notice shall be included in
all copies or substantial portions of the Software.

.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR
IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,
FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE
X CONSORTIUM BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN
AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNEC-
TION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

.

Except as contained in this notice, the name of the X Consortium shall not
be used in advertising or otherwise to promote the sale, use or other deal-
ings in this Software without prior written authorization from the X Consor-
tium.

.

FSF changes to this file are in the public domain.

License: GPL-2+

This program is free software; you can redistribute it and/or modify
it under the terms of the GNU General Public License as published by
the Free Software Foundation; either version 2, or (at your option)
any later version.

.

This program is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU
General Public License for more details.

.

You should have received a copy of the GNU General Public License along
with this program; if not, write to the Free Software Foundation,
Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

.

On Debian systems, the complete text of the GNU General Public License
version 2 can be found in /usr/share/common-licenses/GPL-2.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: lz4

Source: <https://github.com/Cyan4973/lz4>

Files: *

Copyright: Copyright (C) 2011-2017, Yann Collet.

License: BSD-2-clause

Files: lib/*

Copyright: Copyright (C) 2011-2017, Yann Collet.

License: BSD-2-clause

Files: lib/liblz4.pc.in

Copyright: Copyright (C) 2011-2014, Yann Collet.

License: BSD-2-clause

Files: lib/lz4frame.c

lib/lz4frame_static.h

lib/xxhash.c

lib/xxhash.h

Copyright: Copyright (C) 2011-2016, Yann Collet.

License: BSD-2-clause

Files: programs/*

Copyright: Copyright (C) 2011-2016, Yann Collet.

License: GPL-2+

Files: programs/lz4io.c

Copyright: Copyright (C) 2011-2017, Yann Collet.

License: GPL-2+

Files: programs/platform.h

Copyright: Copyright (C) 2016 -present, Przemyslaw Skibinski, Yann Collet

License: GPL-2+

Files: programs/util.h

Copyright: Copyright (C) 2016 -present, Przemyslaw Skibinski, Yann Collet

License: GPL-2+

Files: ./examples/printVersion.c

Copyright: Takayuki Matsuoka & Yann Collet

License: GPL-2

Files: ./examples/blockStreaming_lineByLine.c

./examples/blockStreaming_doubleBuffer.c

Copyright: Takayuki Matsuoka

License: GPL-2

Files: ./examples/HCStreaming_ringBuffer.c
./examples/blockStreaming_ringBuffer.c
Copyright: Yann Collet
License: GPL-2

Files: ./examples/compress_functions.c
./examples/simple_buffer.c
Copyright: Kyle Harper
License: BSD-2-clause

Files: debian/*
Copyright: 2013 Nobuhiro Iwamatsu <iwamatsu@debian.org>
License: GPL-2+

License: GPL-2
This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; version 2 dated June, 1991.

.
On Debian systems, the complete text of version 2 of the GNU General Public License can be found in '/usr/share/common-licenses/GPL-2'.

License: GPL-2+
This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; version 2 dated June, 1991, or (at your option) any later version.

.
On Debian systems, the complete text of version 2 of the GNU General Public License can be found in '/usr/share/common-licenses/GPL-2'.

License: BSD-2-clause
Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- .
* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

.
THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR

CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Format: <https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Contact: git@vger.kernel.org

Source: <https://www.kernel.org/pub/software/scm/git/>

Files: *

Copyright: 2005-2020, Linus Torvalds and others.

License: GPL-2

Files: `xdiff/*`

Copyright: 2003-2009, Davide Libenzi, Johannes E. Schindelin

License: LGPL-2.1+

Files: `xdiff/xhistogram.c`

Copyright: 2010, Google Inc.

and other copyright owners as documented in JGit's IP log.

License: EDL-1.0

Files: `ewah/*`

Copyright: 2013, GitHub Inc.

2009-2013, Daniel Lemire, Cliff Moon,

David McIntosh, Rober Becho, Google Inc. and Veronika Zenz

License: GPL-2+

Files: `sha1dc/*`

Copyright: 2017,

Marc Stevens

Cryptology Group

Centrum Wiskunde & Informatica

P.O. Box 94079, 1090 GB Amsterdam, Netherlands

marc@marc-stevens.nl

.

Dan Shumow

Microsoft Research

danshu@microsoft.com

License: Expat

Files: `gitk-git/*`

Copyright: 2005-2016, Paul Mackerras, et al.

License: GPL-2+

Files: `gitk-git/po/bg.po`

Copyright: 2014, 2015, 2016, 2017, 2018 Alexander Shopov <ash@kambanaria.org>

License: GPL-2

Comment: This file is distributed under the same license as the git package.

Files: git-gui/*

Copyright: 2005-2010, Shawn Pearce, et. al.

License: GPL-2+

Files: git-gui/po/bg.po git-gui/po/de.po git-gui/po/fr.po git-gui/po/glossary/*

Copyright: 2007-2008, Shawn Pearce, et al.

2012-2015, Alexander Shopov <ash@kambanaria.org>

License: GPL-2

Comment: This file is distributed under the same license as the git package.

Files: git-gui/po/glossary/el.po git-gui/po/glossary/pt_br.po

Copyright: 2007, Shawn Pearce, et al.

2009, Jimmy Angelakos

License: GPL-2+

Comment: This file is distributed under the same license as the git-gui package.

Files: gitweb/static/js/*

Copyright: 2007, Fredrik Kuivinen <frekui@gmail.com>

2007, Petr Baudis <pasky@suse.cz>

2008-2011, Jakub Narebski <jnareb@gmail.com>

2011, John 'Warthog9' Hawley <warthog9@eaglescrag.net>

License: GPL-2+

Files: git-p4

Copyright: 2007, Simon Hausmann <simon@lst.de>

2007, Trolltech ASA

License: Expat

Files: git-svn.perl

Copyright: 2006, Eric Wong <normalperson@yhbt.net>

License: GPL-2+

Files: imap-send.c

Copyright: 2000-2002, Michael R. Elkins <me@mutt.org>

2002-2004, Oswald Buddenhagen <ossi@users.sf.net>

2004, Theodore Y. Ts'o <tytso@mit.edu>

2006, Mike McCormack

Name: git-imap-send - drops patches into an imap Drafts folder
derived from isync/mbsync - mailbox synchronizer

License: GPL-2+

Files: perl/Git.pm

Copyright: 2006, by Petr Baudis <pasky@suse.cz>

License: GPL-2+

Files: perl/private-Error.pm

Copyright: 1997-8, Graham Barr <gbarr@ti.com>

License: GPL-1+ or Artistic-1

This program is free software; you can redistribute it and/or modify it under the terms of either:

- .
 - a) the GNU General Public License as published by the Free Software Foundation; either version 1, or (at your option) any later version, or
 - .
 - b) the "Artistic License" which comes with Perl.
- .

On Debian GNU/Linux systems, the complete text of the GNU General Public License can be found in '/usr/share/common-licenses/GPL' and the Artistic Licence in '/usr/share/common-licenses/Artistic'.

Files: kwset.c kwset.h

Copyright: 1989, 1998, 2000, 2005, Free Software Foundation, Inc.

License: GPL-2+

Files: khash.h

Copyright: 2008, 2009, 2011 by Attractive Chaos <attractor@live.co.uk>

License: Expat

Files: trace.c

Copyright: 2000-2002, Michael R. Elkins <me@mutt.org>

2002-2004, Oswald Buddenhagen <ossi@users.sf.net>

2004, Theodore Y. Ts'o <tytso@mit.edu>

2006, Mike McCormack

2006, Christian Couder

License: GPL-2+

Files: sh-i18n--envsubst.c

Copyright: 2010, var Arnfjr Bjarmason

1998-2007, Free Software Foundation, Inc.

License: GPL-2+

Files: t/test-lib.sh

Copyright: 2005, Junio C Hamano

License: GPL-2+

Files: compat/inet_ntop.c compat/inet_pton.c

Copyright: 1996-2001, Internet Software Consortium.

License: ISC

Files: compat/poll/poll.c compat/poll/poll.h

Copyright: 2001-2003, 2006-2011, Free Software Foundation, Inc.

Name: Emulation for poll(2) from gnuilib.

License: GPL-2+

Files: compat/vcbuild/include/sys/utime.h

Copyright: ?

License: mingw-runtime

Files: compat/nedmalloc/*

Copyright: 2005-2006 Niall Douglas

License: Boost

Files: compat/nedmalloc/malloc.c.h

Copyright: 2006, KJK::Hyperion <hackbunny@reactos.com>

License: dlmalloc

Files: compat/regex/*

Copyright: 1985, 1989-93, 1995-2010, Free Software Foundation, Inc.

Name: Extended regular expression matching and search library

License: LGPL-2.1+

Files: compat/obstack.c compat/obstack.h

Copyright: 1988-1994, 1996-2005, 2009, Free Software Foundation, Inc.

Name: Object stack macros.

License: LGPL-2.1+

Files: contrib/persistent-https/*

Copyright: 2012, Google Inc.

License: Apache-2.0

Files: contrib/credential/gnome-keyring/git-credential-gnome-keyring.c

Copyright: 2011, John Szakmeister <john@szakmeister.net>

2012, Philipp A. Hartmann <pah@qo.cx>

License: GPL-2+

Files: contrib/hg-to-git/hg-to-git.py

Copyright: 2007, Stelian Pop <stelian@popies.net>

Name: hg-to-git.py - A Mercurial to GIT converter

License: GPL-2+

Files: contrib/mw-to-git/git-*.perl contrib/mw-to-git/t/t*

Copyright: 2011

Jrmie Nikaes <jeremie.nikaes@ensimag.imag.fr>

Arnaud Lacurie <arnaud.lacurie@ensimag.imag.fr>

Claire Fousse <claire.fousse@ensimag.imag.fr>

David Amouyal <david.amouyal@ensimag.imag.fr>

Matthieu Moy <matthieu.moy@grenoble-inp.fr>

2012

Charles Roussel <charles.roussel@ensimag.imag.fr>

Simon Cathebras <simon.cathebras@ensimag.imag.fr>

Julien Khayat <julien.khayat@ensimag.imag.fr>

Guillaume Sasdy <guillaume.sasdy@ensimag.imag.fr>

Simon Perrat <simon.perrat@ensimag.imag.fr>

2013

Benoit Person <benoit.person@ensimag.imag.fr>

Celestin Matte <celestin.matte@ensimag.imag.fr>

License: GPL-2+

Files: debian/*

Copyright: 2005, Sebastian Kuzminsky <seb@highlab.com>

2005-2006, Andres Salomon <dilinger@debian.org>

2005-2012, Gerrit Pape <pape@sarden.org>

License: GPL-2

License: GPL-2

You can redistribute this software and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; version 2 dated June, 1991.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

On Debian systems, the complete text of the GNU General Public License can be found in /usr/share/common-licenses/GPL-2 file.

License: GPL-2+

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2, or (at your option) any later version.

.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

.

On Debian systems, the complete text of the GNU General Public License can be found in /usr/share/common-licenses/GPL-2 file.

License: LGPL-2+

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Library General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of

MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Library General Public License for more details.

On Debian systems, the complete text of the GNU Library General Public License can be found in the /usr/share/common-licenses/LGPL-2 file.

License: LGPL-2.1+

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

On Debian systems, the complete text of the GNU Lesser General Public License can be found in /usr/share/common-licenses/LGPL-2.1.

License: Apache-2.0

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

On Debian systems, the full text of the Apache License version 2 can be found in /usr/share/common-licenses/Apache-2.0.

License: ISC

Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS" AND INTERNET SOFTWARE CONSORTIUM DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL INTERNET SOFTWARE CONSORTIUM BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS

SOFTWARE.

License: Expat

<<http://www.opensource.org/licenses/mit-license.php>>:

.
Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.
The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.
THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

License: EDL-1.0

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- .
- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- .
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- .
- Neither the name of the Eclipse Foundation, Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

.
THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT

NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

License: mingw-runtime

This file has no copyright assigned and is placed in the Public Domain.

This file is a part of the mingw-runtime package.

.

The mingw-runtime package and its code is distributed in the hope that it will be useful but WITHOUT ANY WARRANTY. ALL WARRANTIES, EXPRESSED OR IMPLIED ARE HEREBY DISCLAIMED. This includes but is not limited to warranties of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

.

You are free to use this package and its code without limitation.

License: Boost

It is licensed under the Boost Software License which basically means you can do anything you like with it. This does not apply to the malloc.c.h file which remains copyright to others.

.

Boost Software License - Version 1.0 - August 17th, 2003

.

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

.

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor.

.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

License: dlmalloc

This is a version (aka dlmalloc) of malloc/free/realloc written by Doug Lea and released to the public domain, as explained at <http://creativecommons.org/licenses/publicdomain>. Send questions, comments, complaints, performance data, etc to dl@cs.oswego.edu

Incorporates code from intrin_x86.h, which bears the following notice:

Compatibility <intrin_x86.h> header for GCC -- GCC equivalents of intrinsic Microsoft Visual C++ functions. Originally developed for the ReactOS (<<http://www.reactos.org/>>) and TinyKrn1 (<<http://www.tinykrnl.org/>>) projects.

Copyright (c) 2006 KJK::Hyperion <hackbunny@reactos.com>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.17 dagger 2.4

1.17.1 Available under license :

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2014 Google, Inc.

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/DelegateFactory.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/MapKey.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/MapFactory.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/Component.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/InstanceFactory.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/SingleCheck.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/Factory.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/MapProviderFactory.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/Collections.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/SetFactory.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2007 Google Inc.
* Copyright (C) 2012 Square, Inc.
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/Provides.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2015 Google, Inc.
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>

*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/Multibindings.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/package-info.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/multibindings/IntKey.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/multibindings/StringKey.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/multibindings/LongKey.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/Beta.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/multibindings/ClassKey.java
* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/Subcomponent.java

No license file was found, but licenses were detected in source scan.

/*
* Copyright (C) 2014 Google Inc.
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/MembersInjectors.java

No license file was found, but licenses were detected in source scan.

/*
* Copyright (C) 2016 Google, Inc.
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

- * Unless required by applicable law or agreed to in writing, software
- * distributed under the License is distributed on an "AS IS" BASIS,
- * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
- * See the License for the specific language governing permissions and
- * limitations under the License.
- */

Found in path(s):

- * /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/Reusable.java
 - * /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/ProviderOfLazy.java
 - * /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/Binds.java
 - * /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/Preconditions.java
 - * /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/internal/DoubleCheck.java
 - * /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/multibindings/ElementsIntoSet.java
 - * /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/multibindings/IntoMap.java
 - * /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/multibindings/package-info.java
 - * /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/multibindings/IntoSet.java
- No license file was found, but licenses were detected in source scan.

/*

- * Copyright (C) 2012 Square, Inc.
- *
- * Licensed under the Apache License, Version 2.0 (the "License");
- * you may not use this file except in compliance with the License.
- * You may obtain a copy of the License at
- *
- * <http://www.apache.org/licenses/LICENSE-2.0>
- *

- * Unless required by applicable law or agreed to in writing, software
- * distributed under the License is distributed on an "AS IS" BASIS,
- * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
- * See the License for the specific language governing permissions and
- * limitations under the License.
- */

Found in path(s):

- * /opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/Module.java
- No license file was found, but licenses were detected in source scan.

/*

- * Copyright (C) 2012 Square, Inc.
- * Copyright (C) 2009 Google Inc.
- *
- * Licensed under the Apache License, Version 2.0 (the "License");
- * you may not use this file except in compliance with the License.
- * You may obtain a copy of the License at
- *

```
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/
```

Found in path(s):

```
*/opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/MembersInjector.java
```

No license file was found, but licenses were detected in source scan.

```
/*
* Copyright (C) 2012 Google, Inc.
* Copyright (C) 2012 Square, Inc.
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/
```

Found in path(s):

```
*/opt/cola/permits/1257772315_1643010337.24/0/dagger-2-4-sources-jar/dagger/Lazy.java
```

1.18 okhttp 4.10.0

1.18.1 Available under license :

Note that publicsuffixes.gz is compiled from The Public Suffix List:

https://publicsuffix.org/list/public_suffix_list.dat

It is subject to the terms of the Mozilla Public License, v. 2.0:

<https://mozilla.org/MPL/2.0/>

1.19 jackson 2.14.2

1.19.1 Available under license :

FasterXML, LLC

Software Grant and Corporate Contributor License Agreement ("Agreement")

<https://github.com/FasterXML/jackson/blob/master/contributor-agreement-corporate.txt>

(v1)

Thank you for your interest in FasterXML, LLC ("FasterXML"). In order to clarify the intellectual property license granted with Contributions from any person or entity, FasterXML must have a Contributor License Agreement (CLA) on file that has been signed by each Contributor, indicating agreement to the license terms below. This license is for your protection as a Contributor as well as the protection of FasterXML and its users; it does not change your rights to use your own Contributions for any other purpose.

This version of the Agreement allows an entity (the "Corporation") to submit Contributions to the FasterXML, to authorize Contributions submitted by its designated employees to FasterXML, and to grant copyright and patent licenses thereto.

If you have not already done so, please complete and sign, then scan and email a pdf file of this Agreement to clas@fasterxml.com. If necessary, send an original signed Agreement to FasterXML, LLC, 600 N 36th Ave, Suite 409, Seattle, WA 98103.

Please read this document carefully before signing and keep a copy for your records.

Corporation name: _____

Corporation address: _____

Point of Contact: _____

E-Mail: _____

Telephone: _____ Fax: _____

You accept and agree to the following terms and conditions for Your present and future Contributions submitted to FasterXML. Except

for the license granted herein to FasterXML and recipients of software distributed by FasterXML, You reserve all right, title, and interest in and to Your Contributions.

1. Definitions.

"You" (or "Your") shall mean the copyright owner or legal entity authorized by the copyright owner that is making this Agreement with FasterXML. For legal entities, the entity making a Contribution and all other entities that control, are controlled by, or are under common control with that entity are considered to be a single Contributor. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"Contribution" shall mean the code, documentation or other original works of authorship expressly identified in Schedule B, as well as any original work of authorship, including any modifications or additions to an existing work, that is intentionally submitted by You to FasterXML for inclusion in, or documentation of, any of the products owned or managed by FasterXML (the "Work"). For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to FasterXML or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, FasterXML for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by You as "Not a Contribution."

2. Grant of Copyright License. Subject to the terms and conditions of this Agreement, You hereby grant to FasterXML and to recipients of software distributed by FasterXML a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare derivative works of, publicly display, publicly perform, sublicense, and distribute Your Contributions and such derivative works.

3. Grant of Patent License. Subject to the terms and conditions of this Agreement, You hereby grant to FasterXML and to recipients of software distributed by FasterXML a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work,

where such license applies only to those patent claims licensable by You that are necessarily infringed by Your Contribution(s) alone or by combination of Your Contribution(s) with the Work to which such Contribution(s) were submitted. If any entity institutes patent litigation against You or any other entity (including a cross-claim or counterclaim in a lawsuit) alleging that your Contribution, or the Work to which you have contributed, constitutes direct or contributory patent infringement, then any patent licenses granted to that entity under this Agreement for that Contribution or Work shall terminate as of the date such litigation is filed.

4. You represent that You are legally entitled to grant the above license. You represent further that each employee of the Corporation designated on Schedule A below (or in a subsequent written modification to that Schedule) is authorized to submit Contributions on behalf of the Corporation.
5. You represent that each of Your Contributions is Your original creation (see section 7 for submissions on behalf of others).
6. You are not expected to provide support for Your Contributions, except to the extent You desire to provide support. You may provide support for free, for a fee, or not at all. Unless required by applicable law or agreed to in writing, You provide Your Contributions on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE.
7. Should You wish to submit work that is not Your original creation, You may submit it to FasterXML separately from any Contribution, identifying the complete details of its source and of any license or other restriction (including, but not limited to, related patents, trademarks, and license agreements) of which you are personally aware, and conspicuously marking the work as "Submitted on behalf of a third-party: [named here]".
8. It is your responsibility to notify FasterXML when any change is required to the list of designated employees authorized to submit Contributions on behalf of the Corporation, or to the Corporation's Point of Contact with FasterXML.

Please sign: _____ Date: _____

Title: _____

Corporation: _____

Schedule A

[Initial list of designated employees. NB: authorization is not tied to particular Contributions.]

Schedule B

[Identification of optional concurrent software grant. Would be left blank or omitted if there is no concurrent software grant.]

1.20 httpcore-nio 4.4.13

1.20.1 Available under license :

Apache HttpCore NIO
Copyright 2005-2020 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of,

publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

(a) You must give any other recipients of the Work or Derivative Works a copy of this License; and

(b) You must cause any modified files to carry prominent notices stating that You changed the files; and

(c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and

(d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution

notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing

the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

1.21 httpclient-cache 4.5.13

1.21.1 Available under license :

Apache HttpClient Cache
Copyright 2010-2020 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:
 - (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and

- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. **Submission of Contributions.** Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.
6. **Trademarks.** This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.
7. **Disclaimer of Warranty.** Unless required by applicable law or

agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.
9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");

you may not use this file except in compliance with the License.

You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

1.22 zeromq 4.3.4

1.22.1 Available under license :

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Robert Beaty that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "drbobbeaty", with commit author "Bob Beaty <drbob@themanfromspud.com>", are copyright of Robert Beaty . This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Robert Beaty

2019/08/10

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Tore Halvorsen that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "demozon", with commit author "Tore Halvorsen <tore.halvorsen@gmail.com>", are copyright of Tore Halvorsen. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Tore Halvorsen

2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Thomas Braun

that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "t-b", with commit author "thomas.braun@virtuell-zuhause.de" and "thomas.braun@byte-physics.de", are copyright of Thomas Braun.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Thomas Braun

2017/03/27

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Shubham Lagwankar that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "ssbl", with commit author "Shubham Lagwankar <shubhu105@gmail.com>", are copyright of Shubham Lagwankar. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Shubham Lagwankar

2018/10/30

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Iwan Paolucci that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "ipa", with commit author "Iwan Paolucci <iwan.paolucci@gmail.com>", are copyright of Iwan Paolucci. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Iwan Paolucci

2019/04/18

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by William P Strang

that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "willstrang", with commit author "Will Strang <william.p.strang@gmail.com>", are copyright of William P Strang. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

William P Strang

2017/03/23

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Rik van der Heijden that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "rikvdh", with commit author "Rik van der Heijden <mail@rikvanderheijden.com>" and "Rik van der Heijden <rik.vanderheijden@dualinventive.com>", are copyright of Rik van der Heijden.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Rik van der Heijden

2017/04/23

Permission to Relicense under MPLv2 or any other share-alike OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Andreas Rottmann that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other share-alike Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "rotty", with commit author "Andreas Rottmann <a.rottmann@gmx.at>", are copyright of Andreas Rottmann. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Andreas Rottmann

2017/05/07

Permission to Relicense under MPLv2

This is a statement by Goswin von Brederlow

that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "mrvn", with commit author "Goswin von Brederlow <goswin-v-b@web.de>" or "Goswin von Brederlow <brederlo@q-leap.de>", are copyright of Goswin von Brederlow.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Goswin von Brederlow
2020/12/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Lionel Orry that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "chickenkiller", with commit author "Lionel Orry <lionel.orry@gmail.com>", are copyright of Lionel Orry.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Lionel Orry
2017/03/23

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Matthias Kluwe that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "mkluwe", with commit author "Matthias Kluwe <mkluwe@gmail.com>", are copyright of Matthias Kluwe.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Matthias Kluwe
2017/03/24

Permission to Relicense under MPLv2

This is a statement by Hewlett Packard Enterprise that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "brc859844", with commit author "Brett Cameron <Brett.Cameron@hp.com>", are copyright of Hewlett Packard Enterprise. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Hewlett Packard Enterprise
2019/03/12
wepoll - epoll for Windows
<https://github.com/piscisaureus/wepoll>

Copyright 2012-2018, Bert Belder <bertbelder@gmail.com>
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Martin Labsch on behalf of KST innovations GmbH that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "martin-ksti", with commit author "Martin Labsch <martin.labsch@ksti.de>", are copyright of Martin Labsch on behalf of KST innovations GmbH. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and

future contributions of the author listed above.

Martin Labsch

2020/10/09

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Christopher Laws that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "claws", with commit author "Chris Laws <clawsicus@gmail.com>", are copyright of Christopher Laws. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Christopher Laws

2019/08/11

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Rickard Hallerbck that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "Ricardicus", with commit author "Rickard Hallerbck", are copyright of Rickard Hallerbck. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Rickard Hallerbck 2020/02/28

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Anthony Scemama that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "scemama", with commit author "Anthony Scemama <scemama@irsamc.ups-tlse.fr>", are copyright of Anthony Scemama. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Anthony Scemama

2017/03/21

Permission to Relicense under MPLV2

This directory collects grants from individuals and firms that hold copyrights in ZeroMQ to permit licensing the ZeroMQ code under

the [Mozilla Public License, version 2](https://www.mozilla.org/en-US/MPL/2.0/). See [GitHub Pull Request #1917](https://github.com/zeromq/libzmq/pull/1917), the [0MQ Licensing Page](http://zeromq.org/area:licensing) and [original iMatix zeromq-dev license grant](http://lists.zeromq.org/pipermail/zeromq-dev/2016-April/030288.html) for some background information.

Please create a separate file in this directory for each individual or firm holding copyright in ZeroMQ, named after the individual or firm holding the copyright.

Each patch must be made with a GitHub handle that is clearly associated with the copyright owner, to guarantee the identity of the signatory. Please avoid changing the files created by other individuals or firms granting a copyright license over their copyrights (if rewording is required contact them and ask them to submit an updated version). This makes it easier to verify that the license grant was made by an authorized GitHub account.

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Diego Fons that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "dfons", with commit author "Diego Fons <diego.fons@gmail.com>" or "Diego Fons <diego.fons@intraway.com>", are copyright of Diego Fons.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Diego Fons

2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Caleb Epstein that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "Bklyn", with commit author "Caleb Epstein <cae@bklyn.org>", are copyright of Caleb Epstein.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Caleb Epstein

2017/03/21

Permission to Relicense under MPLv2

This is a statement by Steven McCoy
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "steve-o", with
commit author "Steven McCoy <steven.mccoy@miru.hk>" and "Steve-o
<fnjordy@gmail.com>", are copyright of Steven McCoy.

This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Steven McCoy

2019/02/24

Format: <http://www.debian.org/doc/packaging-manuals/copyright-format/1.0/>

Upstream-Name: ZeroMQ

Source: <http://zeromq.org>

Files: *

Copyright: 2009-2011, 250bpm s.r.o

2007-2013, iMatix Corporation

2007-2011, Other contributors as noted in the AUTHORS file

License: LGPL-3.0+

Files: src/xreq.cpp

src/xpub.cpp

src/xsub.cpp

tests/test_reqrep_device.cpp

tests/test_invalid_rep.cpp

Copyright: 2010-2011, 250bpm s.r.o

2011, VMware, Inc

2010-2011, Other contributors as noted in the AUTHORS file

License: LGPL-3.0+

Files: src/msg.hpp

src/xrep.*

src/options.*

src/req.*

src/socket_base.*

src/pipe.*

src/encoder.cpp

src/lb.cpp

src/session_base.*

src/fq.cpp

include/zmq.h

Copyright: 2009-2011, 250bpm s.r.o
2007-2013, iMatix Corporation
2011, VMware, Inc
2007-2011, Other contributors as noted in the AUTHORS file
License: LGPL-3.0+

Files: src/pgm_receiver.*
src/pgm_sender.*
src/pgm_socket.*
Copyright: 2009-2011, 250bpm s.r.o
2007-2013, iMatix Corporation
2010-2011, Miru Limited
2007-2011, Other contributors as noted in the AUTHORS file
License: LGPL-3.0+

Files: external/unity/*
Copyright: 2007-2014 Mike Karlesky
2007-2014 Mark VanderVoord
2007-2014 Greg Williams

License: MIT

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Files: debian/*
Copyright: 2014- , Laszlo Boszormenyi (GCS) <gcs@debian.org>
2012-2014, Alessandro Ghedini <ghedo@debian.org>
2010-2012, Martin Lucina <martin@lucina.net>
2009-2010, Adrian von Bidder <cmot@debian.org>
2009-2010, Peter Busser <peter@mirabilix.nl>
2012, Alessandro Ghedini <ghedo@debian.org>
License: LGPL-2.0+

License: LGPL-2.0+

This package is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This package is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

On Debian systems, the complete text of the GNU Lesser General Public License can be found in "/usr/share/common-licenses/LGPL-2".

License: LGPL-3.0+

This package is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 3 of the License, or (at your option) any later version.

This package is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

On Debian systems, the complete text of the GNU Lesser General Public License can be found in "/usr/share/common-licenses/LGPL-3". BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Permission to Relicense under MPLv2

This is a statement by Cameron Smith that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "cwsmith", with commit author "Cameron Smith <smithc11@rpi.edu>", are copyright of Cameron Smith.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Cameron Smith

2020/02/05

Permission to Relicense under MPLv2

This is a statement by Jean-Christophe Fillion-Robin that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "jcfr", with commit author "Jean-Christophe Fillion-Robin <jchris.fillionr@kitware.com>", are copyright of Kitware Inc. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Jean-Christophe Fillion-Robin

2019/09/03

Permission to Relicense under MPLv2

This is a statement by sonoware GmbH that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "sonoware", with commit author "Stephan Senkbeil" are copyright of sonoware GmbH.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the authors listed above.

Stephan Senkbeil <stephan.senkbeil@sonoware.de>

2019/12/13

Permission to Relicense under MPLv2

This is a statement by Dave Meehan

that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "dmeehan1968", with commit author "Dave Meehan dave_meehan@replicated.co.uk", are copyright of Dave Meehan.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Dave Meehan

2019/08/31

Permission to Relicense under MPLv2

This is a statement by Brett Cameron

that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "brc859844", with commit author "Brett Cameron <brett.r.cameron@gmail.com>" or "Brett Cameron <brett.cameron@vmssoftware.com>", are copyright of Brett Cameron. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Brett Russell Cameron
2019/02/25

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Egomotion Limited that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "robertcastle", with commit author "Robert Castle <robert@egomotion.co.uk>", are copyright of Egomotion Limited. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Robert Castle,
Director, Egomotion Limited
2017/03/21

Permission to Relicense under MPLv2

This is a statement by Rosen Penev that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "flub", with commit author "Rosen Penev <rosenp@gmail.com>", are copyright of Rosen Penev . This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Rosen Penev
2019/04/19
Permission to Relicense under MPLv2

This is a statement by Maurizio Melato that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "mauri-melato", with commit author "Maurizio Melato", are copyright of Maurizio Melato. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Maurizio Melato

2017-04-04

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Franco Fichtner that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "fichtner", with commit author "Franco Fichtner <franco@lastsummer.de>", are copyright of Franco Fichtner. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Franco Fichtner

2017/03/21

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Dmitrii (Dima) Pasechnik that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "dimpase", with commit author "Dima Pasechnik dimpase@gmail.com", are copyright of Dmitrii Pasechnik. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Dmitrii Pasechnik 2019/09/18

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Michael Lloyd that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "CommanderBubble", with commit author "Michael Lloyd <commander.bubble@gmail.com>", are copyright of Michael Lloyd. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Michael Lloyd

2019/02/23

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Xujing Yang (laplaceyang) that grants permission to relicense his copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "laplaceyang", with commit author "laplaceyang <laplace2013@outlook.com>", are copyright of Xujing Yang. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Xujing Yang

2020/04/22

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Paul Colomiets that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "tailhook", with commit author "Paul Colomiets <paul@colomiets.name>" or "Paul Colomiets <pc@gafol.net>", are copyright of Paul Colomiets. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Paul Colomiets

2017/03/19

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Bill Torpey that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "wallstprog", with commit author "Bill Torpey <wallstprog@gmail.com>", are copyright of Bill Torpey. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Bill Torpey

2018/11/02

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Jean Airoidie that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "jean-airoidie", with commit author "jean-airoidie <25088801+jean-airoidie@users.noreply.github.com>", are copyright of Jean Airoidie. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Jean Airoidie 2019/04/27

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Szekely Gyorgy that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "hoditohod", with commit author "Szekely Gyorgy <hoditohod@gmail.com>", are copyright of Szekely Gyorgy. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Szekely Gyorgy

2018/08/15

GNU LESSER GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. <<http://fsf.org/>>

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

This version of the GNU Lesser General Public License incorporates the terms and conditions of version 3 of the GNU General Public License, supplemented by the additional permissions listed below.

0. Additional Definitions.

As used herein, "this License" refers to version 3 of the GNU Lesser General Public License, and the "GNU GPL" refers to version 3 of the GNU General Public License.

"The Library" refers to a covered work governed by this License, other than an Application or a Combined Work as defined below.

An "Application" is any work that makes use of an interface provided by the Library, but which is not otherwise based on the Library. Defining a subclass of a class defined by the Library is deemed a mode of using an interface provided by the Library.

A "Combined Work" is a work produced by combining or linking an Application with the Library. The particular version of the Library with which the Combined Work was made is also called the "Linked Version".

The "Minimal Corresponding Source" for a Combined Work means the Corresponding Source for the Combined Work, excluding any source code for portions of the Combined Work that, considered in isolation, are based on the Application, and not on the Linked Version.

The "Corresponding Application Code" for a Combined Work means the object code and/or source code for the Application, including any data and utility programs needed for reproducing the Combined Work from the Application, but excluding the System Libraries of the Combined Work.

1. Exception to Section 3 of the GNU GPL.

You may convey a covered work under sections 3 and 4 of this License without being bound by section 3 of the GNU GPL.

2. Conveying Modified Versions.

If you modify a copy of the Library, and, in your modifications, a facility refers to a function or data to be supplied by an Application that uses the facility (other than as an argument passed when the facility is invoked), then you may convey a copy of the modified version:

- a) under this License, provided that you make a good faith effort to ensure that, in the event an Application does not supply the function or data, the facility still operates, and performs whatever part of its purpose remains meaningful, or
- b) under the GNU GPL, with none of the additional permissions of this License applicable to that copy.

3. Object Code Incorporating Material from Library Header Files.

The object code form of an Application may incorporate material from a header file that is part of the Library. You may convey such object code under terms of your choice, provided that, if the incorporated material is not limited to numerical parameters, data structure layouts and accessors, or small macros, inline functions and templates

(ten or fewer lines in length), you do both of the following:

- a) Give prominent notice with each copy of the object code that the Library is used in it and that the Library and its use are covered by this License.
- b) Accompany the object code with a copy of the GNU GPL and this license document.

4. Combined Works.

You may convey a Combined Work under terms of your choice that, taken together, effectively do not restrict modification of the portions of the Library contained in the Combined Work and reverse engineering for debugging such modifications, if you also do each of the following:

- a) Give prominent notice with each copy of the Combined Work that the Library is used in it and that the Library and its use are covered by this License.
- b) Accompany the Combined Work with a copy of the GNU GPL and this license document.
- c) For a Combined Work that displays copyright notices during execution, include the copyright notice for the Library among these notices, as well as a reference directing the user to the copies of the GNU GPL and this license document.

d) Do one of the following:

- 0) Convey the Minimal Corresponding Source under the terms of this License, and the Corresponding Application Code in a form suitable for, and under terms that permit, the user to recombine or relink the Application with a modified version of the Linked Version to produce a modified Combined Work, in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.

- 1) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (a) uses at run time a copy of the Library already present on the user's computer system, and (b) will operate properly with a modified version of the Library that is interface-compatible with the Linked Version.

- e) Provide Installation Information, but only if you would otherwise be required to provide such information under section 6 of the

GNU GPL, and only to the extent that such information is necessary to install and execute a modified version of the Combined Work produced by recombining or relinking the Application with a modified version of the Linked Version. (If you use option 4d0, the Installation Information must accompany the Minimal Corresponding Source and Corresponding Application Code. If you use option 4d1, you must provide the Installation Information in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.)

5. Combined Libraries.

You may place library facilities that are a work based on the Library side by side in a single library together with other library facilities that are not Applications and are not covered by this License, and convey such a combined library under terms of your choice, if you do both of the following:

- a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities, conveyed under the terms of this License.
- b) Give prominent notice with the combined library that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

6. Revised Versions of the GNU Lesser General Public License.

The Free Software Foundation may publish revised and/or new versions of the GNU Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library as you received it specifies that a certain numbered version of the GNU Lesser General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that published version or of any later version published by the Free Software Foundation. If the Library as you received it does not specify a version number of the GNU Lesser General Public License, you may choose any version of the GNU Lesser General Public License ever published by the Free Software Foundation.

If the Library as you received it specifies that a proxy can decide whether future versions of the GNU Lesser General Public License shall apply, that proxy's public statement of acceptance of any version is permanent authorization for you to choose that version for the Library.

SPECIAL EXCEPTION GRANTED BY COPYRIGHT HOLDERS

As a special exception, copyright holders give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent modules, and to copy and distribute the resulting executable under terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module. An independent module is a module which is not derived from or based on this library. If you modify this library, you must extend this exception to your version of the library.

Note: this exception relieves you of any obligations under sections 4 and 5 of this license, and section 6 of the GNU General Public License.

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Yuval Langer
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "yuvallanger", with
commit author "Yuval Langer <yuvall.langer@gmail.com>", are copyright of Yuval Langer.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Yuval Langer
2017-03-19

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Thomas Rodgers
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "rodgert", with
commit author "Thomas Rodgers <rodgert@twrogers.com>", are copyright
of Thomas Rodgers.

This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Thomas W Rodgers
2017/04/08

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Michael Fox
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "gitfoxi", with
commit author "gitfoxi", are copyright of Michael Fox.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Michael Fox

2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Roy Lenferink
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "rlenferink", with
commit author "Roy Lenferink <lenferinkroy@gmail.com>" or "Roy Lenferink <rlenferink@apache.org>", are
copyright of Roy Lenferink.

This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Roy Lenferink

2017/03/17

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Aaron Linville
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "linville", with
commit author "Aaron Linville <aaron@linville.org>", are copyright of Aaron Linville.

This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Aaron Linville

2017/03/27

Permission to Relicense under MPLv2

This is a statement by Nikita Kozlov
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "KLNikita", with
commit author "nikita kozlov <nikita@elyzion.net>", are copyright of Nikita Kozlov .
This document hereby grants the libzmq project team to relicense
libzmq,
including all past, present and future contributions of the author
listed above.

Nikita Kozlov
6 February 2020

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Brian Silverman
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "brian-peloton", with
commit author "brian@peloton-tech.com", are copyright of Brian Silverman .
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Brian Silverman
2019/08/14

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by "chugga_fan"
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "chuggafan", with
commit author "chugga_fan chuggafans@gmail.com", are copyright of "chugga_fan" .
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

"chugga_fan"
2017/03/19

Permission to Relicense under MPLv2

This is a statement by Google, Inc.

that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "tkoepe", with commit author "Thomas Kppe", are copyright of Google, Inc. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Thomas Kppe
2017/09/13

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Min Ragan-Kelley that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the GitHub handle "minrk", with commit author "Min RK benjaminrk@gmail.com", are copyright of Min Ragan-Kelley. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Min Ragan-Kelley
2017/07/17

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Arthur O'Dwyer that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "Quuxplusone", with commit author "Arthur O'Dwyer <arthur@push.am>", are copyright of Arthur O'Dwyer. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Arthur O'Dwyer
2019/02/17

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Henri Gourvest that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "hgourvest", with commit author "Henri Gourvest <hgourvest@progdigy.com>", are copyright of Henri Gourvest. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Henri Gourvest
2018/12/8

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Christophe Juniet that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "cjuniet", with commit author "Christophe Juniet <c.juniet@gmail.com>", are copyright of Christophe Juniet. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Christophe Juniet
2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Matthew Connolly that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "mattconnolly", with commit author "Matt Connolly <matt.connolly@me.com>", are copyright of Matthew Connolly. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Matthew Connolly
2017/06/28

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Christian Kamm that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "ckamm", with commit author "Christian Kamm kamm@incasoftware.de", are copyright of Christian Kamm.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Christian Kamm

2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Gonzalo Diethelm that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "gonzus", with commit author "Gonzalo Diethelm <gonzalo.diethelm@diethelm.org>" or "Gonzalo Diethelm <gdiethelm@dcv.cl>", are copyright of Gonzalo Diethelm .

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Gonzalo Diethelm

2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Nikolay Amiantov that grants permission to relicense his copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "abbradar", with commit author "Nikolay Amiantov <ab@fmap.me>", are copyright of Nikolay Amiantov.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Nikolay Amiantov

2017/03/24

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Wang Yunlai that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "hnwyllmm", with commit author "hnwyllmm hnwyllmm@126.com", are copyright of Wang Yunlai .

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Wang Yunlai

2019/08/13

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Mark Jan van Kampen that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "mjvk", with commit author "Mark Jan van Kampen <markjanvankampen@gmail.com>", are copyright of Mark Jan van Kampen. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Mark Jan van Kampen

2020/02/24

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Piotr Trojanek that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "ptroja", with commit author "Piotr Trojanek <piotr.trojanek@gmail.com>", are copyright of Piotr Trojanek. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Piotr Trojanek

2017/03/19

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Volodymyr Korniiichuk that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "ezhikus", with commit author "VolodymyrKorn@gmail.com", are copyright of Volodymyr Korniiichuk. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Volodymyr Korniiichuk

2017/03/21

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by John T. Conklin
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "johntconklin", with
commit author "J.T. Conklin <jtc@acorntoolworks.com>", are copyright of John T. Conklin.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

John T. Conklin
2017-03-19

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Andrij Abyzov
that grants permission to relicense his copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "drolevar", with
commit author "Andrij Abyzov <drolevar@gmail.com>", are copyright of Andrij Abyzov.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed
above.

Andrij Abyzov
2019/11/19

Permission to Relicense under MPLv2

This is a statement by Kevin Sapper that grants permission to relicense its
copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License
v2 (MPLv2).

A portion of the commits made by the Github handle "sappo", with commit author
"Kevin Sapper <mail@kevinsapper.de>", are copyright of Kevin Sapper. This document hereby grants the
libzmq project team to relicense libzmq, including all past, present and future
contributions of the author listed above.

Kevin Sapper
2017/03/20

GNU GENERAL PUBLIC LICENSE
Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. <<http://fsf.org/>>

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The GNU General Public License is a free, copyleft license for software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

Developers that use the GNU GPL protect your rights with two steps: (1) assert copyright on the software, and (2) offer you this License giving you legal permission to copy, distribute and/or modify it.

For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of

protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS

0. Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations.

To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through

a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding

Source.

The Corresponding Source for a work in source code form is that same work.

2. Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. The output from running a covered work is covered by this License only if the output, given its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law.

You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for you, or provide you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you.

Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing is not allowed; section 10 makes it unnecessary.

3. Protecting Users' Legal Rights From Anti-Circumvention Law.

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

5. Conveying Modified Source Versions.

You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

- a) The work must carry prominent notices stating that you modified it, and giving a relevant date.
- b) The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement modifies the requirement in section 4 to "keep intact all notices".
- c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.
- d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an "aggregate" if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

- a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.
- b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.
- c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.
- d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.
- e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.

A "User Product" is either (1) a "consumer product", which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, "normally used" refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

"Installation Information" for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in source code form), and must require no special password or key for

unpacking, reading or copying.

7. Additional Terms.

"Additional permissions" are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission.

Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

- a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or
- b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or
- c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or
- d) Limiting the use for publicity purposes of names of licensors or authors of the material; or
- e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or
- f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on those licensors and authors.

All other non-permissive additional terms are considered "further

restrictions" within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains a further restriction but permits relicensing or conveying under this License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying.

If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

8. Termination.

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

9. Acceptance Not Required for Having Copies.

You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

10. Automatic Licensing of Downstream Recipients.

Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License.

An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity transaction, each party to that transaction who receives a copy of the work also receives whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts.

You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and you may not initiate litigation (including a cross-claim or counterclaim in a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it.

11. Patents.

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, "control" includes the right to grant patent sublicenses in a manner consistent with the requirements of

this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version.

In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory patent license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that

contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

12. No Surrender of Others' Freedom.

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

13. Use with the GNU Affero General Public License.

Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU Affero General Public License into a single combined work, and to convey the resulting work. The terms of this License will continue to apply to the part which is the covered work, but the special requirements of the GNU Affero General Public License, section 13, concerning interaction through a network will apply to the combination as such.

14. Revised Versions of this License.

The Free Software Foundation may publish revised and/or new versions of the GNU General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies that a certain numbered version of the GNU General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the GNU General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future versions of the GNU General Public License can be used, that proxy's

public statement of acceptance of a version permanently authorizes you to choose that version for the Program.

Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

15. Disclaimer of Warranty.

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

17. Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <http://www.gnu.org/licenses/>.

Also add information on how to contact you by electronic and paper mail.

If the program does terminal interaction, make it output a short notice like this when it starts in an interactive mode:

```
<program> Copyright (C) <year> <name of author>  
This program comes with ABSOLUTELY NO WARRANTY; for details type `show w'.  
This is free software, and you are welcome to redistribute it  
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, your program's commands might be different; for a GUI interface, you would use an "about box".

You should also get your employer (if you work as a programmer) or school, if any, to sign a "copyright disclaimer" for the program, if necessary. For more information on this, and how to apply and follow the GNU GPL, see <http://www.gnu.org/licenses/>.

The GNU General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License. But first, please read <http://www.gnu.org/philosophy/why-not-lgpl.html>.

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Diego Barrios Romero that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "eldruin", with commit author "Diego Barrios Romero <eldruin@gmail.com>", are copyright of Diego Barrios Romero. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Diego Barrios Romero
2019/11/13

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Isaac Poulton that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "Omegastick", with commit author "Omegastick", are copyright of Isaac Poulton. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Isaac Poulton
2019/04/14

Permission to Relicense under MPLv2

This is a statement by KIU Shueng Chuan that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "pijyoi", with commit author "KIU Shueng Chuan <nixchuan@gmail.com>", are copyright of KIU Shueng Chuan. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

KIU Shueng Chuan
2017/03/23

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by JaeSang Yoo that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "JSYoo5B", with commit author "JaeSang Yoo <jsyoo5b@gmail.com>", are copyright of JaeSang Yoo. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

JaeSang Yoo
2020.02.29
Permission to Relicense under MPLv2

This is a statement by Ricardo Catalinas Jimenez that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "jimenezrick", with commit author "Ricardo Catalinas Jimenez", are copyright of Ricardo Catalinas Jimenez. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Ricardo Catalinas Jimenez
2020/02/03
Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Davit Kalantaryan that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made with commit author "Davit Kalantaryan <davit.kalantaryan@desy.de>", are copyright of Davit Kalantaryan. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Davit Kalantaryan
2020/08/06
Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Elliot Saba that grants permission to relicense his copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "staticfloat", with

commit author "Elliot Saba <staticfloat@gmail.com>", are copyright of Elliot Saba.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Elliot Saba

2017/03/19

Copyright (C) 1995, 1996, 1997, and 1998 WIDE Project.

All rights reserved.

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions
are met:

1. Redistributions of source code must retain the above copyright
notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright
notice, this list of conditions and the following disclaimer in the
documentation and/or other materials provided with the distribution.
3. Neither the name of the project nor the names of its contributors
may be used to endorse or promote products derived from this software
without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE PROJECT AND CONTRIBUTORS ``AS IS" AND
ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
ARE DISCLAIMED. IN NO EVENT SHALL THE PROJECT OR CONTRIBUTORS BE LIABLE
FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
SUCH DAMAGE.

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Jim Hague that grants permission to relicense
its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla
Public License v2 (MPLv2) or any other Open Source Initiative approved
license chosen by the current ZeroMQ BDFL (Benevolent Dictator for
Life).

A portion of the commits made by the Github handle "banburybill", with
commit author "Jim Hague <jim.hague@acm.org>", are copyright of Jim
Hague. This document hereby grants the libzmq project team to
relicense libzmq, including all past, present and future contributions
of the author listed above.

Jim Hague

2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Sergey KHripchenko
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "shripchenko", with
commit author "Sergey KHripchenko <shripchenko@intermedia.net>", are copyright of Sergey KHripchenko.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Sergey KHripchenko
2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by C-Sir
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "C-Sir", with
commit author "C-Sir <942510829@qq.com>", are copyright of C-Sir.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

C-Sir
2020/09/28

Permission to Relicense under MPLv2

This is a statement by Antonio Vanegas that grants permission to relicense its copyrights in the libzmq C++ library
(ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "hpsaturn", with commit author "Antonio Vanegas", are
copyright of Antonio Vanegas.
This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future
contributions of the author listed above.

Antonio Vanegas
2018/10/27

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Chuck Remes
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ

BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "chuckremes", with commit author "Chuck Remes", are copyright of Chuck Remes.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Chuck Remes

2017/03/21

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Stoian Ivanov that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "sdrsdr", with commit author "Stoian Ivanov sdr@mail.bg", are copyright of Stoian Ivanov. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Stoian Ivanov

2017-03-23

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Christoph Schulz that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "schulzch", with commit author "Christoph Schulz <schulzchs@gmail.com>", are copyright of Christoph Schulz. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Christoph Schulz

2018/09/10

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

I happily grant permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

The portion of the commits made by the Github handle "chymanfx", are not copyrighted in any way.

Chyman

2019/08/12

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Latchmoor Services, LLC that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "drbitboy", with commit author "Brian Carcich <drbitboy@gmail.com>", are copyright of Latchmoor Services, LLC.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Latchmoor Services, LLC

2019/07/26

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Andreas Hasenack that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "panlinux", with commit author "Andreas Hasenack <andreas@canonical.com>", are copyright of Andreas Hasenack. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Andreas Hasenack

2019/03/18

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Denis Collette that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "colletted", with commit author "Denis Collette <denisncollette@gmail.com>", are copyright of Denis Collette. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Denis Collette 2020/01/22

Permission to Relicense under MPLv2

This is a statement by Frdric Trgon

that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "FredTreg", with commit author "Frederic Tregon <frederic.tregon@gmail.com>", are copyright of Frdric Trgon. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Frdric Trgon
2020/02/03

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Andrei Tomashpolskiy that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "atomashpolskiy", with commit author "Andrei Tomashpolskiy <nordmann89@gmail.com>", are copyright of Andrei Tomashpolskiy . This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Andrei Tomashpolskiy
2019/08/22

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Dries Harnie that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "Botje", with commit author "Dries Harnie <dries@harnie.be>", are copyright of Dries Harnie. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Dries Harnie
2019/10/31

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Leonardo J. Consoni that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "AnCaPepe", with commit author "Leonardo Jos Consoni <consoni_2519@hotmail.com>", are copyright of Leonardo J. Consoni. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Leonardo Jos Consoni

2017/03/19

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Gudmundur Adalsteinsson that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "gummif", with commit author "Gudmundur Adalsteinsson <ofpgummi@yahoo.com>", are copyright of Gudmundur Adalsteinsson. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Gudmundur Adalsteinsson

2020/02/04

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Byron Mallett that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "mystfit", with commit author "Byron Mallett <byronated@gmail.com>", are copyright of Byron Mallett . This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Byron Mallett

2018/9/1

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Adam Seering that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commit made by the Github handle "aseering", with commit author "Adam Seering <aseering@gmail.com>", are copyright of Adam Seering.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Adam Seering
2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Claudio Biagi that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "emtr", with commit author "Claudio Biagi <retmt@gmx.com>", are copyright of Claudio Biagi. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Claudio Biagi
2019/03/07

Permission to Relicense under MPLv2 or any other share-alike OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by {{ name of company / name of individual }} that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other share-alike Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "{{ github username }}", with commit author "{{ github commit author }}", are copyright of {{ name }} . This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

{{ Full Name }}
{{ creation date of document (format: yyyy/mm/dd) }}
Permission to Relicense under MPLv2

This is a statement by Liquid Instruments that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "acsearle", with commit author "Antony Searle", are copyright of Liquid Instruments . This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Antony Searle

2020/02/03

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Michael Lutz

that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "michic", with

commit author "Michael Lutz <michi@icosahedron.de>", are copyright of Michael Lutz.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Michael Lutz

2017/05/01

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by aixxe (aixxe)

that grants permission to relicense his copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "aixxe", with commit author "aixxe <me@aixxe.net>" are copyright of aixxe.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

aixxe

2019/07/25

Permission to Relicense under MPLv2

This is a statement by Thomas M. DuBuisson

that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "tommd", with

commit author "Thomas M. DuBuisson", are copyright of Thomas M. DuBuisson.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Thomas M. DuBuisson

2019/04/11

Permission to Relicense under MPLv2

This is a statement by trya.

that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "trya", with commit author "trya", are copyright of trya.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

trya

2019/09/23

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Juha Reunanen, Tomaattinen Ltd, and Outotec (Finland) Oy that grants permission to relicense their copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the GitHub handle "reunanen", with commit author "Juha Reunanen <juha.reunanen@tomaattinen.com>", are copyright of Juha Reunanen.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Juha Reunanen

2017/04/01

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Vincent Tellier that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "vtellier", with commit author "Vincent Tellier", are copyright of Vincent Tellier .

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Vincent Louis Thophile Tellier

2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Pawel Kurdybacha that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "kurdybacha", with commit author "Pawel Kurdybacha pawel.kurdybacha@gmail.com", are copyright of Pawel Kurdybacha . This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Pawel Kurdybacha

2017/04/13

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Stefan Radomski that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "sradomski", with commit author "Stefan Radomski <radomski@tk.informatik.tu-darmstadt.de>", are copyright of Stefan Radomski . This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Stefan Radomski

2020/12/20

Permission to Relicense under MPLv2

This is a statement by Nokia that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "aheroff1", with commit author "Andy Heroff", are copyright of Nokia. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Andy Heroff

2021/01/05

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by "Michal Vyskocil" that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "vyskocilm", with commit author "Michal Vyskocil michal.vyskocil@gmail.com", are copyright of "Michal Vyskocil". This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Michal Vyskocil 2017/03/24

Permission to Relicense under MPLv2

This is a statement by Brian Knox
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "taotetek", with
commit author "Brian Knox", are copyright of Brian Knox.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Brian Knox
2017/03/19

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Timothy Mossbarger
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "Prarrot", with
commit author "Prarrot", are copyright of Timothy Mossbarger .
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Timothy Mossbarger
18 Feb 2019

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Axel Nennker that grants permission to
relicense its copyrights in the libzmq C++ library (ZeroMQ) under the
Mozilla Public License v2 (MPLv2) or any other Open Source Initiative
approved license chosen by the current ZeroMQ BDFL (Benevolent
Dictator for Life).

A portion of the commits made by the Github handle "AxelNennker", with
commit author "Axel Nennker <axel@nennker.de>", are
copyright of Axel Nennker. This document hereby grants the libzmq
project team to relicense libzmq, including all past, present and
future contributions of the author listed above.

Axel Nennker
2019/08/11

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Maarten Ditzel
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ

BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "mditzel", with commit author "Maarten Ditzel <maarten.ditzel@gmail.com>", are copyright of Maarten Ditzel. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Maarten Ditzel

2017/03/24

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Ming Ji that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "answeroo", with commit author "answeroo <jiming@yafco.com>", are copyright of Ming Ji. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Ming Ji

2018/08/20

Permission to Relicense under MPLv2

This is a statement by Olaf Mandel that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "olafmandel", with commit author "Olaf Mandel <o.mandel@menlosystems.com>", are copyright of Olaf Mandel. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Olaf Mandel

2017/03/21

Permission to Relicense under MPLV2 or any Open Source Initiative (OSI) approved license chosen by the current ZeroMQ BDFL

This is a statement by Nick Guiffrida that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

The commits made by the Github handle "goodfella", with commit author "Nick Guiffrida goodfella005@gmail.com" are copyright of Nick

Guiffrida. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Permission to Relicense under MPLv2

This is a statement by Ricardo Catalinas Jimenez that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "xantares", with commit author "Michel Zou <xantares09@hotmail.com>", are copyright of Michel Zou. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Michel Zou

2020/02/03

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Trevor Bernard (trevorbernard) that grants permission to relicense his copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "trevorbernard", with commit author "Trevor Bernard <trevor.bernard@gmail.com>", are copyright of Trevor Bernard. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Trevor Bernard

2019/02/25

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by {{ name of company / name of individual }} that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "{{ github username }}", with commit author "{{ github commit author }}", are copyright of {{ name }} . This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

{{ Full Name }}

{{ creation date of document (format: yyyy/mm/dd) }}

Permission to Relicense under MPLv2

This is a statement by Laurent Stacul
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "stac47", with
commit author "Laurent Stacul <laurent.stacul@gmail.com>", are copyright of
Laurent Stacul .

This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Laurent Stacul

2020/02/21

Permission to Relicense under MPLv2

This is a statement by Jrmie Courrges-Anglas
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "jcourreges", with
commit author "Jrmie Courrges-Anglas", are copyright of Jrmie Courrges-Anglas.

This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Jrmie Courrges-Anglas

2018/12/07

Permission to Relicense under MPLv2

This is a statement by Benjamin Deroche
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "benjdero", with
commit author "Benjamin Deroche", are copyright of Benjamin Deroche.

This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Benjamin Deroche

2019/10/26

Permission to Relicense under MPLv2

This is a statement by Victor Luchits
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "vicious", with

commit author "Victor Luchits", are copyright of Victor Luchits.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Victor Luchits

2019/11/12

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Phillip Mienk
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "pmienk", with
commit author "Phillip Mienk <mienkphi@gmail.com>", are copyright of Phillip Mienk.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Phillip Mienk

2019/02/18

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Ian Barber
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commit made by the Github handle "ianbarber", with
commit author "Ian Barber <ianbarber@gmail.com>", are copyright of Ian Barber.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Ian Barber

2017/03/27

Permission to Relicense under MPLv2

This is a statement by Asaf Kahlon
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "asafkahlon", with
commit author "Asaf Kahlon asafka7@gmail.com", are copyright of Asaf Kahlon.
This document hereby grants the libzmq project team to relicense
libzmq,
including all past, present and future contributions of the author
listed above.

Asaf Kahlon

2020/02/05

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Jon Dyte

that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "JonDyte", with commit author "Jon Dyte <jon@totient.co.uk>", are copyright of Jon Dyte. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Jon Dyte

2019/10/03

Permission to Relicense under MPLv2

This is a statement by Bernd Prager

that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "bprager", with commit author "Bernd Prager <bernd@prager.ws>", are copyright of Bernd Prager. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Bernd Prager

2017/03/22

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Jakub Kaczmarzyk

that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "kaczmarj", with commit author "Jakub Kaczmarzyk jakub.kaczmarzyk@gmail.com", are copyright of Jakub Kaczmarzyk. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Jakub Kaczmarzyk

2020/07/29

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Mikko Koppanen that grants permission to relicense his copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "mkoppanen", with commit author "Mikko Koppanen <mikko@kuut.io>", are copyright of Mikko Koppanen. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Mikko Koppanen
2018/02/17

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Reza Ebrahimi that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "reza-ebrahimi", with commit author "Reza Ebrahimi <reza.ebrahimi.dev@gmail.com>", are copyright of Reza Ebrahimi. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Reza Ebrahimi
2017/03/22

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Christophe Guillon that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "guillon", with commit author "Christophe Guillon <christophe.guillon.perso@gmail.com>", are copyright of Christophe Guillon. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Christophe Guillon
2019/06/10

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Tom Whittock that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other

Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "twhittock", with commit author "Tom Whittock", are copyright of Tom Whittock. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Tom Whittock
2017/04/10

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Jan Kryl that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "jkryl", with commit author "Jan Kryl jan.kryl@nexenta.com", are copyright of Jan Kryl. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Jan Kryl
2017/03/19

Permission to Relicense under MPLv2

This is a statement by Dr. Stefan Kaes that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "skaes", with commit author "Stefan Kaes <stefan.kaes@xing.com>", are copyright of New Work SE. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Dr. Stefan Kaes
2021/01/04

Permission to Relicense under MPLv2

This is a statement by Dhammika Pathirana that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "dhammika", with commit author "Dhammika Pathirana <dhammika@gmail.com>", are copyright of Dhammika Pathirana . This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Dhammika Pathirana

2019/08/12

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Norman Oveneri that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "normano", with commit author "normano", are copyright of Norman Oveneri.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

This is a statement by Norman Oveneri

2019/05/01

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Martin Natano that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "natano", with commit author "Martin Natano", are copyright of Martin Natano.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Martin Natano

2017/03/21

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Christoph Kahl that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "kanonet", with commit author "Christoph Kahl", are copyright of Christoph Kahl. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Christoph Kahl

2020/01/09

Permission to Relicense under MPLv2 or any other share-alike OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by xqcool
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
share-alike Open Source Initiative approved license chosen by the current
ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "xqcool", with
commit author "xqcool <xuquan316@live.com>", are copyright of xqcool .
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

xqcool

2020/01/01

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Alex Grnholm
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "agronholm", with
commit author "Alex Grnholm <alex.grnholm+git@nextday.fi>", are copyright of Alex Grnholm.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Alex Grnholm

2017/03/19

Permission to Relicense under MPLv2

This is a statement by Floris Bruynooghe
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "flub", with
commit author "Floris Bruynooghe <flub@devork.be>", are copyright of
Floris Bruynooghe .
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Floris Bruynooghe

2017/05/03

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by John Murphy
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ

BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "murphybytes", with commit author "John Murphy <murphybytes@gmail.com>", are copyright of John Murphy . This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

John Murphy

2019/08/12

Permission to Relicense under MPLV2

This document collects grants from firms that hold copyrights in ZeroMQ. Please add new firms at the start. Each patch must be made with a GitHub handle that guarantees identity of the signatory.

iMatix Corporation

This is a statement by iMatix Corporation sprl (iMatix) that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

1. The original ZeroMQ codebase was developed from 2007-2009 by FastMQ Inc. (FastMQ) in Slovakia, which held all copyrights in code written by its staff.
2. On 2009-11-01, iMatix exercised an option to acquire FastMQ and its assets, including ZeroMQ. On or before 2010-01-05 the FastMQ copyrights in ZeroMQ were transferred to iMatix ([commit](https://github.com/zeromq/libzmq/commit/4f6baf4dde627656b63cc4e2acdb78a8577ba640)). The FastMQ legal entity was subsequently liquidated.
3. Between 2009 and 2016, iMatix has continued to add contributions to ZeroMQ under the GitHub handle 'hintjens'.
4. This grant therefore covers what remains of the original FastMQ codebase plus all later contributions.
5. iMatix hereby grants an irrevocable, global, and fully paid-up license on all its copyrights that exist in ZeroMQ, under the MPLv2.

-Pieter Hintjens

CEO, iMatix Corporation sprl

23 April 2016

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Conrad Parker that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "kfish", with

commit author "Conrad Parker <conrad@metadecks.org>", are copyright of Conrad Parker. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Conrad Parker

2018/10/30

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Zoe Faltib that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "zoedberg", with commit author "Zoe Faltib zoefaltiba@gmail.com", are copyright of Zoe Faltib. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Zoe Faltib

2020/11/10

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Jeff Brubaker that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "brubakerjeff", with commit author "Jeff Brubaker <brubaker.jeff@gmail.com>", are copyright of Jeff Brubaker. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Jeff Brubaker

2018/11/18

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Attila Mark Sz that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "ambitslix", with commit author "gougolith@gmail.com", are copyright of Attila Mark. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Attila Mark Sz 2020/11/10

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Alain Kalker that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "ackalker", with commit author "Alain Kalker <a.c.kalker@gmail.com>", are copyright of Alain Kalker. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Alain Kalker

2019/05/23

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Ivan Pechorin that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "ipechorin", with commit author "Ivan Pechorin <ivan.pechorin@gmail.com>", are copyright of Ivan Pechorin. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Ivan Pechorin

2019/09/25

Permission to Relicense under MPLv2

This is a statement by Sven Liedtke that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "liedtkeInTUM", with commit author "Sven Liedtke", are copyright of Sven Liedtke. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Sven Liedtke

2019/11/27

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Christopher Dolan

that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "cdolan", with commit author "Christopher Dolan <chris@codingstream.org>", are copyright of Christopher Dolan. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Christopher Dolan

2017/03/19

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Giuseppe Corbelli that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "cowo78" with commit author "Giuseppe Corbelli <cowo78@gmail.com>", are copyright of Giuseppe Corbelli. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Giuseppe Corbelli

2017/03/21

Permission to Relicense under MPLv2

This is a statement by Ericsson that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "hugne", with commit author "Erik Hugne erik.hugne@ericsson.com", are copyright of Ericsson. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Jon Maloy <jon.maloy@ericsson.com>

2019/03/27

Permission to Relicense under MPLv2

This is a statement by Fredrick Paul Eisele that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle phreed, with commit author "Fred Eisele", are copyright of Fred Eisele .

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Fredrick Paul Eisele

2020/01/03

Permission to Relicense under MPLv2

This is a statement by Connamara Systems llc that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "cbusbey", with commit author "chris busbey", are copyright of Connamara Systems, llc. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Chris Busbey

2019/09/03

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Jonathan Reams that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "jbreams", with commit author "Jonathan Reams <jbreams@gmail.com>", are copyright of Jonathan Reams. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Jonathan Reams

2019/08/31

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Michael Vilim that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "mvilim", with commit author "Michael Vilim

<697a9b924bfa6f06a81e82975ddca4785b90a7b40d91044ce76f68d3bd65a9b8@697a9b924bfa6f06a81e82975ddca4

785b90a7b40d91044ce76f68d3bd65a9b8.com>", are
copyright of Michael Vilim. This document hereby grants the libzmq
project team to relicense libzmq, including all past, present and
future contributions of the author listed above.

Michael Vilim

2019/08/31

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Robert Gagnon that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved
license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "rgagnon24", with commit author
"Robert Gagnon rgagnon24+zmq@gmail.com", are copyright of Robert Gagnon. This document hereby grants the
libzmq project team to relicense libzmq, including all past, present and future contributions of the
author listed above.

Robert Gagnon

2017/03/19

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Joe Eli McIlvain
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "jemc", with
commit author "Joe Eli McIlvain", are copyright of Joe Eli McIlvain.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Joe Eli McIlvain

2017/03/28

Permission to Relicense under MPLv2

This is a statement by Chris Staite that grants permission to relicense its
copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License
v2 (MPLv2).

A portion of the commits made by the Github handle "chrisstaite", with commit
author "Chris <chris@yourdreamnet.co.uk>", are copyright of Chris Staite.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed
above.

Chris Staite

2017/03/28

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Jovan Bunjevacki that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "bjovke", with commit author "Jovan Bunjevacki <bjovan@gmail.com>", are copyright of Jovan Bunjevacki. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Jovan Bunjevacki

2017/04/04

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Andre Caron that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "AndreLouisCaron", with commit author "Andre Caron <andre.l.caron@gmail.com>", are copyright of Andre Caron. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Andre Caron

2017/03/19

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Dongmin Yu that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "miniway", with commit author "Dongmin Yu <miniway@gmail.com>", are copyright of Dongmin Yu. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Dongmin Yu

2019/08/12

Permission to Relicense under MPLv2

This is a statement by Kapp Arnaud
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "xaqq", with
commit author "Kapp Arnaud", are copyright of Kapp Arnaud.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Kapp Arnaud
2017/03/30

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Simon Giesecke that grants permission to
relicense its copyrights in the libzmq C++ library (ZeroMQ) under the
Mozilla Public License v2 (MPLv2) or any other Open Source Initiative
approved license chosen by the current ZeroMQ BDFL (Benevolent
Dictator for Life).

A portion of the commits made by the Github handle "sigieseck", with
commit author "Simon Giesecke <simon.giesecke@btc-ag.com>", are
copyright of Simon Giesecke. This document hereby grants the libzmq
project team to relicense libzmq, including all past, present and
future contributions of the author listed above.

Simon Giesecke
2017/08/17

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Kymeta Corporation
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "opensource-kymetacorp", with
commit author "opensource-kymetacorp", are copyright of Kymeta Corporation.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Kymeta Corporation
2018/11/21

Permission to Relicense under MPLv2

This is a statement by Hendrik Beskow
that grants permission to relicense its copyrights in the libzmq C++

library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "Asmod4n", with commit author "Asmod4n Asmod4n@users.noreply.github.com", are copyright of Hendrik Beskow. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Hendrik Beskow

2017/04/21

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Bryan Gillespie (RPGillespie6) that grants permission to relicense his copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "RPGillespie6", with commit author "Bryan Gillespie <rpgillespie6@gmail.com>", are copyright of Bryan Gillespie. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Bryan Gillespie

2019/09/06

Permission to Relicense under MPLv2

This is a statement by Joerg Kreuzberger that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "kreuzberger", with commit author "Joerg Kreuzberger", are copyright of Joerg Kreuzberger . This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Joerg Kreuzberger

2019/09/02

Permission to Relicense under MPLv2

This is a statement by Daniel Krikun that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "dkrikun", with commit author "Daniel Krikun", are copyright of Daniel Krikun . This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Daniel Krikun

2019/08/17

Permission to Relicense under MPLv2

This is a statement by Matthias Loy that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "mloy", with commit author "Matthias Loy", are copyright of Matthias Loy. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Matthias Loy

2020/01/18

Permission to Relicense under MPLv2

This is a statement by Jake Cobb that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "jakecobb", with commit author "Jake Cobb <jake.cobb@gmail.com>", are copyright of Jake Cobb. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Jake Cobb

2017/04/04

Permission to Relicense under MPLv2

This is a statement by Douglas Young that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "rcxdude", with commit author "Douglas Young <rcxdude@gmail.com>", are copyright of Douglas Young . This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Douglas Young

2019/08/31

This is a statement by Peter LaDow that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "Suudy", with commit

author "Suudy <pladow@gmail.com>", are copyright of Peter LaDow. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Peter LaDow

14 August 2019

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Guido Vranken that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "guidovranken", with commit author "Guido Vranken <guidovranken@gmail.com>", are copyright of Guido Vranken. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Guido Vranken

2019/01/08

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Tarmo Tnav that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "tarmo", with commit author "Tarmo Tnav <tarmo@itech.ee>", are copyright of Tarmo Tnav. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Tarmo Tnav

2020/08/29

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Daiyu Hurst that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "daiyuhurst", with commit author "Daiyu Hurst <daiyu.hurst@gmail.com>", are copyright of Daiyu Hurst. This document hereby grants the libzmq

project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Daiyu Hurst

2019/08/31

Permission to Relicense under MPLv2

This is a statement by Juraj Oruli that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "ojura", with commit author "Juraj Oruli", are copyright of Juraj Oruli.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Juraj Oruli

2018/10/26

Permission to Relicense under MPLv2

This is a statement by Quantum Corporation that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "vortechs2000", with commit author "AJ Lewis aj.lewis@quantum.com", are copyright of Quantum Corporation.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

AJ Lewis

2019/02/21

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Dennis Klein that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "dennisklein", with commit author "Dennis Klein <d.klein@gsi.de>", are copyright of Dennis Klein.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Dennis Klein

2019/08/11

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Adrian Muraru

that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "amuraru", with commit author "Adrian Muraru <adi.muraru@gmail.com>", are copyright of Adrian Muraru. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Adrian Muraru
2017/03/20
Permission to Relicense under MPLv2

This is a statement by IVU Traffic Technologies AG that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "jruffin", with commit author "Julien Ruffin <jur@ivu.de>", are copyright of IVU Traffic Technologies AG. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Henrik Benner
Head of Department Ticketing Development, IVU Traffic Technologies AG
2017/05/10
Permission to Relicense under MPLv2

This is a statement by Roal Zanazzi that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "roalz", with commit author "roalz <roal.zanazzi@gmail.com>", are copyright of Roal Zanazzi. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Roal Zanazzi
2017/03/21
Permission to Relicense under MPLv2

This is a statement by Fedor Sheremetyev that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "sheremetyev", with commit author "Fedor Sheremetyev <sheremetyev@gmail.com>", are copyright of Fedor Sheremetyev. This document hereby grants the libzmq project team to relicense libzmq,

including all past, present and future contributions of the author listed above.

Fedor Sheremetyev

2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by niXman (github.nixman@pm.me) that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "niXman", with commit author "niXman", are copyright of nixMan .

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

niXman (github.nixman@pm.me)

2019/10/03

Permission to Relicense under MPLv2

This is a statement by Jesse Gorzinski that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "ThePrez", with commit author "ThePrez <jgorzinski@gmail.com>", are copyright of Jesse Gorzinski.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Jesse Gorzinski

2019/10/02

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by H. Eduardo Montoya Snchez that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "montoyaedu", with commit author "Montoya Edu <montoya.edu@gmail.com>", are copyright of H. Eduardo Montoya Snchez.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

H. Eduardo Montoya Snchez

2017/03/20

Permission to Relicense under MPLv2

This is a statement by Pavel Pimenov
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle pavel-pimenov, with
commit author Pavel Pimenov pavel.pimenov@gmail.com, are copyright of Pavel Pimenov .
This document hereby grants the libzmq project team to relicense
libzmq,
including all past, present and future contributions of the author
listed above.

Pavel Pimenov

2020/02/04

Permission to Relicense under MPLv2

This is a statement by Spotify AB that grants permission to relicense its
copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License
v2 (MPLv2).

A portion of the commits made by the Github handle "gimaker", with commit author
"Staffan Gimker", the commits made by the Github handle "danielnorberg", with
commit author "Daniel Norberg", and the commits made by the Github handle
"caipre", with commit author "Nick Platt", are copyright of Spotify AB. This
document hereby grants the libzmq project team to relicense libzmq, including
all past, present and future contributions of the authors listed above.

Nick Platt <nickplatt@spotify.com>

2019/08/21

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Arkadiusz Drabczyk (ardrabczyk) that grants
permission to relicense his copyrights in the libzmq C++ library
(ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open
Source Initiative approved license chosen by the current ZeroMQ BDFL
(Benevolent Dictator for Life).

A portion of the commits made by the Github handle "ardrabczyk", with
commit author "Arkadiusz Drabczyk <arkadiusz@drabczyk.org>", are
copyright of Arkadiusz Drabczyk. This document hereby grants the
libzmq project team to relicense libzmq, including all past, present
and future contributions of the author listed above.

Arkadiusz Drabczyk

2020/11/10

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Stephane Vales
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "StephaneVales", with
commit author "Stephane Vales <7755128+stvales@users.noreply.github.com>", are copyright of Stephane Vales.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Stephane Vales
2020/08/06
Permission to Relicense under MPLv2

This is a statement by Patrik Wenger
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "paddor", with
commit author "Patrik Wenger", are copyright of Patrik Wenger .
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Patrik Wenger
2019/08/31
Naos Ltd (a New Zealand company)

This is a statement by Naos Ltd (Naos) that grants permission to
relicense its copyrights in the libzmq C++ library (ZeroMQ) under
the Mozilla Public License v2 (MPLv2).

The port of libzmq to run on the z/OS Mainframe ([GitHub Pull
request #1136](https://github.com/zeromq/libzmq/pull/1136), [GitHub Pull
request #1138](https://github.com/zeromq/libzmq/pull/1138), and
[GitHub Pull request #1139](https://github.com/zeromq/libzmq/pull/1139))
was performed as work for hire under contract to iMatix Corporation
sprl, itself under contract to a client. Thus copyright in that
portability work does not belong to Naos Ltd, and Naos Ltd hereby
releases any claim to the copyright in the z/OS Mainframe portability
work identified by the above three GitHub pull requests.

Ewen McNeill
Managing Director, Naos Ltd
2016-04-25
Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Johan Mabilie

that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "JohanMabille", with commit author "Johan Mabille johan.mabille@gmail.com", are copyright of Johan Mabille. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Johan Mabille
2017/03/20
Brocade Communications Systems Inc.

This is a statement by Brocade Communications Systems Inc. (Brocade) that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "bluca", with commit author "Luca Boccassi <luca.boccassi@gmail.com>" or "Luca Boccassi <lboccass@brocade.com>", are copyright of Brocade. This permission to relicense includes all past, present and future contributions of Brocade employees.

Luca Boccassi
Software Engineer, Brocade Communications Systems Inc.
2016-05-16
Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Lonard Michelet that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "leonarf", with commit author "Lonard Michelet <leonard.michelet@openwide.fr>", are copyright of Lonard Michelet. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Michelet Lonard 2017/03/29
Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Constantin Rack that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "c-rack", with commit author "Constantin Rack <constantin.rack@gmail.com>", are copyright of Constantin Rack. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Constantin Rack
2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Eric Camachat that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "camachat", with commit author "Eric Camachat <eric@camachat.org>", are copyright of Eric Camachat. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Eric L. Camachat
March 20, 2017

Permission to Relicense under MPLv2

This is a statement by Chih-Hsuan Yen that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "yan12125", with commit author "Chih-Hsuan Yen <yan12125@gmail.com>", are copyright of Chih-Hsuan Yen. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Chih-Hsuan Yen
2019/10/12

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Diorcet Yann that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "diorcety", with commit author "yann.diorcet@xenocs.com", are copyright of Diorcet Yann. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Diorcet Yann

2019/09/04

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Anonymous Maarten that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "madebr", with commit author "Anonymous Maarten <anonymous.maarten@gmail.com>", are copyright of Anonymous Maarten. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Anonymous Maarten

2017/03/27

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Uli Khler that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

All commits made by the Github handle "ulikoehler", with commit author "Uli Khler", are copyright of Uli Khler.

This document hereby grants the libzmq project team to relicense libzmq and / or CZMQ, including all past, present and future contributions of the author listed above.

Uli Khler

2017/03/25

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Andrew Thompson that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "thompsa", with commit author "Andrew Thompson <andy@fud.org.nz>", are copyright of Andrew Thompson. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Andrew Thompson

2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Doron Somech (somdoron) that grants permission to relicense his copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "somdoron", with commit author "Doron Somech <somdoron@gmail.com>", are copyright of Doron Somech. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Doron Somech

2019/02/18

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Rishi Theivendan (inuik) that grants permission to relicense his copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "inuik", with commit author "Rishi Theivendran <29522253+inuik@users.noreply.github.com>" or "Rishi Theivendran <rishi.theivendran@rohde-schwarz.com>", are copyright of Rishi Theivendran. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Rishi Theivendran

2019/07/18

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Benjamin HENRION that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "zoobab", with commit author "Benjamin HENRION", are copyright of Benjamin HENRION. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Benjamin HENRION (zoobab)

Done in Brussels on the 2020/02/03

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Jens Auer
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "jens.auer", with
commit author "Jens Auer", are copyright of Jens Auer.

This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Jens Auer

2019/11/08

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Matthew Arsenault
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "arsenm", with
commit author "Matt Arsenault <arsenm2@gmail.com>", are copyright of Matthew Arsenault.

This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Matthew Arsenault

2017/10/12

Permission to Relicense under MPLv2

This is a statement by Matthias Gabriel
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "gabm", with
commit author "Matthias Gabriel <matthias.gabriel@etit.tu-chemnitz.de>", are copyright of Matthias Gabriel.

This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Matthias Gabriel

2018/10/8

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Pacific Northwest National Laboratory (Battelle Memorial Institute, Pacific Northwest
Division)

that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license (at least as permissive as the MPLv2) chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "hashstat", with commit author "Brandon Carpenter <brandon.carpenter@pnnl.gov>", are copyright of Pacific Northwest National Laboratory (Battelle Memorial Institute, Pacific Northwest Division).

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Jereme Haack on behalf of Brandon Carpenter
2019/02/18

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Luca Boccassi (bluca) that grants permission to relicense his copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "bluca", with commit author "Luca Boccassi <luca.boccassi@gmail.com>" or "Luca Boccassi <bluca@debian.org>", are copyright of Luca Boccassi. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Luca Boccassi
2019/02/16

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by "Osiris Pedroso" that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "opedroso", with commit author "Osiris Pedroso <opedroso@gmail.com>", are copyright of "Osiris Pedroso". This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Osiris Pedroso
2017/03/21

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Jonathan Reams (of MongoDB, Inc.)

that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "jbrems", with commit author "Jonathan Reams jbrems@mongodb.com" (specifically the commits merged in pull requests #1451, #1449, #1448, and #1174), are copyright of MongoDB, Inc.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Jonathan Reams

2019/10/1

Permission to Relicense under MPLv2

This is a statement by Aleksander Melnikov that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "malexxz", with commit author "Aleksander Melnikov", are copyright of Aleksander Melnikov.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Aleksander Melnikov

2019/08/11

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by skicc that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "skicc", with commit author "skicc <skicc@fastmail.com>", are copyright of skicc.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

skicc

2019/06/15

Permission to Relicense under MPLv2

This is a statement by Laszlo Boszormenyi (GCS) that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "gcsideal", with commit author "Laszlo Boszormenyi (GCS) <gcs@debian.org>", are copyright of Laszlo Boszormenyi (GCS) .

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Laszlo Boszormenyi (GCS)

2020/02/13

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Micromass UK Limited that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "ricnewton", with commit author "Richard Newton" are copyright of Micromass UK Limited. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Steve Smith

Director Micromass UK Limited

2017/04/26

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Jack Pimbert that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "jackpimbert", with commit author "jackpimbert <jack.pimbert@gmail.com>", are copyright of Jack Pimbert. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Jack Pimbert

2019/05/24

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Daniel Shih that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ

BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "danielhtshih", with commit author "Daniel Shih <hotingwow@gmail.com>", are copyright of Daniel Shih. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Daniel Shih

2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Diego R.Losada that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "drodri", with commit author "drodri <diego.rlosada@gmail.com>", are copyright of Diego Rodriguez-Losada. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Diego Rodriguez-Losada

2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Tobias Schlter that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "TobiSchluter", with commit author "TobiSchluter", are copyright of Tobias Schlter . This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Tobias Schlter

2019/09/13

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Bastian Lher that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "bl0x", with

commit author "Bastian Lher <me@l-dot.de>", are
copyright of Bastian Lher. This document hereby grants the libzmq
project team to relicense libzmq, including all past, present and
future contributions of the author listed above.

Bastian Lher

2019/08/01

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Gennady Makovetski
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "gena-moscow", with
commit author "Gennady Makovetski <makovetski@gmail.com>", are copyright of Gennady Makovetski.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Gennady Makovetski

2017/03/21

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Takeshi Abe
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "tabe", with
commit author "Takeshi Abe <tabe@fixedpoint.jp>", are copyright of Takeshi Abe.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Takeshi Abe

2017/03/22

Permission to Relicense under MPLv2

This is a statement by Telford Berkey
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "tberkey", with
commit author "Telford Berkey <tberkey@gmail.com>", are copyright of Telford Berkey.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Telford Berkey

03 Feb 2020

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Wouter Overmeire that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "lodagro", with commit author "lodagro <lodagro@gmail.com>", are copyright of Wouter Overmeire. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Wouter Overmeire

2017/04/01

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Romain Moret that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "moretomain", with commit author "Romain Moret <moretomain@gmail.com>", are copyright of Romain Moret. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Romain Moret

2019/05/06

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Florian Ebeling that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "febeling", with commit author "Florian Ebeling <florian.ebeling@gmail.com>", are copyright of Florian Ebeling. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Florian Ebeling

2017/03/20

Permission to Relicense under MPLv2

This is a statement by Bruno Bodin
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "bbdb68", with
commit author "Bruno Bodin <brunobodin@gmail.com>", are copyright of Bruno Bodin .
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Bruno Bodin

2017/04/04

Permission to Relicense under MPLv2 or any other share-alike OSI approved license chosen by the current
ZeroMQ BDFL

This is a statement by Joel Lauener
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
share-alike Open Source Initiative approved license chosen by the current
ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "jlauenercern", with
commit author "Joel Lauener <Joel.Lauener@cern.ch>", are copyright of Joel Lauener .
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Joel Lauener

2019/08/12

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Weidmueller Interface GmbH & Co KG
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "herbrechtsmeier", with
commit author "Stefan Herbrechtsmeier", are copyright of Weidmueller Interface GmbH & Co KG.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Stefan Herbrechtsmeier

2019/09/09

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Roberto Santacroce Martins that grants permission to relicense its copyrights in the libzmq
C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved

license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "mileschet", with commit author "Roberto Santacroce Martins miles.chet@gmail.com", are copyright of Roberto Santacroce Martins. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Roberto Santacroce Martins 2020/07/06

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Stanisaw Macia
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "stanpl", with
commit author "Stanisaw Macia", are copyright of Stanisaw Macia.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Stanisaw Macia

2020/12/23

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Evgeny (Jim) Klimov
that grants permission to relicense his copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "jimklimov",
with commit author "Jim Klimov <jim@jimklimov.com>" or
"Jim Klimov <jimklimov@gmail.com>", are copyright of Evgeny (Jim) Klimov.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed
above.

Evgeny (Jim) Klimov

2017/03/21

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Brian Buchanan
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "bwbuchanan", with

commit author "Brian Buchanan <bwb@holo.org>" or "Brian Buchanan <brian@tiogalake.com>", are copyright of Brian Buchanan.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Brian Buchanan

2017/03/23

Permission to Relicense under MPLv2

This is a statement by Shannen Saez that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "shancat", with commit author "Shannen Saez <shannenlaptop@gmail.com>", are copyright of Shannen Saez.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Shannen Saez

2017/03/21

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Ghislain PUTOIS that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "ghpu", with commit author "Ghislain PUTOIS", are copyright of Ghislain PUTOIS.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Ghislain PUTOIS

2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Dan Riegsecker that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "danriegsecker", with commit author "Dan Riegsecker <1baldgeek@gmail.com>", are copyright of Dan Riegsecker. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Dan Riegsecker

2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Timothee Besset
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "TTimo", with
commit author "Timothee Besset <timo@timo.net>", are copyright of Timothee Besset.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Timothee Besset

2017/03/19

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Frank R. Dana Jr.
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "ferdnyc", with
commit author "FeRD (Frank Dana)", are copyright of Frank R. Dana, Jr.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Frank Richard Dana, Jr.

2020-03-16

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Erik Hugne
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "Hugne", with
commit author "erik.hugne@gmail.com", are copyright of Erik Hugne.
Commits made by author "erik.hugne@ericsson.com" are NOT covered by this
statement.

This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Erik Hugne

2017/03/22

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Harald Achitz that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "a4z", with commit author "Harald Achitz <harald.achitz@gmail.com>" or "Harald Achitz <harald.achitz@tritech.se>" or "Harald Achitz <harald.achitz@getinge.com>", are copyright of Harald Achitz. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Harald Achitz

2017/03/21

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Samuel Martin that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "tSed", with commit author "Samuel Martin <s.martin49@gmail.com>", are copyright of Samuel Martin. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Samuel Martin

2017/03/25

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Mrio Kauba that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "soulik", with commit author "Mrio Kauba mario.kasuba@it-academy.sk", are copyright of Mrio Kauba. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Mrio Kauba

2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by boxkey that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "boxkey", with commit author "boxkey 289844900@qq.com", are copyright of boxkey. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

boxkey 2020/11/30

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Fabrice Fontaine that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "ffontaine", with commit author "Fabrice Fontaine <fontaine.fabrice@gmail.com>", are copyright of Fabrice Fontaine. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Fabrice Fontaine

2018-09-13

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Gavin McNiff that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "gavinmcniff", with commit author "Gavin McNiff <gavin@mcniff.ie>", are copyright of Gavin McNiff. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Gavin McNiff

2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Michael Ford that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent

Dictator for Life).

A portion of the commits made by the Github handle "fanquake", with commit author "Michael Ford <fanquake@gmail.com>", are copyright of Michael Ford. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Michael Ford

2019/08/10

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Eric Voskuil that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "evoskuil", with commit author "Eric Voskuil <eric@voskuil.org>", are copyright of Eric Voskuil. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Eric Voskuil

2017/03/19

Permission to Relicense under MPLv2

This is a statement by Thomas M. DuBuisson that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "mdionisio", with commit author "Michele Dionisio", are copyright of Michele Dionisio. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Michele Dionisio

2019/07/09

Permission to Relicense under MPLv2 or any other share-alike OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by the Github user "std-any-emplace" that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other share-alike Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "std-any-emplace", with

commit author "std-any-emplace", are copyright of the Github user "std-any-emplace".

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

"std-any-emplace"

2020/01/19

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by John Skallwe that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "skaller", with commit author "skaller", are copyright of John Skaller .

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

John Skaller

2019/09/01

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by G. Evan Burkitt that grants permission to relicense his copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "eburkitt", with commit author "Evan Burkitt <evanb@edulinksys.com>", are copyright of G. Evan Burkitt.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

G. Evan Burkitt

2017/04/06

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Christopher Hall that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "hwx", with commit author "Christopher Hall <hsw@ms2.hinet.net>", are copyright of Christopher Hall. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future

contributions of the author listed above.

Christopher Hall
2019/08/07

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Bjrn Tpel that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "bjoto", with commit author "Bjorn Topel <bjorn.topel@gmail.com>", are copyright of Bjrn Tpel. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Bjrn Tpel
2017/03/26

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Manca George that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "mancasg", with commit author "Manca George <mancas.f.george@gmail.com>", are copyright of Manca George . This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Manca George
2019/07/24

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Jacques Germishuys that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "jacquesg", with commit author "Jacques Germishuys <jacquesg@striata.com>", are copyright of Jacques Germishuys. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Jacques Germishuys

2018/12/14

Permission to Relicense under MPLv2 or any other share-alike OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Chia-liang Kao that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other share-alike Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "clkao", with commit author "Chia-liang Kao clkao@clkao.org", are copyright of Chia-liang Kao. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Chia-liang Kao

2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by crocket that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "crocket", with commit author "crocket <748856+crocket@users.noreply.github.com>", are copyright of crocket. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

crocket

2018/11/10

Permission to Relicense under MPLv2

This is a statement by Fabien Ninoles that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "ninoles", with commit author "Fabien Ninoles", are copyright of Fabien Ninoles.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Fabien Ninoles

2020/02/11

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Michael Hand that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "mipaaa", with commit author "Michael Hand <mipaaa@gmail.com>", are copyright of Michael Hand. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Michael Hand

2017/03/21

Permission to Relicense under MPLv2

This is a statement by Brian Adamson that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "bebopagogo", with commit author "bebopagogo <bebopagogo@users.noreply.github.com>" and "Brian Adamson <badamson@gmail.com>", are copyright of Brian Adamson. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Brian Adamson 2019/08/11 s

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Chengye Ke that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "imkcy9", with commit author "Chengye Ke <imkcy9@icloud.com>" or "Chengye Ke <imkcy9@gmail.com>", are copyright of Chengye Ke. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Chengye Ke

2019/05/18

Permission to Relicense under MPLv2

This is a statement by {{ name of company / name of individual }} that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "{{ github username }}", with commit author "{{ github commit author }}", are copyright of {{ name }} .

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

{{ Full Name }}

{{ creation date of document (format: yyyy/mm/dd) }}

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Francesco Montorsi that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "f18m", with commit author "Francesco Montorsi <francesco.montorsi@gmail.com>", are copyright of Francesco Montorsi. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Francesco Montorsi

2018/09/14

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Lionel Flandrin that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "simias", with commit author "Lionel Flandrin lflandrin@ereca.fr", are copyright of Lionel Flandrin.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Lionel Flandrin

2018/05/02

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Andrey Sibiryov that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "kobolog", with commit author "Andrey Sibiryov

<me@kobology.ru>",

are copyright of Andrey Sibiryov. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Andrey Sibiryov

2017/04/04

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by serg06 (serg06)

that grants permission to relicense his copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "serg06", with commit author "serg06 <serkhas@hotmail.com>" are copyright of serg06.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

serg06

2020/05/25

Permission to Relicense under MPLv2

This is a statement by Mark Barbisan

that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "mbarbisan", with commit author "Mark Barbisan <mark@barbisan.ca>", are copyright of Mark Barbisan.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Mark Barbisan

2019/08/31

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Felipe Goron Farinon (psl-felipefarinon)

that grants permission to relicense his copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "psl-felipefarinon", with commit author "Felipe Goron Farinon", are copyright of Felipe Goron Farinon.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Felipe Goron Farinon
2019/09/02
The MIT License (MIT)

Copyright (c) <year> 2007-14 Mike Karlesky, Mark VanderVoord, Greg Williams

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Justin.Hung
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "loachfish", with
commit author "Justin.Hung fronront@qq.com", are copyright of Justin.Hung .
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Justin.Hung
2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Alexander Straub
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "straubar", with
commit author "Alexander Straub <alexander.straub@visus.uni-stuttgart.de>", are copyright of Alexander Straub.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Alexander Straub

2019/09/04

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Marc Su Clos (msune) that grants permission to relicense his copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "msune", with commit author "Marc Sune <marcdevel@gmail.com>" or "Marc Sune <marc@voltanet.io>", are copyright of Marc Su.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Marc Su Clos

2019/08/31

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Serghei Novac that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "carbofos", with commit author "Serghei Novac <serghei.novac@epyd.com>", are copyright of Serghei Novac.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Serghei Novac

2019/03/05

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Martin Grigorov that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "martin-g", with commit author "Martin Grigorov", are copyright of Martin Grigorov.

This document hereby grants the libzmq project team to relicense libzmq,

including all past, present and future contributions of the author listed above.

Martin Grigorov

2021/01/11

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Anton Dimitrov that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "antonrd", with commit author "Anton Dimitrov <dimitrov.anton@gmail.com>", are copyright of Anton Dimitrov. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Anton Dimitrov

2018/10/01

Permission to Relicense under MPLv2

This is a statement by grmt.
that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "grmt", with commit author "grmt", are copyright of grmt.
This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

grmt (garmt.noname@gmail.com)

2020/05/04

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Sbastien Rombauts
that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "SRombauts", with commit author "Sbastien Rombauts", are copyright of Sbastien Rombauts.
This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Sbastien Rombauts

2017/03/21

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by David Jelenc that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "djelenc", with commit author "David Jelenc <david.jelenc@fri.uni-lj.si>", are copyright of David Jelenc. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

David Jelenc

2017/03/20

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Wenbin Hou that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "WenbinHou", with commit author "Wenbin Hou <houwenbin@pku.edu.cn>", are copyright of Wenbin Hou. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Wenbin Hou

2018/05/16

Permission to Relicense under MPLv2

This is a statement by Manuel Segura that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "mesegura", with commit author "Manuel Segura", are copyright of Manuel Segura . This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Manuel Eduardo Segura

2019/08/10

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Philippe Leite that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the

Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "philippeleite", with commit author "Philippe Leite <philippe.leite@gmail.com>", are copyright of Philippe Leite. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Philippe Leite

2019/06/10

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Jim Garlick (garlick) that grants permission to relicense his copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "garlick", with commit author "Jim Garlick <garlick.jim@gmail.com>", are copyright of Jim Garlick. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Jim Garlick

2019/08/10

Permission to Relicense under MPLv2

This is a statement by Dylan Cali that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "calid", with commit author "Dylan Cali <calid1984@gmail.com>", are copyright of Dylan Cali. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Dylan Cali

2019/02/17

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Mike Gatny (mgatny) that grants permission to relicense his copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "mgatny", with commit author "Mike Gatny <mgatny@gmail.com>" or "Mike Gatny <mgatny@connamara.com>", are copyright of Mike Gatny. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Mike Gatny

2019/02/19

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Anton Dimitrov that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "glemercier", with commit author "Gregory Lmercier <greglemercier@free.fr>", are copyright of Gregory Lmercier. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Gregory Lmercier

2018/10/07

Permission to Relicense under MPLv2

This is a statement by Thomas Chiantia that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "tomzbench", with commit author "Thomas<Thomas@Altronix.com>", are copyright of Thomas Chiantia. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Thomas Chiantia

2019/08/10

Permission to Relicense under MPLv2

This is a statement by Robert G. Jakobosky that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "Neopallium", with commit author "Robert G. Jakobosky <bobby@sharedrealm.com>", are copyright of Robert G. Jakobosky.

This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Robert Gabriel Jakabosky

2019/08/17

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Ivo Danihelka that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "fidlej", with commit author "Ivo Danihelka <ivo@danihelka.net>", are copyright of Ivo Danihelka. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Ivo Danihelka

2017/03/21

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by William Swanson that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "swansontec", with commit author "William Swanson <swansontec@gmail.com>", are copyright of William Swanson. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

William Swanson

2017/04/10

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Gian Lorenzo Meocci that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "meox", with commit author "Gian Lorenzo Meocci <glmeocci@gmail.com>", are copyright of Gian Lorenzo Meocci. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Gian Lorenzo Meocci

2017/04/09

Permission to Relicense under MPLv2

This is a statement by Pierre Yager that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2).

A portion of the commits made by the Github handle "zedalaye", with commit author "Pierre Yager <pierre.y@gmail.com>" or "Pierre Yager <pierre.yager@crisolid.com", are copyright of Pierre Yager. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Pierre Yager

2021/01/04

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Ilya Kulakov that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "kentzo", with commit author "Ilya Kulakov <kulakov.ilya@gmail.com>", are copyright of Ilya Kulakov. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Ilya Kulakov

2017/05/23

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Eelis van der Weegen that grants permission to relicense its copyrights in the libzmq C++ library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other Open Source Initiative approved license chosen by the current ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "Eelis", with commit author "Eelis van der Weegen <eelis@eelis.net>", are copyright of Eelis van der Weegen. This document hereby grants the libzmq project team to relicense libzmq, including all past, present and future contributions of the author listed above.

Eelis van der Weegen

2019/02/22

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Sylvain Corlay
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
Open Source Initiative approved license chosen by the current ZeroMQ
BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "SylvainCorlay", with
commit author "Sylvain Corlay sylvain.corlay@gmail.com", are copyright of Sylvain Corlay .
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Sylvain Corlay
2017/03/20

Permission to Relicense under MPLv2 or any other share-alike OSI approved license chosen by the current
ZeroMQ BDFL

This is a statement by Lourens Naud
that grants permission to relicense its copyrights in the libzmq C++
library (ZeroMQ) under the Mozilla Public License v2 (MPLv2) or any other
share-alike Open Source Initiative approved license chosen by the current
ZeroMQ BDFL (Benevolent Dictator for Life).

A portion of the commits made by the Github handle "methodmissing", with
commit author "Lourens Naud <lourens@methodmissing.com>", are copyright of Lourens Naud.
This document hereby grants the libzmq project team to relicense libzmq,
including all past, present and future contributions of the author listed above.

Lourens Naud
2019/07/01

Permission to Relicense under MPLv2 or any other OSI approved license chosen by the current ZeroMQ BDFL

This is a statement by Nathan Toone that grants permission to
relicense its copyrights in the libzmq C++ library (ZeroMQ) under the
Mozilla Public License v2 (MPLv2) or any other Open Source Initiative
approved license chosen by the current ZeroMQ BDFL (Benevolent
Dictator for Life).

A portion of the commits made by the Github handle "toonetown", with
commit author "Nathan Toone <nathan@toonetown.com>", are
copyright of Nathan Toone. This document hereby grants the libzmq
project team to relicense libzmq, including all past, present and
future contributions of the author listed above.

Nathan Toone
2018/11/05

1.23 guava 31.0.1-android

1.23.1 Available under license :

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2020 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except

* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License

* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under

* the License.

*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/Java8Compatibility.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Java8Compatibility.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/math/ToDoubleRounder.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/OverflowAvoidingLockSupport.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/Java8Compatibility.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/math/BigDecimalMath.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2008 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

- * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
- * See the License for the specific language governing permissions and
- * limitations under the License.
- */

Found in path(s):

- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/Tables.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/RegularImmutableMap.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ImmutableMapValues.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/StandardRowSortedTable.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/Collections2.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/Platform.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ImmutableSortedSet.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/Table.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/Range.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/PeekingIterator.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ImmutableCollection.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/HashBasedTable.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/Serialization.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ImmutableMapKeySet.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/RegularImmutableBiMap.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/StandardTable.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ImmutableMultimap.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ImmutableBiMap.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ImmutableMultiset.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ImmutableEntry.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/thirdparty/publicsuffix/PublicSuffixPatterns.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/TreeBasedTable.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ImmutableMapEntrySet.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ImmutableMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ImmutableListMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/UnmodifiableIterator.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/EmptyImmutableListMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/CollectPreconditions.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2018 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/ImmutableSupplier.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/ExecutionSequencer.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2017 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License

* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either

express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/ForwardingLock.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/ImmutableDoubleArray.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/ImmutableIntArray.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/AbstractHashFunction.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/ImmutableLongArray.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/ForwardingCondition.java
No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2011 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/AtomicLongMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Present.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/ListeningScheduledExecutorService.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/UnsignedInts.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/cache/RemovalListeners.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/Hashing.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/cache/CacheStats.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/math/MathPreconditions.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/FutureCallback.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/AbstractCompositeHashFunction.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/math/package-info.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/AsyncFunction.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/math/DoubleMath.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/Funnels.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/EmptyContiguousSet.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/Hasher.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/WrappingExecutorService.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/BloomFilter.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/cache/CacheBuilderSpec.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/Murmur3_32HashFunction.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/HashCode.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/cache/ForwardingLoadingCache.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/reflect/TypeParameter.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/cache/package-info.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/UnsignedLongs.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/math/DoubleUtils.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/net/MediaType.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/cache/RemovalCause.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Optional.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/HashFunction.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/cache/RemovalListener.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/math/LongMath.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/ForwardingExecutorService.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/Murmur3_128HashFunction.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/AbstractScheduledService.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/AbstractSortedMultiset.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/UnsignedLong.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/Funnel.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Ticker.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/UnsignedInteger.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/ForwardingListeningExecutorService.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/FunctionalEquivalence.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/reflect/Types.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/cache/RemovalNotification.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/math/IntMath.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/BloomFilterStrategies.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Enums.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/cache/ForwardingCache.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/cache/Cache.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/cache/CacheLoader.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/net/HostAndPort.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/RegularContiguousSet.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/AbstractNonStreamingHashFunction.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/math/BigIntegerMath.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/ExecutionError.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/cache/LoadingCache.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/AbstractListeningExecutorService.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/MessageDigestHashFunction.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/cache/AbstractCache.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/CycleDetectingLockFactory.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/PairwiseEquivalence.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/RegularImmutableMultiset.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/UncheckedExecutionException.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/TreeRangeSet.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/DescendingImmutableSortedMultiset.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/net/HttpHeaders.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/HashingOutputStream.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/BoundType.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/cache/AbstractLoadingCache.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/PrimitiveSink.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/ParseRequest.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/Queues.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/AbstractStreamingHasher.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Absent.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/cache/Weigher.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/Crc32cHashFunction.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/AbstractHasher.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/Uninterruptibles.java

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2018 The Guava Authors
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

```
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/BaseImmutableMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/IndexedImmutableSet.java
```

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2020 The Guava Authors
 *
 * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
 * in compliance with the License. You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software distributed under the License
 * is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
 * express
 * or implied. See the License for the specific language governing permissions and limitations under
 * the License.
 */
```

```
/**
 * Holder for web specializations of methods of { @code Shorts}. Intended to be empty for regular
 * version.
 */
```

Found in path(s):

```
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/primitives/ShortsMethodsForWeb.java
```

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2010 The Guava Authors
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

```
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ForwardingSetMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/AbstractSequentialIterator.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/SortedMapDifference.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ForwardingSortedSetMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/RowSortedTable.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/UnmodifiableListIterator.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ForwardingImmutableCollection.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ForwardingListMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/MinMaxPriorityQueue.java
```

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2014 The Guava Authors
 *
 * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
 * in compliance with the License. You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software distributed under the License
```


* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/math/Quantiles.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/eventbus/SubscriberRegistry.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/eventbus/Dispatcher.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/MoreObjects.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/TrustedListenableFutureTask.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/ListenerCallQueue.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/eventbus/Subscriber.java
No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2010 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Strings.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/ThreadFactoryBuilder.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/Atomics.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/SortedLists.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-

jar/com/google/common/util/concurrent/Monitor.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/base/Ascii.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/ForwardingBlockingQueue.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/annotations/package-info.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/ListeningExecutorService.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ContiguousSet.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/annotations/Beta.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/primitives/package-info.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/base/Equivalence.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/UncaughtExceptionHandler.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/net/package-info.java
No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2013 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/Runnables.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/eventbus/SubscriberExceptionContext.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/reflect/TypeVisitor.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/hash/HashingInputStream.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-

jar/com/google/common/util/concurrent/WrappingScheduledExecutorService.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/io/CharSequenceReader.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/base/Utf8.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/AbstractTable.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/base/VerifyException.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/thirdparty/publicsuffix/PublicSuffixType.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/eventbus/SubscriberExceptionHandler.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/base/Verify.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/FilteredMultimapValues.java
No license file was found, but licenses were detected in source scan.

```
/*  
* Copyright (C) 2016 The Guava Authors  
*  
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except  
* in compliance with the License. You may obtain a copy of the License at  
*  
* http://www.apache.org/licenses/LICENSE-2.0  
*  
* Unless required by applicable law or agreed to in writing, software distributed under the License  
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either  
* express  
* or implied. See the License for the specific language governing permissions and limitations under  
* the License.  
*/  
/**  
* Holder for extra methods of {@code Objects} only in web. Intended to be empty for regular  
* version.  
*/
```

Found in path(s):
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/base/ExtraObjectsMethodsForWeb.java
No license file was found, but licenses were detected in source scan.

```
/*  
* Copyright (C) 2016 The Guava Authors  
*  
* Licensed under the Apache License, Version 2.0 (the "License");  
* you may not use this file except in compliance with the License.
```

- * You may obtain a copy of the License at
- *
- * <http://www.apache.org/licenses/LICENSE-2.0>
- *
- * Unless required by applicable law or agreed to in writing, software
- * distributed under the License is distributed on an "AS IS" BASIS,
- * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
- * See the License for the specific language governing permissions and
- * limitations under the License.
- */

Found in path(s):

- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/AbstractValueGraph.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/MapRetrievalCache.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/DirectedNetworkConnections.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/ForwardingNetwork.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/HashMultimapGwtSerializationDependencies.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/UndirectedGraphConnections.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/Comparators.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/EdgesConnecting.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/NetworkBuilder.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/StandardMutableValueGraph.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/StandardNetwork.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/ForwardingValueGraph.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/ValueGraphBuilder.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/MapIteratorCache.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/StandardMutableGraph.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/NetworkConnections.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/GraphBuilder.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ArrayListMultimapGwtSerializationDependencies.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/AbstractDirectedNetworkConnections.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/LinkedHashMultimapGwtSerializationDependencies.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/StandardValueGraph.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/GraphConstants.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/RangeGwtSerializationDependencies.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/EndpointPairIterator.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/ImmutableValueGraph.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/EndpointPair.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/GraphConnections.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/UndirectedMultiNetworkConnections.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/ValueGraph.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/ForwardingGraph.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/MultiEdgesConnecting.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/MutableValueGraph.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/UndirectedNetworkConnections.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/AbstractGraphBuilder.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/AbstractUndirectedNetworkConnections.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/DirectedMultiNetworkConnections.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/StandardMutableNetwork.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/DirectedGraphConnections.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/AbstractNetwork.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/ElementOrder.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ImmutableMultisetGwtSerializationDependencies.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/AbstractGraph.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2020 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except

* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License

* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under

* the License.

*/

/**

* Holder for web specializations of methods of { @code Floats }. Intended to be empty for regular

* version.

*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/primitives/FloatsMethodsForWeb.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2007 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

/**

* Returns an array containing all of the elements in the specified collection. This method

* returns the elements in the order they are returned by the collection's iterator. The returned

* array is "safe" in that no references to it are maintained by the collection. The caller is

* thus free to modify the returned array.

*

* <p>This method assumes that the collection size doesn't change while the method is running.

```
*
* <p>TODO(kevinb): support concurrently modified collections?
*
* @param c the collection for which to return an array of elements
*/
```

Found in path(s):

```
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ObjectArrays.java
```

No license file was found, but licenses were detected in source scan.

```
/*
```

```
* Copyright (C) 2011 The Guava Authors
```

```
*
```

```
* Licensed under the Apache License, Version 2.0 (the "License"); you may not
* use this file except in compliance with the License. You may obtain a copy of
* the License at
```

```
*
```

```
* http://www.apache.org/licenses/LICENSE-2.0
```

```
*
```

```
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS, WITHOUT
* WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the
* License for the specific language governing permissions and limitations under
* the License.
```

```
*/
```

Found in path(s):

```
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/SortedMultisets.java
```

```
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/SortedMultiset.java
```

No license file was found, but licenses were detected in source scan.

```
/*
```

```
* Copyright (C) 2020 The Guava Authors
```

```
*
```

```
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at
```

```
*
```

```
* http://www.apache.org/licenses/LICENSE-2.0
```

```
*
```

```
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
```

```
*/
```

/**

* Holder for web specializations of methods of { @code Ints }. Intended to be empty for regular
* version.
*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/primitives/IntsMethodsForWeb.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2015 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/AsyncCallable.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/hash/LittleEndianByteArray.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/AggregateFutureState.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/hash/MacHashFunction.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/hash/FarmHashFingerprint64.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/Platform.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/io/ReaderInputStream.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ConsumingQueueIterator.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/InterruptibleTask.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/CombinedFuture.java

No license file was found, but licenses were detected in source scan.


```
/*
 * Copyright (C) 2014 The Guava Authors
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

```
 * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/graph/Graph.java
 * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/graph/SuccessorsFunction.java
 * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/graph/MutableGraph.java
 * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/graph/Network.java
 * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/graph/PredecessorsFunction.java
 * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/graph/Graphs.java
 * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/TopKSelector.java
 * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/graph/MutableNetwork.java
 * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/graph/ImmutableGraph.java
 * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/graph/ImmutableNetwork.java
```

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2012 The Guava Authors
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *

```

- * Unless required by applicable law or agreed to in writing, software
- * distributed under the License is distributed on an "AS IS" BASIS,
- * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
- * See the License for the specific language governing permissions and
- * limitations under the License.
- */

Found in path(s):

- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/DescendingImmutableSortedSet.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/CompactLinkedHashSet.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/RangeMap.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ForwardingDeque.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/RegularImmutableAsList.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/FilteredMultimap.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ForwardingImmutableMap.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/FilteredEntrySetMultimap.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/EvictingQueue.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/FilteredEntryMultimap.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/AbstractSortedKeySortedSetMultimap.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/FilteredKeyListMultimap.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/FilteredSetMultimap.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/AbstractNavigableMap.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/UnmodifiableSortedMultiset.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/TransformedIterator.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/TreeRangeMap.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/TreeTraverser.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ForwardingImmutableSet.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/SortedMultisetBridge.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/AllEqualOrdering.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/CompactHashSet.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/ForwardingBlockingDeque.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ForwardingNavigableMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/CompactHashMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ImmutableEnumMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/AbstractMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ForwardingNavigableSet.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ForwardingBlockingDeque.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ForwardingImmutableList.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/DescendingMultiset.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/FilteredKeySetMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/CompactLinkedHashMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/TransformedListIterator.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2005 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/reflect/Reflection.java

No license file was found, but licenses were detected in source scan.

/*

- * Written by Doug Lea with assistance from members of JCP JSR-166
 - * Expert Group and released to the public domain, as explained at
 - * <http://creativecommons.org/publicdomain/zero/1.0/>
- */

Found in path(s):

- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/Striped64.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/LongAdder.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/cache/LongAdder.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/AtomicDoubleArray.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/cache/Striped64.java

No license file was found, but licenses were detected in source scan.

/*

- * Copyright (C) 2013 The Guava Authors
 - *
 - * Licensed under the Apache License, Version 2.0 (the "License");
 - * you may not use this file except in compliance with the License.
 - * You may obtain a copy of the License at
 - *
 - * <http://www.apache.org/licenses/LICENSE-2.0>
 - *
 - * Unless required by applicable law or agreed to in writing, software
 - * distributed under the License is distributed on an "AS IS" BASIS,
 - * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 - * See the License for the specific language governing permissions and
 - * limitations under the License.
- */

Found in path(s):

- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/MultimapBuilder.java

No license file was found, but licenses were detected in source scan.

/*

- * Copyright (C) 2011 The Guava Authors
- *
- * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
- * in compliance with the License. You may obtain a copy of the License at
- *

```
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/
/*
* This method was written by Doug Lea with assistance from members of JCP JSR-166 Expert Group
* and released to the public domain, as explained at
* http://creativecommons.org/licenses/publicdomain
*
* As of 2010/06/11, this method is identical to the (package private) hash method in OpenJDK 7's
* java.util.HashMap class.
*/
```

Found in path(s):

```
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/Striped.java
```

No license file was found, but licenses were detected in source scan.

```
/*
* Copyright (C) 2015 The Guava Authors
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/
```

Found in path(s):

```
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/graph/package-info.java
```

No license file was found, but licenses were detected in source scan.

```
/*
* Copyright (C) 2009 The Guava Authors
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
```

```
* You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/
/**
 * Not supported. <b>You are attempting to create a map that may contain a non-{@code Comparable}
 * key.</b> Proper calls will resolve to the version in {@code ImmutableSortedMap}, not this dummy
 * version.
 *
 * @throws UnsupportedOperationException always
 * @deprecated <b>Pass a key of type {@code Comparable} to use {@link
 *     ImmutableSortedMap#of(Comparable, Object)}.</b>
 */
```

Found in path(s):

```
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ImmutableSortedMapFauxverideShim.java
```

No license file was found, but licenses were detected in source scan.

```
/*
```

```
* Copyright (C) 2019 The Guava Authors
```

```
*
```

```
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at
```

```
*
```

```
* http://www.apache.org/licenses/LICENSE-2.0
```

```
*
```

```
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
```

```
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
```

```
*/
```

Found in path(s):

```
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/primitives/Platform.java
```

No license file was found, but licenses were detected in source scan.

```
/*
```

```
* Copyright (C) 2011 The Guava Authors
```

```
*
```

* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/GwtTransient.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2007 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License

* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under

* the License.

*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/eventbus/Subscribe.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/MultiInputStream.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Objects.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/FinalizableSoftReference.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/LineReader.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Charsets.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/FinalizableWeakReference.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/LineBuffer.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Predicate.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/ExecutionList.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/ByteStreams.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Function.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/Files.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/eventbus/AsyncEventBus.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/AbstractIterator.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/eventbus/DeadEvent.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/eventbus/package-info.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/FinalizablePhantomReference.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/FinalizableReferenceQueue.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/Interners.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Predicates.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/CountingInputStream.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/CharStreams.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Suppliers.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/ListenableFuture.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Supplier.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/Primitives.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/AbstractFuture.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/eventbus/EventBus.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/CountingOutputStream.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/Closeables.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Defaults.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/Flushables.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Throwables.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/HashBiMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/eventbus/AllowConcurrentEvents.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/LittleEndianDataInputStream.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Functions.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/Resources.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/FinalizableReference.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/package-info.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/EnumMultiset.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/package-info.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/package-info.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Preconditions.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/LittleEndianDataOutputStream.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/DirectExecutor.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2017 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ObjectCountLinkedHashMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/ClosingFuture.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/AbstractBaseGraph.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/Traverser.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/BaseGraph.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ObjectCountHashMap.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2012 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/html/package-info.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/BaseEncoding.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/ByteSink.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/StandardSystemProperty.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/reflect/ImmutableTypeToInstanceMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/CartesianList.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/ServiceManager.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-

jar/com/google/common/collect/ImmutableRangeMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/math/PairedStatsAccumulator.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/hash/AbstractByteHasher.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/io/Closer.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/math/PairedStats.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/hash/SipHashFunction.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/hash/LongAddable.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/xml/package-info.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/reflect/ClassPath.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/io/CharSink.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/reflect/package-info.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/hash/ChecksumHashFunction.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/reflect/TypeCapture.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/escape/package-info.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/FilteredKeyMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/io/FileWriteMode.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/reflect/Invokable.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ImmutableRangeSet.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/cache/LongAddable.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/io/CharSource.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/reflect/MutableTypeToInstanceMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/reflect/TypeToInstanceMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/math/LinearTransformation.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/ListenableScheduledFuture.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-

jar/com/google/common/util/concurrent/SmoothRateLimiter.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/RateLimiter.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/hash/LongAddables.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/io/ByteSource.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/math/StatsAccumulator.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/math/Stats.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/cache/LongAddables.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/reflect/Parameter.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/reflect/AbstractInvocationHandler.java
No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2007 The Guava Authors
 *
 * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
 * in compliance with the License. You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software distributed under the License
 * is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
 * express
 * or implied. See the License for the specific language governing permissions and limitations under
 * the License.
 */
/*
 * This following method is a modified version of one found in
 * http://gee.cs.oswego.edu/cgi-bin/viewcvs.cgi/jsr166/src/test/tck/AbstractExecutorServiceTest.java?revision=1.30
 * which contained the following notice:
 *
 * Written by Doug Lea with assistance from members of JCP JSR-166 Expert Group and released to
 * the public domain, as explained at http://creativecommons.org/publicdomain/zero/1.0/
 *
 * Other contributors include Andrew Wright, Jeffrey Hayes, Pat Fisher, Mike Judd.
 */
```

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/MoreExecutors.java

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2019 The Guava Authors
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

```
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/graph/IncidentEdgeSet.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/CompactHashing.java
```

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2009 The Guava Authors
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

```
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ImmutableSortedMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ArrayTable.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ImmutableSetMultimap.java
```

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/RegularImmutableSortedSet.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ImmutableTable.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ComputationException.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/AbstractIndexedListIterator.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/EmptyImmutableSetMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ImmutableClassToInstanceMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ImmutableEnumSet.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ComparisonChain.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ImmutableAsList.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/SingletonImmutableTable.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/RegularImmutableList.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/DiscreteDomain.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ImmutableSortedSetFauxverideShim.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ForwardingTable.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2008 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/Floats.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/SequentialExecutor.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/Shorts.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/Ints.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/net/InetAddresses.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/Longs.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/MultiReader.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/escape/UnicodeEscaper.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/Doubles.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/ListenableFutureTask.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/Chars.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/net/PercentEscaper.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/internal/Finalizer.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/CharMatcher.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/thirdparty/publicsuffix/TrieParser.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Joiner.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/escape/Escaper.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Converter.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/Booleans.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Stopwatch.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/FluentIterable.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/Bytes.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/FileBackedOutputStream.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2009 The Guava Authors

```

*
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.
*/
/**
* Outer class that exists solely to let us write {@code Partially.GwtIncompatible} instead of plain
* {@code GwtIncompatible}. This is more accurate for {@link Futures#catching}, which is available
* under GWT but with a slightly different signature.
*
* <p>We can't use {@code PartiallyGwtIncompatible} because then the GWT compiler wouldn't recognize
* it as a {@code GwtIncompatible} annotation. And for {@code Futures.catching}, we need the GWT
* compiler to autostrip the normal server method in order to expose the special, inherited GWT
* version.
*/

```

Found in path(s):

```

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/Partially.java

```

No license file was found, but licenses were detected in source scan.

```

/*
* Copyright (C) 2007 The Guava Authors
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

```

Found in path(s):

```

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ForwardingMapEntry.java

```

```

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-

```


jar/com/google/common/collect/ExplicitOrdering.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/Multiset.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/LexicographicalOrdering.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/AbstractIterator.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/AbstractSortedSetMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/UsingToStringOrdering.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/RegularImmutableSet.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ForwardingObject.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ForwardingQueue.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/EnumBiMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/EnumHashBiMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ConcurrentHashMultiset.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/NullsFirstOrdering.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ImmutableList.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/HashMultiset.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/Multimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/CompoundOrdering.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/AbstractSetMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/AbstractMapBasedMultiset.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ByFunctionOrdering.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/SortedSetMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ForwardingList.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ForwardingMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/HashMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-

jar/com/google/common/collect/ForwardingSet.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/AbstractMapEntry.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/package-info.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/AbstractMultiset.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/Lists.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ForwardingListIterator.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/LinkedListMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/NaturalOrdering.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ForwardingMultiset.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/AbstractBiMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/LinkedHashMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ForwardingMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ReverseNaturalOrdering.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/AbstractListMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ForwardingSortedMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/SetMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/Multisets.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/SingletonImmutableSet.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/MutableClassToInstanceMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/MapDifference.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/NullsLastOrdering.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/Ordering.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ImmutableSet.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/TreeMultiset.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-

jar/com/google/common/collect/Sets.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ForwardingCollection.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/Synchronized.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ListMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ReverseOrdering.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/AbstractMapBasedMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/Multimaps.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ArrayListMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ForwardingSortedSet.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ForwardingConcurrentMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/TreeMultimap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ForwardingIterator.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ClassToInstanceMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/Iterators.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/Maps.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ComparatorOrdering.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/LinkedHashMultiset.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/Interner.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/BiMap.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/Iterables.java
No license file was found, but licenses were detected in source scan.

/*
* Copyright (C) 2020 The Guava Authors
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*

* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/ServiceManagerBridge.java
No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2011 The Guava Authors.

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/hash/package-info.java
No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2009 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express
* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

Found in path(s):

- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/escape/ArrayBasedUnicodeEscaper.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/MapMakerInternalMap.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/AbstractExecutionThreadService.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/net/HostSpecifier.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/reflect/TypeResolver.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Platform.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/annotations/GwtIncompatible.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/annotations/GwtCompatible.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/AbstractIdleService.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/cache/ReferenceEntry.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/UnsignedBytes.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/ForwardingFuture.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/escape/ArrayBasedCharEscaper.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/ByteProcessor.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/html/HtmlEscapers.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/net/UrlEscapers.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/Cut.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/Callables.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/net/InternetDomainName.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/ByteArrayDataInput.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/escape/ArrayBasedEscaperMap.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/RegularImmutableTable.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/MapMaker.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/ForwardingFluentFuture.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/JdkFutureAdapters.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/ForwardingListenableFuture.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/escape/Escapers.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/DenseImmutableTable.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/cache/CacheBuilder.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/ByteArrayDataOutput.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/SettableFuture.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/Service.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/escape/Platform.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/AbstractService.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/cache/LocalCache.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/LineProcessor.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/xml/XmlEscapers.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/SparseImmutableTable.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/Splitter.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/SignedBytes.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2012 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License

* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under

* the License.

*/

/*

* This method was rewritten in Java from an intermediate step of the Murmur hash function in
* <http://code.google.com/p/smhasher/source/browse/trunk/MurmurHash3.cpp>, which contained the
* following header:

*

* MurmurHash3 was written by Austin Appleby, and is placed in the public domain. The author
* hereby disclaims copyright to this source code.

*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/base/SmallCharMatcher.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2016 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
express

* or implied. See the License for the specific language governing permissions and limitations under
* the License.

*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/base/PatternCompiler.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/base/CommonPattern.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/base/JdkPattern.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/base/CommonMatcher.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2011 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
* in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software distributed under the
* License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND,
either
* express or implied. See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/SortedIterables.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ImmutableSortedMultiset.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/Count.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/RangeSet.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ForwardingSortedMultiset.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ImmutableSortedMultisetFauxverideShim.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/GeneralRange.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/SortedIterable.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/RegularImmutableSortedMultiset.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/AbstractRangeSet.java

No license file was found, but licenses were detected in source scan.

/*
* Copyright (C) 2021 The Guava Authors
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/ParametricNullness.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/ParametricNullness.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/math/ParametricNullness.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/net/ElementTypesAreNonnullByDefault.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/html/ElementTypesAreNonnullByDefault.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/ParametricNullness.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/cache/ParametricNullness.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/eventbus/ElementTypesAreNonnullByDefault.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/reflect/ParametricNullness.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/escape/ParametricNullness.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/hash/ElementTypesAreNonnullByDefault.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/escape/ElementTypesAreNonnullByDefault.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/xml/ParametricNullness.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/html/ParametricNullness.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/net/ParametricNullness.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/xml/ElementTypesAreNonnullByDefault.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/math/ElementTypesAreNonnullByDefault.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/ParametricNullness.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/io/ParametricNullness.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/ElementTypesAreNonnullByDefault.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/graph/ElementTypesAreNonnullByDefault.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/ParametricNullness.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/eventbus/ParametricNullness.java
- * /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-

jar/com/google/common/util/concurrent/ElementTypesAreNonnullByDefault.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/graph/ParametricNullness.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/reflect/ElementTypesAreNonnullByDefault.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/collect/ElementTypesAreNonnullByDefault.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/io/ElementTypesAreNonnullByDefault.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/base/ElementTypesAreNonnullByDefault.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/cache/ElementTypesAreNonnullByDefault.java
No license file was found, but licenses were detected in source scan.

```
/*  
* Copyright (C) 2006 The Guava Authors  
*  
* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except  
* in compliance with the License. You may obtain a copy of the License at  
*  
* http://www.apache.org/licenses/LICENSE-2.0  
*  
* Unless required by applicable law or agreed to in writing, software distributed under the License  
* is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either  
* express  
* or implied. See the License for the specific language governing permissions and limitations under  
* the License.  
*/
```

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/FuturesGetChecked.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/TimeoutFuture.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/FluentFuture.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/escape/CharEscaper.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/UncheckedTimeoutException.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/GwtFuturesCatchingSpecialization.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/AbstractTransformFuture.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/SimpleTimeLimiter.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-

jar/com/google/common/io/PatternFilenameFilter.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/CollectionFuture.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/ImmediateFuture.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/reflect/TypeToken.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/annotations/VisibleForTesting.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/Futures.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/AbstractCatchingFuture.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/base/CaseFormat.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/io/AppendableWriter.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/GwtFluentFutureCatchingSpecialization.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/TimeLimiter.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/FakeTimeLimiter.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/escape/CharEscaperBuilder.java
* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-
jar/com/google/common/util/concurrent/AggregateFuture.java
No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2020 The Guava Authors
 *
 * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except
 * in compliance with the License. You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software distributed under the License
 * is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either
 * express
 * or implied. See the License for the specific language governing permissions and limitations under
 * the License.
 */
/**
 * Holder for web specializations of methods of { @code Doubles}. Intended to be empty for regular
 * version.
 */
```

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/primitives/DoublesMethodsForWeb.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2021 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express

* or implied. See the License for the specific language governing permissions and limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/util/concurrent/NullnessCasts.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/base/NullnessCasts.java

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/NullnessCasts.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2008 The Guava Authors

*

* Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and limitations under the License.

*/

/*

* This method was rewritten in Java from an intermediate step of the Murmur hash function in

* <http://code.google.com/p/smhasher/source/browse/trunk/MurmurHash3.cpp>, which contained the

* following header:

*
* MurmurHash3 was written by Austin Appleby, and is placed in the public domain. The author
* hereby disclaims copyright to this source code.
*/

Found in path(s):

* /opt/cola/permits/1312950193_1650560245.64/0/guava-31-0-1-android-sources-1-jar/com/google/common/collect/Hashing.java

1.24 commons-fileupload 1.5

1.24.1 Available under license :

Apache Commons FileUpload
Copyright 2002-2023 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work,

where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or

for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason

of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

1.25 log4j-jcl 2.17.1

1.25.1 Available under license :

Apache Log4j Commons Logging Bridge
Copyright 1999-1969 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems,

and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:
 - (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
 - (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
 - (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and

(d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. **Submission of Contributions.** Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. **Trademarks.** This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. **Disclaimer of Warranty.** Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and

limitations under the License.

1.26 boost 1.75.0

1.26.1 Available under license :

This program, "bzip2", the associated library "libbzip2", and all documentation, are copyright (C) 1996-2019 Julian R Seward. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
3. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
4. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Julian Seward, jseward@acm.org
bzip2/libbzip2 version 1.0.8 of 13 July 2019

////

Copyright 2018 Peter Dimov

Distributed under the Boost Software License, Version 1.0.

See accompanying file LICENSE_1_0.txt or copy at

http://www.boost.org/LICENSE_1_0.txt

////

[#copyright]

Copyright and License

:idprefix:

This documentation is

* Copyright 2003-2017 Beman Dawes

* Copyright 2018 Peter Dimov

and is distributed under the http://www.boost.org/LICENSE_1_0.txt[Boost Software License, Version 1.0].

The MIT License (MIT)

Copyright (c) 2014 fqiang

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

////

Copyright 2018, 2019 Peter Dimov

Distributed under the Boost Software License, Version 1.0.

See accompanying file LICENSE_1_0.txt or copy at

http://www.boost.org/LICENSE_1_0.txt

////

[#copyright]

Copyright and License

:idprefix:

This documentation is copyright 2018, 2019 Peter Dimov and is distributed under the http://www.boost.org/LICENSE_1_0.txt[Boost Software License, Version 1.0].
Boost Software License - Version 1.0 - August 17th, 2003

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Software License, Version 1.0

Copyright 2002-2003, Trustees of Indiana University.

Copyright 2000-2001, University of Notre Dame.

All rights reserved.

Indiana University has the exclusive rights to license this product under the following license.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* All redistributions of source code must retain the above copyright notice, the list of authors in the original source code, this list of conditions and the disclaimer listed in this license;

* All redistributions in binary form must reproduce the above copyright notice, this list of conditions and the disclaimer listed in this license

in the documentation and/or other materials provided with the distribution;

* Any documentation included with all redistributions must include the following acknowledgement:

"This product includes software developed at the University of Notre Dame and the Pervasive Technology Labs at Indiana University. For technical information contact Andrew Lumsdaine at the Pervasive Technology Labs at Indiana University. For administrative and license questions contact the Advanced Research and Technology Institute at 351 West 10th Street. Indianapolis, Indiana 46202, phone 317-278-4100, fax 317-274-5902."

Alternatively, this acknowledgement may appear in the software itself, and wherever such third-party acknowledgments normally appear.

* The name Indiana University, the University of Notre Dame or "Caramel" shall not be used to endorse or promote products derived from this software without prior written permission from Indiana University. For written permission, please contact Indiana University Advanced Research & Technology Institute.

* Products derived from this software may not be called "Caramel", nor may Indiana University, the University of Notre Dame or "Caramel" appear in their name, without prior written permission of Indiana University Advanced Research & Technology Institute.

Indiana University provides no reassurances that the source code provided does not infringe the patent or any other intellectual property rights of any other entity. Indiana University disclaims any liability to any recipient for claims brought by any other entity based on infringement of intellectual property rights or otherwise.

LICENSEE UNDERSTANDS THAT SOFTWARE IS PROVIDED "AS IS" FOR WHICH NO WARRANTIES AS TO CAPABILITIES OR ACCURACY ARE MADE. INDIANA UNIVERSITY GIVES NO WARRANTIES AND MAKES NO REPRESENTATION THAT SOFTWARE IS FREE OF INFRINGEMENT OF THIRD PARTY PATENT, COPYRIGHT, OR OTHER PROPRIETARY RIGHTS. INDIANA UNIVERSITY MAKES NO WARRANTIES THAT SOFTWARE IS FREE FROM "BUGS", "VIRUSES", "TROJAN HORSES", "TRAP DOORS", "WORMS", OR OTHER HARMFUL CODE. LICENSEE ASSUMES THE ENTIRE RISK AS TO THE PERFORMANCE OF SOFTWARE AND/OR ASSOCIATED MATERIALS, AND TO THE PERFORMANCE AND VALIDITY OF INFORMATION GENERATED USING SOFTWARE.

The following people hereby grant permission to replace all existing licenses on their contributions to Boost with the Boost Software License, Version 1.0. (boostinspect:nolicense boostinspect:nocopyright)

Aleksey Gurtovoy (agurtovoy@meta-comm.com)

Andrei Alexandrescu (andrewalex - at - hotmail.com) (See Boost list message of August 12, 2004 11:06:58 AM EST)

Andrew Lumsdaine ()

Anthony Williams (anthony -at- justsoftwaresolutions.co.uk)
Beman Dawes (bdawes@acm.org)
Brad King (brad.king -at- kitware.com) (See Boost list message of Wed, 21 Jul 2004 11:15:46 -0400)
Brian Osman (osman -at- vvisions.com) (See CVS log)
Bruce Barr (schmoost -at- yahoo.com) (See Boost list of Mon, 16 Aug 2004 15:06:43 -0500)
Bruno da Silva de Oliveira (bruno - at - esss.com.br)
Christain Engstrom (christian.engstrom -at- glindra.org) (See Boost list message of Mon, 30 Aug 2004 14:31:49 +0200)
Cromwell D Enage (sponage -at- yahoo.com) (See Boost list message of August 12, 2004 11:49:13 AM EST)
Dan Gohman (djg -at- cray.com) (See Boost list message of Sat, 21 Aug 2004 10:54:59 +0100)
Dan Nuffer (dan -at- nuffer.name)
Daniel Frey (d.frey -at- gmx.de, daniel.frey -at- aixigo.de)
Daniel Nuffer (dan -at- nuffer.name)
Darin Adler (darin -at- bentspoon.com) (Email to Andreas Huber, see change log)
Daryle Walker (darylew - at - hotmail.com)
Dave Abrahams (dave@boost-consulting.com)
Dave Moore (dmoore -at- viefinancial.com) (See Boost list message of 18 Dec 2003 15:35:50 -0500)
David Abrahams (dave@boost-consulting.com)
Dietmar Kuehl (dietmar_kuehl -at- yahoo.com) (Email to Andreas Huber, see change log)
Douglas Gregor (gregod -at- cs.rpi.edu, dgregor -at- cs.indiana.edu, doug.gregor -at- gmail.com)
Dr John Maddock (john - at - johnmaddock.co.uk)
Edward D. Brey (brey -at- ductape.net) (Email to Andreas Huber, see change log)
Eric Ford (un5o6n902 -at- sneakemail.com) (See Boost list message of Sun, 15 Aug 2004 10:29:13 +0100)
Eric Friedman (ebf@users.sourceforge.net)
Eric Niebler (eric@boost-consulting.com)
Fernando Cacciola (fernando_cacciola@ciudad.com.ar)
Fernando Luis Cacciola Carballal (fernando_cacciola@ciudad.com.ar)
Francois Faure (Francois.Faure -at- imag.fr) (See CVS log)
Gary Powell (powellg - at - amazon.com) (See Boost list message of 10 Feb 2004 14:22:46 -0800)
Gennadiy Rozental (rogeeff -at- mail.com) (Email to Andreas Huber, see change log)
Gottfried Ganssaue (Gottfried.Ganssaue -at- HAUFE.DE) (See Boost List message of Mon, 16 Aug 2004 10:09:19 +0200)
Gottfried Ganaue (Gottfried.Ganssaue -at- HAUFE.DE) (Alternative spelling of Gottfried Ganssaue)
Greg Colvin (gregory.colvin -at- oracle.com) (See Boost list message of Sat, 14 Aug 2004 10:57:00 +0100)
Gregory Colvin (gregory.colvin -at- oracle.com) (See Boost list message of Sat, 14 Aug 2004 10:57:00 +0100)
Gunter Winkler (gunter.winkler -at- unibw-muenchen.de) (See Boost List message of Mon, 16 Aug 2004 10:24:17 +0200)
Hartmut Kaiser (hartmut.kaiser -at- gmail.com)
Herve Bronnimann (hbr -at- poly.edu)
Herv Brnnimann (hbr -at- poly.edu)
Housemarque Oy (Ilari Kuittinen ilari.kuittinen -at- housemarque.fi)
Howard Hinnant (hinnant -at- twcnv.rr.com) (See Boost list message of July 25, 2004 3:44:49 PM EST)
Hubert Holin (hubert_holin -at- users.sourceforge.net)
Indiana University ()
Itay Maman (imaman -at- users.sourceforge.net)
Jaakko Jrv (jajarvi -at- osl.iu.edu)
Jaap Suter (j.suter -at- student.utwente.nl) (See Boost list message of Thu, 16 Sep 2004 09:32:43 -0700)
Jeff Garland (jeff - at - crystalclearsoftware.com) (see Boost list post of July 25, 2004 19:31:09 -0700)

Jens Maurer (Jens.Maurer@gmx.net)
Jeremy G Siek (jsiek@osl.iu.edu)
Jeremy Siek (jsiek@osl.iu.edu)
Joel de Guzman (joel -at- boost-consulting.com) (See Boost list message of July 25, 2004 8:32:00 PM EST)
John Bandela (jbandela-at-ufl.edu)
John Maddock (john - at - johnmaddock.co.uk)
John R Bandela (jbandela-at-ufl.edu)
Jonathan Turkanis (turkanis -at- coderage dot com)
Juergen Hunold (hunold -at- ive.uni-hannover.de) (See Boost List Message of Fri, 13 Aug 2004 19:39:55 +0200)
Kevlin Henney (kevin -at- curbralan.com) (See Boost list message of Wed, 15 Sep 2004 18:15:17 +0200)
Kresimir Fresl (fresl -at- master.grad.hr) (See Boost List message of August 16, 2004 8:23:35 AM EST)
Lars Gullik Bijnnes (larsbj -at- lyx.org) (See Boost list message of Tue, 17 Aug 2004 15:49:02 +0100)
Lie-Quan Lee (liequan - at - slac.stanford.edu, llee - at - cs.indiana.edu)
Maarten Keijzer (mkeijzer -at- cs.vu.nl) (See Boost list message of Wed, 18 Aug 2004 21:43:18 +0100)
Mac Murrett (mmurrett -at- mac.com)
Marc Wintermantel (wintermantel -at- imes.mavt.ethz.ch, wintermantel -at- even-ag.ch) (See CVS log)
Michael Glassford (glassfordm - at - hotmail.com)
Michael Stevens (Michael.Stevens - at - epost.de)
Multi Media Ltd. (pdimov@mmltd.net)
Nicolai M Josuttis (solutions -at- josuttis.com) (See Boost list message of Mon, 30 Aug 2004 10:52:00 +0100)
Nikolay Mladenov (nickm -at- sitius.com) (See Boost list message of Tue, 17 Aug 2004 15:45:33 +0100)
Paul Mensonides (pmenso57 -at- comcast.net) (See Boost list message of July 21, 2004 1:12:21 AM EST)
Pavol Droba (droba -at- topmail.sk)
Peter Dimov (pdimov@mmltd.net)
R W Grosse-Kunstleve (RWGrosse-Kunstleve@lbl.gov)
Ralf W. Grosse-Kunstleve (RWGrosse-Kunstleve@lbl.gov)
Rational Discovery LLC (Greg Landrum Landrum -at- RationalDiscovery.com) (See Boost list post of Tue, 17 Aug 2004 10:35:36 +0100)
Rene Rivera (grafik/redshift-software.com, rrivera/acm.org)
Robert Ramey (ramey@www.rrsd.com)
Roland Richter (roland -at- flll.jku.at) (See Boost list post of Mon, 16 Aug 2004 22:16:55 +0200)
Roland Schwarz (roland.schwarz -at- chello.at)
Ronald Garcia (garcia -at- cs.indiana.edu) (Email to Andreas Huber, see change log)
Samuel Krempp (krempp -at- crans.ens-cachan.fr) (See Boost list message of Mon, 27 Sep 2004 13:18:36 +0200)
Stefan Seefeld (seefeld -at- sympatico.ca)
Stephen Cleary (scleary -at- jerviswebb.com) (See Boost list message of Tue, 28 Sep 2004 13:11:46 +0100)
Steve Cleary (Variant of Stephen Cleary)
Sylvain Pion (Sylvain.Pion - at - sophia.inria.fr)
The Trustees of Indiana University ()
Thomas Witt (witt - at - ive.uni-hannover.de, witt - at - acm.org, witt - at - styleadvisor.com)
Thorsten Jrgen Ottosen (nesotto - at - cs.auc.dk)
Thorsten Ottosen (nesotto - at - cs.auc.dk)
Toon Knapen (toon dot knapen - at - fft.be)
Trustees of Indiana University ()
University of Notre Dame ()
Vladimir Prus (ghost@cs.msu.su)
William E. Kempf () (email to Beman Dawes, 9/14/2006 4:18 PM)
Joerg Walter (jhr.walter - at - t-online.de : email to ublas mailing list Mon, 17 Sep 2007 10:17:08 +0200)

--- end ---

////

Copyright 2017 Peter Dimov

Distributed under the Boost Software License, Version 1.0.

See accompanying file LICENSE_1_0.txt or copy at

http://www.boost.org/LICENSE_1_0.txt

////

[#mpl]

MPL Support, <boost/mp11/mpl.hpp>

:toc:

:toc-title:

:idprefix:

The header `<boost/mp11/mpl.hpp>`, when included, defines the necessary support infrastructure for `mp_list` and `std::tuple` to be valid link:../../../../libs/mpl[MPL] sequences.

NOTE: `mpl.hpp` is not included by `<boost/mp11.hpp>`.

It's also possible to only enable support for `mp_list` by including `<boost/mp11/mpl_list.hpp>`, and for `std::tuple` by including `<boost/mp11/mpl_tuple.hpp>`. This may be required because some libraries, such as Boost.Fusion, contain their own MPL support for `std::tuple`, which conflicts with Mp11's one.

<!DOCTYPE html>

<html>

<head></head>

<body>

<h3>

Copyright Test

</h3>

<p class="copyright">

1963, 1964, 1965 Jane Doe

</p>

<p class="copyright">

2018 Joe Blow, John Coe

</p>

<p class="copyright">

1977, 1985 Someone else

</p>

</body>

</html>

<!-- Copyright 2018 Paul Fultz II
Distributed under the Boost Software License, Version 1.0.
(http://www.boost.org/LICENSE_1_0.txt)
-->

License
=====

Boost Software License - Version 1.0 - August 17th, 2003

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER Use of this software is granted under one of the following two licenses, to be chosen freely by the user.

1. Boost Software License - Version 1.0 - August 17th, 2003

=====

Copyright (c) 2006, 2007 Marcin Kalicinski

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and

all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

2. The MIT License

Copyright (c) 2006, 2007 Marcin Kalicinski

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Copyright (c) 2007-2011 Barend Gehrels, Amsterdam, the Netherlands.

Copyright (c) 2008-2011 Bruno Lalande, Paris, France.

Copyright (c) 2009-2011 Mateusz Loskot, London, UK.

Use, modification and distribution is subject to the Boost Software License, Version 1.0. (See accompanying file LICENSE_1_0.txt or copy at http://www.boost.org/LICENSE_1_0.txt)

The default copyright note for C++ source files reads:

```
// Boost.Geometry (aka GGL, Generic Geometry Library)
```

```
// Copyright (c) 2007-2011 Barend Gehrels, Amsterdam, the Netherlands.
// Copyright (c) 2008-2011 Bruno Lalande, Paris, France.
// Copyright (c) 2009-2011 Mateusz Loskot, London, UK.

// Parts of Boost.Geometry are redesigned from Geodan's Geographic Library
// (geolib/GGL), copyright (c) 1995-2010 Geodan, Amsterdam, the Netherlands.

// Use, modification and distribution is subject to the Boost Software License,
// Version 1.0. (See accompanying file LICENSE_1_0.txt or copy at
// http://www.boost.org/LICENSE_1_0.txt)
```

Exceptions:

- 1) Major work of any author -> might change order, change date
- 2) Exclusive work of one author including design -> might take sole copyright

Examples:

- adapted geometry types e.g. array, Boost.Polygon
 - implemented file-format e.g. WKB
 - implemented specific strategy or algorithm e.g. intersections
- 3) Examples -> might take sole copyright
 - 4) Tests -> might take sole copyright
 - 5) Docs -> might take sole copyright
 - 6) Utilities e.g. converters -> might take sole copyright

The copyright note for other (source) files as .py, Jamfiles, etc is similar and comments are changed accordingly.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE article PUBLIC "-//Boost//DTD BoostBook XML V1.0//EN"
"http://www.boost.org/tools/boostbook/dtd/boostbook.dtd">
<article id="copyright_test" last-revision="DEBUG MODE Date: 2000/12/20 12:00:00 $"
xmlns:xi="http://www.w3.org/2001/XInclude">
<title>Copyright Test</title>
<articleinfo>
<copyright>
<year>1963</year> <year>1964</year> <year>1965</year> <holder>Jane Doe</holder>
</copyright>
<copyright>
<year>2018</year> <holder>Joe Blow, John Coe</holder>
</copyright>
<copyright>
<year>1977</year> <year>1985</year> <holder>Someone else</holder>
</copyright>
</articleinfo>
</article>
```

Copyright Louis Dionne 2013-2017

Boost Software License - Version 1.0 - August 17th, 2003

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

This package was debianized by Vladimir Prus <ghost@cs.msu.su> on Wed, 17 July 2002, 19:27:00 +0400.

Copyright:

```
/+\n+\ Copyright 1993-2002 Christopher Seiwald and Perforce Software, Inc.\n\+/
```

This is Release 2.4 of Jam/MR, a make-like program.

License is hereby granted to use this software and distribute it freely, as long as this copyright notice is retained and modifications are clearly marked.

ALL WARRANTIES ARE HEREBY DISCLAIMED.

Some portions are also:

Copyright 2001-2006 David Abrahams.

Copyright 2002-2006 Rene Rivera.

Copyright 2003-2006 Vladimir Prus.

Distributed under the Boost Software License, Version 1.0.

(See accompanying file LICENSE_1_0.txt or http://www.boost.org/LICENSE_1_0.txt)

http_parser.c is based on src/http/nginx_http_parse.c from NGINX copyright Igor Sysoev.

Additional changes are licensed under the same terms as NGINX and copyright Joyent, Inc. and other Node contributors. All rights reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Copyright 2015-2016 Barrett Adair

Boost Software License - Version 1.0 - August 17th, 2003

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Parts of the navigation implementation were borrowed from the docdock theme, and thus they are copyright as follows:

The MIT License (MIT)

Copyright (c) 2014 Grav
Copyright (c) 2016 MATHIEU CORNIC
Copyright (c) 2017 Valere JEANTET

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER

IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.
Copyright Paul Fultz II 2016-2018

Boost Software License - Version 1.0 - August 17th, 2003

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Boost Software License - Version 1.0 - August 17th, 2003

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE,

ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

1.27 okio 2.9.0

1.27.1 Available under license :

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2020 Square, Inc. and others.

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/internal/HashFunction.kt

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/CipherSource.kt

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/CipherSink.kt

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/commonMain/okio/internal/HashFunction.kt

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2018 Square, Inc.

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/commonMain/okio/PeekSource.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/Throttler.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/-DeprecatedUtf8.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/-DeprecatedOkio.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/-DeprecatedUpgrade.kt

No license file was found, but licenses were detected in source scan.

/*

* Copyright 2014 Square Inc.
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/ByteString.kt
No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2017 Square, Inc.
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/commonMain/okio/Utf8.kt
No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2019 Square, Inc.

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/commonMain/okio/internal/RealBufferedSink.kt

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/commonMain/okio/internal/SegmentedByteString.kt

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/commonMain/okio/internal/RealBufferedSource.kt

No license file was found, but licenses were detected in source scan.

/*

* Licensed to the Apache Software Foundation (ASF) under one or more

* contributor license agreements. See the NOTICE file distributed with

* this work for additional information regarding copyright ownership.

* The ASF licenses this file to You under the Apache License, Version 2.0

* (the "License"); you may not use this file except in compliance with

* the License. You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/commonMain/okio/-Base64.kt

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2019 Square, Inc.

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-

jar/commonMain/okio/internal/Buffer.kt

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-

jar/commonMain/okio/RealBufferedSource.kt

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/commonMain/okio/Buffer.kt

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-

jar/commonMain/okio/BufferedSource.kt

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/commonMain/okio/Source.kt

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/commonMain/okio/Timeout.kt

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/commonMain/okio/Sink.kt

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/commonMain/okio/Okio.kt

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-

jar/commonMain/okio/BufferedSink.kt

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-

jar/commonMain/okio/RealBufferedSink.kt

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2015 Square, Inc.

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/SegmentedByteString.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/commonMain/okio/SegmentedByteString.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/ForwardingTimeout.kt

No license file was found, but licenses were detected in source scan.

/*

* Copyright (C) 2014 Square, Inc.

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/Buffer.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/BufferedSource.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/AsyncTimeout.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/Source.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/Sink.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/commonMain/okio/SegmentPool.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/Timeout.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/JvmOkio.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/ForwardingSource.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/GzipSink.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/ForwardingSink.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/GzipSource.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/RealBufferedSource.kt

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/DeflaterSink.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/commonMain/okio/Segment.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/BufferedSink.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/SegmentPool.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/RealBufferedSink.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/InflaterSource.kt
No license file was found, but licenses were detected in source scan.

/*
* Copyright (C) 2018 Square, Inc.
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/commonMain/okio/-Platform.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/commonMain/okio/internal/ByteString.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/commonMain/okio/ByteString.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/-Platform.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/commonMain/okio/-Util.kt
* /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/commonMain/okio/internal/-Utf8.kt
No license file was found, but licenses were detected in source scan.

/*
* Copyright (C) 2016 Square, Inc.
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

- * See the License for the specific language governing permissions and
- * limitations under the License.
- */

Found in path(s):

- * /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/HashingSource.kt
- * /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/Pipe.kt
- * /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/jvmMain/okio/HashingSink.kt
- * /opt/cola/permits/1699230851_1685349853.3870554/0/okio-2-9-0-sources-1-jar/commonMain/okio/Options.kt

1.28 namespace 1.4.01

1.28.1 Available under license :

xml-commons/java/external/LICENSE.dom-software.txt \$Id: LICENSE.dom-software.txt 734314 2009-01-14 03:33:27Z mrglavas \$

This license came from: <http://www.w3.org/TR/2004/REC-DOM-Level-3-Core-20040407/java-binding.zip> (COPYRIGHT.html)

W3C SOFTWARE NOTICE AND LICENSE

Copyright 2004 World Wide Web Consortium, (Massachusetts Institute of Technology, European Research Consortium for Informatics and Mathematics, Keio University). All Rights Reserved.

The DOM bindings are published under the W3C Software Copyright Notice and License. The software license requires "Notice of any changes or modifications to the W3C files, including the date changes were made." Consequently, modified versions of the DOM bindings must document that they do not conform to the W3C standard; in the case of the IDL definitions, the pragma prefix can no longer be 'w3c.org'; in the case of the Java language binding, the package names can no longer be in the 'org.w3c' package.

Note: The original version of the W3C Software Copyright Notice and License could be found at <http://www.w3.org/Consortium/Legal/2002/copyright-software-20021231>

This work (and included software, documentation such as READMEs, or other related items) is being provided by the copyright holders under the following license. By obtaining, using and/or copying this work, you (the licensee) agree that you have read, understood, and will comply with the following terms and conditions.

Permission to copy, modify, and distribute this software and its documentation, with or without modification, for any purpose and without fee or royalty is hereby granted, provided that you include the following on ALL copies of the software and documentation or portions thereof, including modifications:

1. The full text of this NOTICE in a location viewable to users of the

redistributed or derivative work.

2. Any pre-existing intellectual property disclaimers, notices, or terms and conditions. If none exist, the W3C Software Short Notice should be included (hypertext is preferred, text is permitted) within the body of any redistributed or derivative code.
3. Notice of any changes or modifications to the files, including the date changes were made. (We recommend you provide URIs to the location from which the code is derived.)

THIS SOFTWARE AND DOCUMENTATION IS PROVIDED "AS IS," AND COPYRIGHT HOLDERS MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE OR DOCUMENTATION WILL NOT INFRINGE ANY THIRD PARTY PATENTS, COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS.

COPYRIGHT HOLDERS WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THE SOFTWARE OR DOCUMENTATION.

The name and trademarks of copyright holders may NOT be used in advertising or publicity pertaining to the software without specific, written prior permission. Title to copyright in this software and any associated documentation will at all times remain with copyright holders.

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of

this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only

on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

```
=====
== NOTICE file corresponding to section 4(d) of the Apache License, ==
== Version 2.0, in this case for the Apache xml-commons xml-apis ==
== distribution. ==
=====
```

Apache XML Commons XML APIs
Copyright 1999-2009 The Apache Software Foundation.

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

Portions of this software were originally based on the following:
- software copyright (c) 1999, IBM Corporation., <http://www.ibm.com>.
- software copyright (c) 1999, Sun Microsystems., <http://www.sun.com>.
- software copyright (c) 2000 World Wide Web Consortium, <http://www.w3.org>

This license came from: <http://www.w3.org/Consortium/Legal/copyright-documents-20021231>

W3C DOCUMENT LICENSE

<http://www.w3.org/Consortium/Legal/2002/copyright-documents-20021231>

Public documents on the W3C site are provided by the copyright holders under the following license. By using and/or copying this document, or the W3C document from which this statement is linked, you (the licensee) agree that you have read, understood, and will comply with the following terms and conditions:

Permission to copy, and distribute the contents of this document, or the W3C document from which this statement is linked, in any medium for any purpose and without fee or royalty is hereby granted, provided that you include the following on ALL copies of the document, or portions thereof, that you use:

1. A link or URL to the original W3C document.
2. The pre-existing copyright notice of the original author, or if it doesn't exist, a notice (hypertext is preferred, but a textual representation is permitted) of the form: "Copyright [date-of-document] World Wide Web Consortium, (Massachusetts Institute of Technology, European Research Consortium for Informatics and Mathematics, Keio University). All Rights Reserved.
<http://www.w3.org/Consortium/Legal/2002/copyright-documents-20021231>"
3. If it exists, the STATUS of the W3C document.

When space permits, inclusion of the full text of this NOTICE should be provided. We request that authorship attribution be provided in any software, documents, or other items or products that you create pursuant to the implementation of the contents of this document, or any portion thereof.

No right to create modifications or derivatives of W3C documents is granted pursuant to this license. However, if additional requirements (documented in the Copyright FAQ) are satisfied, the right to create modifications or derivatives is sometimes granted by the W3C to individuals complying with those requirements.

THIS DOCUMENT IS PROVIDED "AS IS," AND COPYRIGHT HOLDERS MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, OR TITLE; THAT THE CONTENTS OF THE DOCUMENT ARE SUITABLE FOR ANY PURPOSE; NOR THAT THE IMPLEMENTATION OF SUCH CONTENTS WILL NOT INFRINGE ANY THIRD PARTY PATENTS, COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS.

COPYRIGHT HOLDERS WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THE DOCUMENT OR THE PERFORMANCE OR IMPLEMENTATION OF THE CONTENTS THEREOF.

The name and trademarks of copyright holders may NOT be used in advertising or publicity pertaining to this document or its contents without specific, written prior permission. Title to copyright in this document will at all times remain with copyright holders.

This formulation of W3C's notice and license became active on December 31 2002. This version removes the copyright ownership notice such that this license can be used with materials other than those owned by the W3C, moves information on style sheets, DTDs, and schemas to the Copyright FAQ, reflects that ERCIM is now a host of the W3C, includes references to this specific dated version of the license, and removes the ambiguous grant of "use". See the older formulation for the policy prior to this date. Please see our Copyright FAQ for common questions about using materials from our site, such as the translating or annotating specifications. Other questions about this notice can be directed to site-policy@w3.org.

Joseph Reagle <site-policy@w3.org>

Last revised by Reagle \$Date: 2005-06-03 18:49:13 -0400 (Fri, 03 Jun 2005) \$
xml-commons/java/external/LICENSE.sax.txt \$Id: LICENSE.sax.txt 225954 2002-01-31 23:26:48Z curcuru \$

This license came from: <http://www.megginson.com/SAX/copying.html>
However please note future versions of SAX may be covered
under <http://saxproject.org/?selected=pd>

This page is now out of date -- see the new SAX site at
<http://www.saxproject.org/> for more up-to-date
releases and other information. Please change your bookmarks.

SAX2 is Free!

I hereby abandon any property rights to SAX 2.0 (the Simple API for XML), and release all of the SAX 2.0 source code, compiled code, and documentation contained in this distribution into the Public Domain. SAX comes with NO WARRANTY or guarantee of fitness for any purpose.

David Megginson, david@megginson.com

2000-05-05

1.29 apr 1.7.2

1.29.1 Available under license :

This package was debianized by Thom May <thom@debian.org> on
Wed, 17 Nov 2004 11:27:14 -0800

It was downloaded from <https://httpd.apache.org/download.cgi>

Upstream Authors: The Apache Software Foundation - <https://apr.apache.org/>

Copyright:

Licensed to the Apache Software Foundation (ASF) under one or more contributor
license agreements. The ASF licenses this work to You under the Apache License,
Version 2.0 (the "License"); you may not use this work except in compliance
with the License. You may obtain a copy of the License at

<https://www.apache.org/licenses/LICENSE-2.0>

On a Debian system, the license can be found at
</usr/share/common-licenses/Apache-2.0> .

APACHE PORTABLE RUNTIME SUBCOMPONENTS:

The Apache Portable Runtime includes a number of subcomponents with
separate copyright notices and license terms. Your use of the source
code for the these subcomponents is subject to the terms and
conditions of the following licenses.

From strings/apr_fnmatch.c, include/apr_fnmatch.h, misc/unix/getopt.c,
file_io/unix/mktemp.c, strings/apr_strings.c:

```
/*  
* Copyright (c) 1987, 1993, 1994  
* The Regents of the University of California. All rights reserved.  
*  
* Redistribution and use in source and binary forms, with or without  
* modification, are permitted provided that the following conditions  
* are met:  
* 1. Redistributions of source code must retain the above copyright  
* notice, this list of conditions and the following disclaimer.  
* 2. Redistributions in binary form must reproduce the above copyright  
* notice, this list of conditions and the following disclaimer in the  
* documentation and/or other materials provided with the distribution.
```

- * 3. All advertising materials mentioning features or use of this software
- * must display the following acknowledgement:
- * This product includes software developed by the University of
- * California, Berkeley and its contributors.
- * 4. Neither the name of the University nor the names of its contributors
- * may be used to endorse or promote products derived from this software
- * without specific prior written permission.
- *
- * THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS" AND
- * ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
- * IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
- * ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE
- * FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
- * DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS
- * OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)
- * HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
- * LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
- * OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
- * SUCH DAMAGE.

From network_io/unix/inet_ntop.c, network_io/unix/inet_pton.c:

- /* Copyright (c) 1996 by Internet Software Consortium.
- *
- * Permission to use, copy, modify, and distribute this software for any
- * purpose with or without fee is hereby granted, provided that the above
- * copyright notice and this permission notice appear in all copies.
- *
- * THE SOFTWARE IS PROVIDED "AS IS" AND INTERNET SOFTWARE CONSORTIUM DISCLAIMS
- * ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES
- * OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL INTERNET SOFTWARE
- * CONSORTIUM BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL
- * DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR
- * PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS
- * ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS
- * SOFTWARE.

From dso/aix/dso.c:

- * Based on libdl (dlfcn.c/dlfcn.h) which is
- * Copyright (c) 1992,1993,1995,1996,1997,1988
- * Jens-Uwe Mager, Helios Software GmbH, Hannover, Germany.
- *
- * Not derived from licensed software.
- *
- * Permission is granted to freely use, copy, modify, and redistribute
- * this software, provided that the author is not construed to be liable
- * for any results of using the software, alterations are clearly marked

* as such, and this notice is not modified.

From strings/apr_strnatcmp.c, include/apr_strings.h:

strnatcmp.c -- Perform 'natural order' comparisons of strings in C.
Copyright (C) 2000 by Martin Pool <mbp@humbug.org.au>

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

From test/CuTest.c, test/CuTest.h:

* Copyright (c) 2002-2006 Asim Jalis

*

* This library is released under the zlib/libpng license as described at

*

* <https://www.opensource.org/licenses/zlib-license.html>

*

* Here is the statement of the license:

*

* This software is provided 'as-is', without any express or implied warranty.

* In no event will the authors be held liable for any damages arising from

* the use of this software.

*

* Permission is granted to anyone to use this software for any purpose,

* including commercial applications, and to alter it and redistribute it

* freely, subject to the following restrictions:

*

* 1. The origin of this software must not be misrepresented; you must not

* claim that you wrote the original software. If you use this software in a

* product, an acknowledgment in the product documentation would be

* appreciated but is not required.

*

* 2. Altered source versions must be plainly marked as such, and must not be

- * misrepresented as being the original software.
- *
- * 3. This notice may not be removed or altered from any source distribution.

1.30 error_prone_annotations 2.10.0

1.30.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright 2016 The Error Prone Authors.
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

```
* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-
jar/com/google/errorprone/annotations/RestrictedApi.java
* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-
jar/com/google/errorprone/annotations/MustBeClosed.java
* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-
jar/com/google/errorprone/annotations/CompatibleWith.java
* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-
jar/com/google/errorprone/annotations/DoNotMock.java
* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-
jar/com/google/errorprone/annotations/FormatMethod.java
* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-
jar/com/google/errorprone/annotations/FormatString.java
```

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright 2021 The Error Prone Authors.
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *

```

* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-jar/com/google/errorprone/annotations/InlineMeValidationDisabled.java
* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-jar/com/google/errorprone/annotations/InlineMe.java
* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-jar/com/google/errorprone/annotations/Modifier.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright 2014 The Error Prone Authors.
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-jar/com/google/errorprone/annotations/concurrent/LockMethod.java
* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-jar/com/google/errorprone/annotations/concurrent/UnlockMethod.java
* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-jar/com/google/errorprone/annotations/NoAllocation.java

No license file was found, but licenses were detected in source scan.

Copyright 2015 The Error Prone Authors.

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE>

2.0

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Found in path(s):

* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-jar/META-INF/maven/com.google.errorprone/error_prone_annotations/pom.xml

No license file was found, but licenses were detected in source scan.

/*

* Copyright 2017 The Error Prone Authors.

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

Found in path(s):

* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-jar/com/google/errorprone/annotations/DoNotCall.java

* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-jar/com/google/errorprone/annotations/CheckReturnValue.java

* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-jar/com/google/errorprone/annotations/concurrent/GuardedBy.java

* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-jar/com/google/errorprone/annotations/OverridingMethodsMustInvokeSuper.java

No license file was found, but licenses were detected in source scan.

/*

* Copyright 2015 The Error Prone Authors.

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

```

*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

```

Found in path(s):

```

* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-
jar/com/google/errorprone/annotations/RequiredModifiers.java
* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-
jar/com/google/errorprone/annotations/CanIgnoreReturnValue.java
* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-
jar/com/google/errorprone/annotations/concurrent/LazyInit.java
* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-
jar/com/google/errorprone/annotations/Var.java
* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-
jar/com/google/errorprone/annotations/CompileTimeConstant.java
* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-
jar/com/google/errorprone/annotations/Immutable.java
* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-
jar/com/google/errorprone/annotations/IncompatibleModifiers.java
* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-
jar/com/google/errorprone/annotations/SuppressPackageLocation.java
* /opt/cola/permits/1287386049_1647249958.14/0/error-prone-annotations-2-10-0-sources-
jar/com/google/errorprone/annotations/ForOverride.java

```

1.31 commons-math 2.1

1.31.1 Available under license :

Apache Commons Math
 Copyright 2001-2010 The Apache Software Foundation

This product includes software developed by
 The Apache Software Foundation (<http://www.apache.org/>).

```

=====
The LinearConstraint, LinearObjectiveFunction, LinearOptimizer,
RelationShip, SimplexSolver and SimplexTableau classes in package
org.apache.commons.math.optimization.linear include software developed by
Benjamin McCann (http://www.benmccann.com) and distributed with
the following copyright: Copyright 2009 Google Inc.
=====

```


This product includes software developed by the University of Chicago, as Operator of Argonne National Laboratory.

The LevenbergMarquardtOptimizer class in package org.apache.commons.math.optimization.general includes software translated from the lmdcr, lmdcr and qrsolv Fortran routines from the Minpack package
Minpack Copyright Notice (1999) University of Chicago. All rights reserved

The GraggBulirschStoerIntegrator class in package org.apache.commons.math.ode.nonstiff includes software translated from the odex Fortran routine developed by E. Hairer and G. Wanner.
Original source copyright:
Copyright (c) 2004, Ernst Hairer

The EigenDecompositionImpl class in package org.apache.commons.math.linear includes software translated from some LAPACK Fortran routines. Original source copyright:
Copyright (c) 1992-2008 The University of Tennessee. All rights reserved.

The MersenneTwister class in package org.apache.commons.math.random includes software translated from the 2002-01-26 version of the Mersenne-Twister generator written in C by Makoto Matsumoto and Takuji Nishimura. Original source copyright:
Copyright (C) 1997 - 2002, Makoto Matsumoto and Takuji Nishimura,
All rights reserved

The complete text of licenses and disclaimers associated with the the original sources enumerated above at the time of code translation are in the LICENSE.txt file.

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:
 - (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
 - (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
 - (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
 - (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not

pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special,

incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

APACHE COMMONS MATH DERIVATIVE WORKS:

The Apache commons-math library includes a number of subcomponents whose implementation is derived from original sources written in C or Fortran. License terms of the original sources are reproduced below.

=====
For the lmdcr, lmpar and qrsolv Fortran routine from minpack and translated in the LevenbergMarquardtOptimizer class in package org.apache.commons.math.optimization.general
Original source copyright and license statement:

Minpack Copyright Notice (1999) University of Chicago. All rights reserved

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The end-user documentation included with the redistribution, if any, must include the following acknowledgment:

"This product includes software developed by the University of Chicago, as Operator of Argonne National Laboratory.

Alternately, this acknowledgment may appear in the software itself, if and wherever such third-party acknowledgments normally appear.

4. WARRANTY DISCLAIMER. THE SOFTWARE IS SUPPLIED "AS IS" WITHOUT WARRANTY OF ANY KIND. THE COPYRIGHT HOLDER, THE UNITED STATES, THE UNITED STATES DEPARTMENT OF ENERGY, AND THEIR EMPLOYEES: (1) DISCLAIM ANY WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE OR NON-INFRINGEMENT, (2) DO NOT ASSUME ANY LEGAL LIABILITY OR RESPONSIBILITY FOR THE ACCURACY, COMPLETENESS, OR USEFULNESS OF THE SOFTWARE, (3) DO NOT REPRESENT THAT USE OF THE SOFTWARE WOULD NOT INFRINGE PRIVATELY OWNED RIGHTS, (4)

DO NOT WARRANT THAT THE SOFTWARE WILL FUNCTION UNINTERRUPTED, THAT IT IS ERROR-FREE OR THAT ANY ERRORS WILL BE CORRECTED.

5. LIMITATION OF LIABILITY. IN NO EVENT WILL THE COPYRIGHT HOLDER, THE UNITED STATES, THE UNITED STATES DEPARTMENT OF ENERGY, OR THEIR EMPLOYEES: BE LIABLE FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL OR PUNITIVE DAMAGES OF ANY KIND OR NATURE, INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS OR LOSS OF DATA, FOR ANY REASON WHATSOEVER, WHETHER SUCH LIABILITY IS ASSERTED ON THE BASIS OF CONTRACT, TORT (INCLUDING NEGLIGENCE OR STRICT LIABILITY), OR OTHERWISE, EVEN IF ANY OF SAID PARTIES HAS BEEN WARNED OF THE POSSIBILITY OF SUCH LOSS OR DAMAGES.

=====
Copyright and license statement for the odex Fortran routine developed by E. Hairer and G. Wanner and translated in GraggBulirschStoerIntegrator class in package org.apache.commons.math.ode.nonstiff:

Copyright (c) 2004, Ernst Hairer

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

=====
Copyright and license statement for the original lapack fortran routines

translated in EigenDecompositionImpl class in package
org.apache.commons.math.linear:

Copyright (c) 1992-2008 The University of Tennessee. All rights reserved.

\$COPYRIGHT\$

Additional copyrights may follow

\$HEADERS\$

Redistribution and use in source and binary forms, with or without
modification, are permitted provided that the following conditions are
met:

- Redistributions of source code must retain the above copyright
notice, this list of conditions and the following disclaimer.

- Redistributions in binary form must reproduce the above copyright
notice, this list of conditions and the following disclaimer listed
in this license in the documentation and/or other materials
provided with the distribution.

- Neither the name of the copyright holders nor the names of its
contributors may be used to endorse or promote products derived from
this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS
"AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT
LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR
A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT
OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,
SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

=====
Copyright and license statement for the original Mersenne twister C
routines translated in MersenneTwister class in package
org.apache.commons.math.random:

Copyright (C) 1997 - 2002, Makoto Matsumoto and Takuji Nishimura,
All rights reserved.

Redistribution and use in source and binary forms, with or without

modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The names of its contributors may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

1.32 protobuf-java-format 1.2

1.32.1 Available under license :

Copyright (c) 2009, Orbitz World Wide
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of the Orbitz World Wide nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS

"AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright (c) 2009, Orbitz LLC
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of the Orbitz LLC nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

1.33 expat 2.5.0

1.33.1 Available under license :

/*

- * This file is part of Expat
- * Copyright (C) 2018, Logical Clocks AB. All rights reserved
- *
- * Expat is free software: you can redistribute it and/or modify it under the terms of
- * the GNU Affero General Public License as published by the Free Software Foundation,

* either version 3 of the License, or (at your option) any later version.
*
* Expat is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY;
* without even the implied warranty of MERCHANTABILITY or FITNESS FOR A
* PARTICULAR PURPOSE. See the GNU Affero General Public License for more details.
*
* You should have received a copy of the GNU Affero General Public License along with
* this program. If not, see <<https://www.gnu.org/licenses/>>.
*
*/

GNU AFFERO GENERAL PUBLIC LICENSE
Version 3, 19 November 2007

Copyright (C) 2007 Free Software Foundation, Inc. <<https://fsf.org/>>
Everyone is permitted to copy and distribute verbatim copies
of this license document, but changing it is not allowed.

Preamble

The GNU Affero General Public License is a free, copyleft license for software and other kinds of works, specifically designed to ensure cooperation with the community in the case of network server software.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, our General Public Licenses are intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

Developers that use our General Public Licenses protect your rights with two steps: (1) assert copyright on the software, and (2) offer you this License which gives you legal permission to copy, distribute and/or modify the software.

A secondary benefit of defending all users' freedom is that improvements made in alternate versions of the program, if they receive widespread use, become available for other developers to incorporate. Many developers of free software are heartened and encouraged by the resulting cooperation. However, in the case of software used on network servers, this result may fail to come about. The GNU General Public License permits making a modified version and

letting the public access it on a server without ever releasing its source code to the public.

The GNU Affero General Public License is designed specifically to ensure that, in such cases, the modified source code becomes available to the community. It requires the operator of a network server to provide the source code of the modified version running there to the users of that server. Therefore, public use of a modified version, on a publicly accessible server, gives the public access to the source code of the modified version.

An older license, called the Affero General Public License and published by Affero, was designed to accomplish similar goals. This is a different license, not a version of the Affero GPL, but Affero has released a new version of the Affero GPL which permits relicensing under this license.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS

0. Definitions.

"This License" refers to version 3 of the GNU Affero General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations.

To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work.

A "covered work" means either the unmodified Program or a work based on the Program.

To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well.

To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying.

An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

1. Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work.

A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language.

The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it.

The "Corresponding Source" for a work in object code form means all the source code needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

2. Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. The output from running a covered work is covered by this License only if the output, given its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law.

You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for you, or provide you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you.

Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing is not allowed; section 10 makes it unnecessary.

3. Protecting Users' Legal Rights From Anti-Circumvention Law.

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

4. Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program.

You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee.

5. Conveying Modified Source Versions.

You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

- a) The work must carry prominent notices stating that you modified it, and giving a relevant date.
- b) The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement modifies the requirement in section 4 to "keep intact all notices".
- c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.
- d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an "aggregate" if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other

parts of the aggregate.

6. Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

- a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.
- b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.
- c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.
- d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.
- e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no

charge under subsection 6d.

A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.

A "User Product" is either (1) a "consumer product", which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, "normally used" refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product.

"Installation Information" for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because modification has been made.

If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network.

Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly

documented (and with an implementation available to the public in source code form), and must require no special password or key for unpacking, reading or copying.

7. Additional Terms.

"Additional permissions" are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions.

When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission.

Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

- a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or
- b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or
- c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or
- d) Limiting the use for publicity purposes of names of licensors or authors of the material; or
- e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or
- f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on those licensors and authors.

All other non-permissive additional terms are considered "further restrictions" within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains a further restriction but permits relicensing or conveying under this License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying.

If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

8. Termination.

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

9. Acceptance Not Required for Having Copies.

You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

10. Automatic Licensing of Downstream Recipients.

Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License.

An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity transaction, each party to that transaction who receives a copy of the work also receives whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts.

You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and you may not initiate litigation (including a cross-claim or counterclaim in a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it.

11. Patents.

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For

purposes of this definition, "control" includes the right to grant patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version.

In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory patent license (a) in connection with copies of the covered work

conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

12. No Surrender of Others' Freedom.

If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this License would be to refrain entirely from conveying the Program.

13. Remote Network Interaction; Use with the GNU General Public License.

Notwithstanding any other provision of this License, if you modify the Program, your modified version must prominently offer all users interacting with it remotely through a computer network (if your version supports such interaction) an opportunity to receive the Corresponding Source of your version by providing access to the Corresponding Source from a network server at no charge, through some standard or customary means of facilitating copying of software. This Corresponding Source shall include the Corresponding Source for any work covered by version 3 of the GNU General Public License that is incorporated pursuant to the following paragraph.

Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU General Public License into a single combined work, and to convey the resulting work. The terms of this License will continue to apply to the part which is the covered work, but the work with which it is combined will remain governed by version 3 of the GNU General Public License.

14. Revised Versions of this License.

The Free Software Foundation may publish revised and/or new versions of the GNU Affero General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies that a certain numbered version of the GNU Affero General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of the GNU Affero General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future versions of the GNU Affero General Public License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Program.

Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

15. Disclaimer of Warranty.

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

17. Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates

an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>
Copyright (C) <year> <name of author>

This program is free software: you can redistribute it and/or modify it under the terms of the GNU Affero General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Affero General Public License for more details.

You should have received a copy of the GNU Affero General Public License along with this program. If not, see <<https://www.gnu.org/licenses/>>.

Also add information on how to contact you by electronic and paper mail.

If your software can interact with users remotely through a computer network, you should also make sure that it provides a way for users to get its source. For example, if your program is a web application, its interface could display a "Source" link that leads users to an archive of the code. There are many ways you could offer source, and different solutions will be better for different programs; see section 13 for the specific requirements.

You should also get your employer (if you work as a programmer) or school, if any, to sign a "copyright disclaimer" for the program, if necessary. For more information on this, and how to apply and follow the GNU AGPL, see <<https://www.gnu.org/licenses/>>.

1.34 perfmark-api 0.17.0

1.34.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright 2019 Carl Mastrangelo
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

```
* /opt/cola/permits/1656707133_1682600610.4687467/0/perfmark-api-0-17-0-sources-1-jar/io/perfmark/Impl.java
* /opt/cola/permits/1656707133_1682600610.4687467/0/perfmark-api-0-17-0-sources-1-
jar/io/perfmark/PerfMark.java
* /opt/cola/permits/1656707133_1682600610.4687467/0/perfmark-api-0-17-0-sources-1-jar/io/perfmark/package-
info.java
* /opt/cola/permits/1656707133_1682600610.4687467/0/perfmark-api-0-17-0-sources-1-jar/io/perfmark/Link.java
* /opt/cola/permits/1656707133_1682600610.4687467/0/perfmark-api-0-17-0-sources-1-jar/io/perfmark/Tag.java
```

1.35 log4j-api 2.17.1

1.35.1 Available under license :

Apache Log4j 1.x Compatibility API
Copyright 1999-1969 The Apache Software Foundation

This product includes software developed at
The Apache Software Foundation (<http://www.apache.org/>).

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted"

means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:
 - (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
 - (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
 - (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and

attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and

(d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the

appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software

distributed under the License is distributed on an "AS IS" BASIS,
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
See the License for the specific language governing permissions and
limitations under the License.

1.36 jackson-dataformat-yaml 2.14.2

1.36.1 Available under license :

Jackson JSON processor

Jackson is a high-performance, Free/Open Source JSON processing library.
It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has
been in development since 2007.

It is currently developed by a community of developers, as well as supported
commercially by FasterXML.com.

Licensing

Jackson core and extension components may be licensed under different licenses.
To find the details that apply to this artifact see the accompanying LICENSE file.
For more information, including possible other licensing options, contact
FasterXML.com (<http://fasterxml.com>).

Credits

A list of contributors may be found from CREDITS file, which is included
in some artifacts (usually source distributions); but is always available
from the source code management (SCM) system project uses.

This copy of Jackson JSON processor YAML module is licensed under the
Apache (Software) License, version 2.0 ("the License").

See the License for details about distribution rights, and the
specific rights regarding derivate works.

You may obtain a copy of the License at:

<http://www.apache.org/licenses/LICENSE-2.0>

1.37 error_prone_annotations 2.3.3

1.37.1 Available under license :

No license file was found, but licenses were detected in source scan.

/*

* Copyright 2014 The Error Prone Authors.

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/NoAllocation.java
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/concurrent/LockMethod.java
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/concurrent/UnlockMethod.java
No license file was found, but licenses were detected in source scan.

/*
* Copyright 2016 The Error Prone Authors.
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* <http://www.apache.org/licenses/LICENSE-2.0>
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/

Found in path(s):

* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/CompatibleWith.java
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/FormatMethod.java
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/MustBeClosed.java
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/RestrictedApi.java
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/FormatString.java

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright 2017 The Error Prone Authors.
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

```
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-
jar/com/google/errorprone/annotations/OverridingMethodsMustInvokeSuper.java
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-
jar/com/google/errorprone/annotations/DoNotCall.java
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-
jar/com/google/errorprone/annotations/concurrent/GuardedBy.java
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-
jar/com/google/errorprone/annotations/CheckReturnValue.java
```

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright 2015 The Error Prone Authors.
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

```
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-
jar/com/google/errorprone/annotations/CompileTimeConstant.java
```


* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/SuppressPackageLocation.java
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/Immutable.java
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/RequiredModifiers.java
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/Var.java
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/ForOverride.java
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/concurrent/LazyInit.java
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/CanIgnoreReturnValue.java
* /opt/cola/permits/1264660152_1643871085.34/0/error-prone-annotations-2-3-3-sources-jar/com/google/errorprone/annotations/IncompatibleModifiers.java

1.38 javax-inject 1

1.38.1 Available under license :

Apache License

Version 2.0, January 2004

<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation

source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable

(except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and

may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify,

defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

/*

* Copyright (C) 2009 The JSR-330 Expert Group

*

* Licensed under the Apache License, Version 2.0 (the "License");

* you may not use this file except in compliance with the License.

* You may obtain a copy of the License at

*

* <http://www.apache.org/licenses/LICENSE-2.0>

*

* Unless required by applicable law or agreed to in writing, software

* distributed under the License is distributed on an "AS IS" BASIS,

* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

* See the License for the specific language governing permissions and

* limitations under the License.

*/

1.39 annotations 13.0

1.40 libpng 1.6.38

1.40.1 Available under license :

Copyright (c) 1998-2008 Greg Roelofs. All rights reserved.

This software is provided "as is," without warranty of any kind, express or implied. In no event shall the author or contributors be held liable for any damages arising in any way from the use of this software.

The contents of this file are DUAL-LICENSED. You may modify and/or redistribute this software according to the terms of one of the following two licenses (at your option):

LICENSE 1 ("BSD-like with advertising clause"):

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. Redistributions of source code must retain the above copyright notice, disclaimer, and this list of conditions.
2. Redistributions in binary form must reproduce the above copyright notice, disclaimer, and this list of conditions in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgment:

This product includes software developed by Greg Roelofs and contributors for the book, "PNG: The Definitive Guide," published by O'Reilly and Associates.

LICENSE 2 (GNU GPL v2 or later):

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
GNU General Public License for more details.

You should have received a copy of the GNU General Public License
along with this program; if not, write to the Free Software Foundation,
Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

pnm2png / png2pnm --- conversion from PBM/PGM/PPM-file to PNG-file

copyright (C) 1999-2019 by Willem van Schaik <willem at schaik dot com>

Permission is hereby granted, free of charge, to any person obtaining a copy
of this software and associated documentation files (the "Software"), to deal
in the Software without restriction, including without limitation the rights
to use, copy, modify, merge, publish, distribute, sublicense, and/or sell
copies of the Software, and to permit persons to whom the Software is
furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all
copies or substantial portions of the Software.

The software is provided "as is", without warranty of any kind, express or
implied, including but not limited to the warranties of merchantability,
fitness for a particular purpose and noninfringement. In no event shall the
authors or copyright holders be liable for any claim, damages or other
liability, whether in an action of contract, tort or otherwise, arising from,
out of or in connection with the software or the use or other dealings in the
software.

COPYRIGHT NOTICE, DISCLAIMER, and LICENSE

=====

PNG Reference Library License version 2

- * Copyright (c) 1995-2022 The PNG Reference Library Authors.
- * Copyright (c) 2018-2022 Cosmin Truta.
- * Copyright (c) 2000-2002, 2004, 2006-2018 Glenn Randers-Pehrson.
- * Copyright (c) 1996-1997 Andreas Dilger.
- * Copyright (c) 1995-1996 Guy Eric Schalnat, Group 42, Inc.

The software is supplied "as is", without warranty of any kind,
express or implied, including, without limitation, the warranties
of merchantability, fitness for a particular purpose, title, and
non-infringement. In no event shall the Copyright owners, or

anyone distributing the software, be liable for any damages or other liability, whether in contract, tort or otherwise, arising from, out of, or in connection with the software, or the use or other dealings in the software, even if advised of the possibility of such damage.

Permission is hereby granted to use, copy, modify, and distribute this software, or portions hereof, for any purpose, without fee, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated, but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This Copyright notice may not be removed or altered from any source or altered source distribution.

PNG Reference Library License version 1 (for libpng 0.5 through 1.6.35)

libpng versions 1.0.7, July 1, 2000, through 1.6.35, July 15, 2018 are Copyright (c) 2000-2002, 2004, 2006-2018 Glenn Randers-Pehrson, are derived from libpng-1.0.6, and are distributed according to the same disclaimer and license as libpng-1.0.6 with the following individuals added to the list of Contributing Authors:

Simon-Pierre Cadieux
Eric S. Raymond
Mans Rullgard
Cosmin Truta
Gilles Vollant
James Yu
Mandar Sahastrabudde
Google Inc.
Vadim Barkov

and with the following additions to the disclaimer:

There is no warranty against interference with your enjoyment of the library or against infringement. There is no warranty that our efforts or the library will fulfill any of your particular purposes or needs. This library is provided with all faults, and the entire risk of satisfactory quality, performance, accuracy, and effort is

with the user.

Some files in the "contrib" directory and some configure-generated files that are distributed with libpng have other copyright owners, and are released under other open source licenses.

libpng versions 0.97, January 1998, through 1.0.6, March 20, 2000, are Copyright (c) 1998-2000 Glenn Randers-Pehrson, are derived from libpng-0.96, and are distributed according to the same disclaimer and license as libpng-0.96, with the following individuals added to the list of Contributing Authors:

Tom Lane
Glenn Randers-Pehrson
Willem van Schaik

libpng versions 0.89, June 1996, through 0.96, May 1997, are Copyright (c) 1996-1997 Andreas Dilger, are derived from libpng-0.88, and are distributed according to the same disclaimer and license as libpng-0.88, with the following individuals added to the list of Contributing Authors:

John Bowler
Kevin Bracey
Sam Bushell
Magnus Holmgren
Greg Roelofs
Tom Tanner

Some files in the "scripts" directory have other copyright owners, but are released under this license.

libpng versions 0.5, May 1995, through 0.88, January 1996, are Copyright (c) 1995-1996 Guy Eric Schalnat, Group 42, Inc.

For the purposes of this copyright and license, "Contributing Authors" is defined as the following set of individuals:

Andreas Dilger
Dave Martindale
Guy Eric Schalnat
Paul Schmidt
Tim Wegner

The PNG Reference Library is supplied "AS IS". The Contributing Authors and Group 42, Inc. disclaim all warranties, expressed or implied, including, without limitation, the warranties of merchantability and of fitness for any purpose. The Contributing

Authors and Group 42, Inc. assume no liability for direct, indirect, incidental, special, exemplary, or consequential damages, which may result from the use of the PNG Reference Library, even if advised of the possibility of such damage.

Permission is hereby granted to use, copy, modify, and distribute this source code, or portions hereof, for any purpose, without fee, subject to the following restrictions:

1. The origin of this source code must not be misrepresented.
2. Altered versions must be plainly marked as such and must not be misrepresented as being the original source.
3. This Copyright notice may not be removed or altered from any source or altered source distribution.

The Contributing Authors and Group 42, Inc. specifically permit, without fee, and encourage the use of this source code as a component to supporting the PNG file format in commercial products. If you use this source code in a product, acknowledgment is not required but would be appreciated.

GNU GENERAL PUBLIC LICENSE
Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.
59 Temple Place, Suite 330, Boston, MA 02111-1307 USA
Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

GNU GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program

is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is

implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE

PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>
Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.

<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

1.41 kotlin 1.6.0

1.41.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
{"version":3,"file":"kotlin.js","sources":["wrapper.js","js/arrayUtils.js","js/callableReferenceUtils.js","js/conversions.js","js/core.js","js/long.js","js/markerFunctions.js","js/misc.js","js/polyfills.js","js/rtti.js","runtime/arrayUtils.kt","runtime/Enum.kt","primitiveCompanionObjects.kt","common/src/generated/_Arrays.kt","common/src/generated/_Ranges.kt","unsigned/src/kotlin/UByte.kt","unsigned/src/kotlin/UInt.kt","unsigned/src/kotlin/UShort.kt","builtin-sources/Ranges.kt","src/kotlin/collections/Collections.kt","src/kotlin/collections/Maps.kt","src/kotlin/collections/Sets.kt","src/kotlin/text/StringNumberConversions.kt","src/kotlin/time/Duration.kt","unsigned/src/kotlin/UnsignedUtils.kt","src/kotlin/collections/Iterables.kt","src/kotlin/collections/Sequences.kt","src/kotlin/util/Preconditions.kt","js/src/generated/_ArraysJs.kt","src/kotlin/comparisons/Comparisons.kt","src/kotlin/util/Standard.kt","js/src/generated/_ComparisonsJs.kt","unsigned/src/kotlin/ULong.kt","common/src/generated/_Collections.kt","js/src/kotlin/collections.kt","src/kotlin/collections/Iterators.kt","common/src/generated/_Comparisons.kt","common/src/generated/_Maps.kt","common/src/generated/_OneToManyTitlecaseMappings.kt","js/src/kotlin/text/char.kt","js/src/kotlin/text/string.kt","src/kotlin/text/Char.kt","src/kotlin/CharCode.kt","common/src/generated/_Sequences.kt","common/src/generated/_Sets.kt","common/src/generated/_Strings.kt","src/kotlin/text/Strings.kt","unsigned/src/kotlin/UByteArray.kt","unsigned/src/kotlin/UIntArray.kt","unsigned/src/kotlin/ULongArray.kt","unsigned/src/kotlin/UShortArray.kt","common/src/generated/_UArrays.kt","common/src/generated/_UCollections.kt","common/src/generated/_UComparisons.kt"}
```

common/src/generated/_URanges.kt", "common/src/generated/_USequences.kt", "common/src/kotlin/ExceptionsH.kt", "common/src/kotlin/JsAnnotationsH.kt", "common/src/kotlin/ioH.kt", "builtin-sources/Collections.kt", "builtin-sources/Iterators.kt", "builtin-sources/ProgressionIterators.kt", "builtin-sources/Progressions.kt", "builtin-sources/Range.kt", "builtin-sources/Unit.kt", "builtin-sources/annotation/Annotations.kt", "builtin-sources/internal/InternalAnnotations.kt", "builtin-sources/internal/progressionUtil.kt", "src/kotlin/builtins.kt", "src/kotlin/jsTypeOf.kt", "src/kotlin/kotlin.kt", "src/kotlin/charCode_js-v1.kt", "src/kotlin/coroutines/CoroutineImpl.kt", "src/kotlin/util/Result.kt", "src/kotlin/coroutines/Continuation.kt", "src/kotlin/coroutines/intrinsics/IntrinsicsJs.kt", "src/kotlin/currentBeMisc.kt", "src/kotlin/exceptions.kt", "src/kotlin/jsOperators.kt", "src/kotlin/math_js-v1.kt", "src/kotlin/numbers_js-v1.kt", "src/kotlin/reflection_js-v1.kt", "src/kotlin/text/numberConversions_js-v1.kt", "js/src/generated/_CharCategories.kt", "js/src/generated/_CollectionsJs.kt", "js/src/generated/_DigitChars.kt", "js/src/generated/_LetterChars.kt", "js/src/generated/_OtherLowercaseChars.kt", "js/src/generated/_OtherUppercaseChars.kt", "js/src/generated/_StringsJs.kt", "js/src/generated/_TitlecaseMappings.kt", "js/src/generated/_UArraysJs.kt", "js/src/generated/_WhitespaceChars.kt", "js/src/kotlin/Comparator.kt", "js/src/kotlin/annotations.kt", "js/src/kotlin/annotationsJVM.kt", "js/src/kotlin/collections/AbstractMutableCollection.kt", "js/src/kotlin/collections/AbstractMutableList.kt", "js/src/kotlin/collections/AbstractMutableMap.kt", "js/src/kotlin/collections/AbstractMutableSet.kt", "js/src/kotlin/collections/ArrayList.kt", "js/src/kotlin/collections/ArraySorting.kt", "js/src/kotlin/collections/ArraysJs.kt", "js/src/kotlin/collections/EqualityComparator.kt", "js/src/kotlin/collections/HashMap.kt", "js/src/kotlin/collections/HashSet.kt", "js/src/kotlin/collections/InternalHashMap.kt", "js/src/kotlin/collections/InternalMap.kt", "js/src/kotlin/collections/InternalStringMap.kt", "js/src/kotlin/collections/LinkedHashMap.kt", "js/src/kotlin/collections/LinkedHashSet.kt", "js/src/kotlin/concurrent.kt", "js/src/kotlin/console.kt", "js/src/kotlin/coroutines/SafeContinuationJs.kt", "js/src/kotlin/coroutines/cancellation/CancellationException.kt", "js/src/kotlin/coroutines/js/internal/EmptyContinuation.kt", "js/src/kotlin/date.kt", "js/src/kotlin/dom/Builders.kt", "js/src/kotlin/dom/Classes.kt", "js/src/kotlin/dom/Dom.kt", "js/src/kotlin/dom/EventListener.kt", "js/src/kotlin/dom/ItemArrayLike.kt", "js/src/kotlin/dom/Mutations.kt", "js/src/kotlin/dynamic.kt", "js/src/kotlin/exceptionUtils.kt", "js/src/kotlin/grouping.kt", "src/kotlin/collections/Grouping.kt", "js/src/kotlin/jsOn.kt", "js/src/kotlin/math.kt", "js/src/kotlin/numbers.kt", "js/src/kotlin/promise.kt", "js/src/kotlin/random/PlatformRandom.kt", "js/src/kotlin/reflect/AssociatedObjects.kt", "js/src/kotlin/reflect/JsClass.kt", "js/src/kotlin/reflect/KClassImpl.kt", "js/src/kotlin/reflect/KClassesImpl.kt", "js/src/kotlin/reflect/KTypeHelpers.kt", "js/src/kotlin/reflect/KTypeImpl.kt", "js/src/kotlin/reflect/KTypeParameterImpl.kt", "js/src/kotlin/reflect/primitives.kt", "js/src/kotlin/reflect/reflection.kt", "js/src/kotlin/regexp.kt", "js/src/kotlin/sequence.kt", "js/src/kotlin/text/CharCategoryJS.kt", "js/src/kotlin/text/CharacterCodingExceptionJs.kt", "js/src/kotlin/text/StringBuilderJs.kt", "js/src/kotlin/text/numberConversions.kt", "js/src/kotlin/text/regex.kt", "src/kotlin/text/StringBuilder.kt", "js/src/kotlin/text/stringsCode.kt", "js/src/kotlin/text/utf8Encoding.kt", "js/src/kotlin/throwableExtensions.kt", "js/src/kotlin/time/DurationJs.kt", "js/src/kotlin/time/DurationUnit.kt", "js/src/kotlin/time/MonoTimeSource.kt", "js/src/kotlinx/dom/Builders.kt", "js/src/kotlinx/dom/Classes.kt", "src/kotlin/text/regex/RegexExtensions.kt", "js/src/kotlinx/dom/Dom.kt", "js/src/kotlinx/dom/Mutations.kt", "js/src/org.w3c/deprecated.kt", "js/src/org.w3c/org.khronos.webgl.kt", "js/src/org.w3c/org.w3c.dom.clipboard.kt", "js/src/org.w3c/org.w3c.dom.css.kt", "js/src/org.w3c/org.w3c.dom.encryptedmedia.kt", "js/src/org.w3c/org.w3c.dom.events.kt", "js/src/org.w3c/org.w3c.dom.kt", "js/src/org.w3c/org.w3c.fetch.kt", "js/src/org.w3c/org.w3c.dom.mediacapture.kt", "js/src/org.w3c/org.w3c.dom.mediasource.kt", "js/src/org.w3c/org.w3c.dom.pointerevents.kt", "js/src/org.w3c/org.w3c.dom.svg.kt", "js/src/org.w3c/org.w3c.files.kt", "js/src/org.w3c/org.w3c.notifications.kt", "js/src/org.w3c/org.w3c.workers.kt", "js/src/org.w3c/org.w3c.xhr.kt", "src/kotlin/annotations/Experimental.kt", "src/kotlin/annotations/ExperimentalStdlibApi.kt", "src/kotlin/annotations/Inference.kt", "src/kotlin/annotations/Multiplatform.kt", "src/kotlin/annotations/OptIn.kt", "src/kotlin/collections/AbstractCollection.kt", "src/kotlin/collections/AbstractIterator.kt", "src/kotlin/collections/AbstractList.kt", "src/kotlin/collections/AbstractMap.kt", "src/kotlin/collections/AbstractSet.kt", "src/kotlin/collections/ArrayDeque.kt", "src/kotlin/collections/Arrays.kt", "src/kotlin/collections/BrittleContainsOptimization.kt", "src/kotlin/collections/IndexedValue.kt", "src/kotlin/collections/MapAccessors.kt", "src/kotlin/collections/MapWithDefault.kt", "src/kotlin/collections/MutableCollections.kt", "src/kotlin/collections/ReversedViews.kt", "src/kotlin/collections/SequenceBuilder

r.kt","src/kotlin/collections/SlidingWindow.kt","src/kotlin/collections/UArraySorting.kt","src/kotlin/comparisons/compareTo.kt","src/kotlin/contracts/ContractBuilder.kt","src/kotlin/coroutines/ContinuationInterceptor.kt","src/kotlin/coroutines/CoroutineContext.kt","src/kotlin/coroutines/CoroutineContextImpl.kt","src/kotlin/coroutines/intrinsics/Intrinsics.kt","src/kotlin/experimental/bitwiseOperations.kt","src/kotlin/experimental/inferenceMarker.kt","src/kotlin/internal/Annotations.kt","src/kotlin/properties/Delegates.kt","src/kotlin/properties/Interfaces.kt","src/kotlin/properties/ObservableProperty.kt","src/kotlin/properties/PropertyReferenceDelegates.kt","src/kotlin/random/Random.kt","src/kotlin/random/URandom.kt","src/kotlin/random/XorWowRandom.kt","src/kotlin/ranges/Ranges.kt","src/kotlin/reflect/KClasses.kt","src/kotlin/reflect/KTypeProjection.kt","src/kotlin/reflect/KVariance.kt","src/kotlin/reflect/typeOf.kt","src/kotlin/text/Appendable.kt","src/kotlin/text/Indent.kt","src/kotlin/text/Typography.kt","src/kotlin/text/regex/MatchResult.kt","src/kotlin/time/DurationUnit.kt","src/kotlin/time/ExperimentalTime.kt","src/kotlin/time/TimeSource.kt","src/kotlin/time/TimeSources.kt","src/kotlin/time/measureTime.kt","src/kotlin/util/DeepRecursive.kt","src/kotlin/util/FloorDivMod.kt","src/kotlin/util/HashCode.kt","src/kotlin/util/KotlinVersion.kt","src/kotlin/util/Lateinit.kt","src/kotlin/util/Lazy.kt","src/kotlin/util/Numbers.kt","src/kotlin/util/Suspend.kt","src/kotlin/util/Tuples.kt","unsigned/src/kotlin/UIntRange.kt","unsigned/src/kotlin/UInterators.kt","unsigned/src/kotlin/ULongRange.kt","unsigned/src/kotlin/UMath.kt","unsigned/src/kotlin/UNumbers.kt","unsigned/src/kotlin/UProgressionUtil.kt","unsigned/src/kotlin/UStrings.kt","unsigned/src/kotlin/annotations/Unsigned.kt","common/src/kotlin/MathH.kt"],"sourcesContent":["(function (root, factory) {\n if (typeof define === 'function' && define.amd) {\n define('kotlin', ['exports'], factory);\n }\n else if (typeof exports === 'object') {\n factory(module.exports);\n }\n else {\n root.kotlin = {};\n factory(root.kotlin);\n }\n})(this, function (Kotlin) {\n var _ = Kotlin;\n insertContent();\n});\n","/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\nKotlin.isArray = function (a) {\n return (Array.isArray(a) || a instanceof Int8Array) && a.\$type\$ === \"BooleanArray\";\n};\n\nKotlin.isByteArray = function (a) {\n return a instanceof Int8Array && a.\$type\$!== \"BooleanArray\";\n};\n\nKotlin.isShortArray = function (a) {\n return a instanceof Int16Array;\n};\n\nKotlin.isCharArray = function (a) {\n return a instanceof Uint16Array && a.\$type\$ === \"CharArray\";\n};\n\nKotlin.isIntArray = function (a) {\n return a instanceof Int32Array;\n};\n\nKotlin.isFloatArray = function (a) {\n return a instanceof Float32Array;\n};\n\nKotlin.isDoubleArray = function (a) {\n return a instanceof Float64Array;\n};\n\nKotlin.isLongArray = function (a) {\n return Array.isArray(a) && a.\$type\$ === \"LongArray\";\n};\n\nKotlin.isArray = function (a) {\n return Array.isArray(a) && !a.\$type\$;\n};\n\nKotlin.isArrayish = function (a) {\n return Array.isArray(a) || ArrayBuffer.isView(a);\n};\n\nKotlin.arrayToString = function (a) {\n if (a === null) return \"null\";\n var toString = Kotlin.isCharArray(a) ? String.fromCharCode : Kotlin.toString;\n return \"[\" + Array.prototype.map.call(a, function(e) { return toString(e); }).join(\", \") + \"]\";\n};\n\nKotlin.arrayDeepToString = function (arr) {\n return Kotlin.kotlin.collections.contentDeepToStringImpl(arr);\n};\n\nKotlin.arrayEquals = function (a, b) {\n if (a === b) {\n return true;\n }\n if (a === null || b === null || !Kotlin.isArrayish(b) || a.length !== b.length) {\n return false;\n }\n for (var i = 0, n = a.length; i < n; i++) {\n if (!Kotlin.equals(a[i], b[i])) {\n return false;\n }\n }\n return true;\n};\n\nKotlin.arrayDeepEquals = function (a, b) {\n return Kotlin.kotlin.collections.contentDeepEqualsImpl(a, b);\n};\n\nKotlin.arrayHashCode = function (arr) {\n if (arr === null) return 0;\n var result = 1;\n for (var i = 0, n = arr.length; i < n; i++) {\n result = ((31 * result | 0) + Kotlin.hashCode(arr[i])) | 0;\n }\n return result;\n};\n\nKotlin.arrayDeepHashCode = function (arr) {\n return Kotlin.kotlin.collections.contentDeepHashCodeImpl(arr);\n};\n\nKotlin.primitiveArraySort = function (array) {\n array.sort(Kotlin.doubleCompareTo);\n};\n","/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\nKotlin.getCallableRef = function (name, f) {\n f.callableName = name;\n return f;\n};\n\nKotlin.getPropertyCallableRef = function (name, paramCount, getter, setter) {\n getter.get = getter;\n getter.set = setter;\n getter.callableName = name;\n return getPropertyRefClass(getter, setter,

```

propertyRefClassMetadataCache[paramCount]);\n);\n\nfunction getPropertyRefClass(obj, setter, cache) {\n
obj.$metadata$ = getPropertyRefMetadata(typeof setter === \"function\" ? cache.mutable : cache.immutable);\n
obj.constructor = obj;\n  return obj;\n}\n\nvar propertyRefClassMetadataCache = [\n  {\n    mutable: { value:\n
null, implementedInterface: function () {\n      return Kotlin.kotlin.reflect.KMutableProperty0 }\n    },\n
immutable: { value: null, implementedInterface: function () {\n      return Kotlin.kotlin.reflect.KProperty0 }\n
}\n  },\n  {\n    mutable: { value: null, implementedInterface: function () {\n      return\n
Kotlin.kotlin.reflect.KMutableProperty1 }\n    },\n    immutable: { value: null, implementedInterface: function\n
() {\n      return Kotlin.kotlin.reflect.KProperty1 }\n    }\n  }];\n\nfunction getPropertyRefMetadata(cache)\n
{\n  if (cache.value === null) {\n    cache.value = {\n      interfaces: [cache.implementedInterface()],\n
baseClass: null,\n      functions: {},\n      properties: {},\n      types: {},\n      staticMembers: {}\n
};\n  }\n  return cache.value;\n}\n\n\"/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming\n
Language contributors. \n * Use of this source code is governed by the Apache 2.0 license that can be found in the\n
license/LICENSE.txt file.\n */\n\nKotlin.toShort = function (a) {\n  return (a & 0xFFFF) << 16 >>\n
16;\n};\n\nKotlin.toByte = function (a) {\n  return (a & 0xFF) << 24 >> 24;\n};\n\nKotlin.toChar = function (a) {\n\n
return a & 0xFFFF;\n};\n\nKotlin.numberToLong = function (a) {\n  return a instanceof Kotlin.Long ? a :\n
Kotlin.Long.fromNumber(a);\n};\n\nKotlin.numberToInt = function (a) {\n  return a instanceof Kotlin.Long ?\n
a.toInt() : Kotlin.doubleToInt(a);\n};\n\nKotlin.numberToShort = function (a) {\n  return\n
Kotlin.toShort(Kotlin.numberToInt(a));\n};\n\nKotlin.numberToByte = function (a) {\n  return\n
Kotlin.toByte(Kotlin.numberToInt(a));\n};\n\nKotlin.numberToDouble = function (a) {\n  return\n
+a;\n};\n\nKotlin.numberToChar = function (a) {\n  return\n
Kotlin.toChar(Kotlin.numberToInt(a));\n};\n\nKotlin.doubleToInt = function(a) {\n  if (a > 2147483647) return\n
2147483647;\n  if (a < -2147483648) return -2147483648;\n  return a | 0;\n};\n\nKotlin.toBoxedChar = function\n
(a) {\n  if (a == null) return a;\n  if (a instanceof Kotlin.BoxedChar) return a;\n  return new\n
Kotlin.BoxedChar(a);\n};\n\nKotlin.unboxChar = function(a) {\n  if (a == null) return a;\n  return\n
Kotlin.toChar(a);\n};\n\n\"/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language\n
contributors. \n * Use of this source code is governed by the Apache 2.0 license that can be found in the\n
license/LICENSE.txt file.\n */\n\nKotlin.equals = function (obj1, obj2) {\n  if (obj1 == null) {\n    return obj2 ==\n
null;\n  }\n  if (obj2 == null) {\n    return false;\n  }\n  if (obj1 !== obj2) {\n    return obj2 !== obj2;\n
}\n  if (typeof obj1 === \"object\" && typeof obj1.equals === \"function\") {\n    return obj1.equals(obj2);\n
}\n  if (typeof obj1 === \"number\" && typeof obj2 === \"number\") {\n    return obj1 === obj2 && (obj1 !==\n
0 || 1 / obj1 === 1 / obj2);\n  }\n  return obj1 === obj2;\n};\n\nKotlin.hashCode = function (obj) {\n  if (obj ==\n
null) {\n    return 0;\n  }\n  var objType = typeof obj;\n  if (\"object\" === objType) {\n    return \"function\"\n
=== typeof obj.hashCode ? obj.hashCode() : getObjectHashCode(obj);\n  }\n  if (\"function\" === objType) {\n\n
return getObjectHashCode(obj);\n  }\n  if (\"number\" === objType) {\n    return\n
Kotlin.numberHashCode(obj);\n  }\n  if (\"boolean\" === objType) {\n    return Number(obj)\n  }\n  var str\n
= String(obj);\n  return getStringHashCode(str);\n};\n\nKotlin.toString = function (o) {\n  if (o == null) {\n\n
return \"null\";\n  }\n  else if (Kotlin.isArrayish(o)) {\n    return \"[...]\";\n  }\n  else {\n    return\n
o.toString();\n  }\n};\n\n/** @const */\nvar POW_2_32 = 4294967296;\n// TODO: consider switching to Symbol\n
type once we are on ES6.\n/** @const */\nvar OBJECT_HASH_CODE_PROPERTY_NAME =\n
\"kotlinHashCodeValue$\";\n\nfunction getObjectHashCode(obj) {\n  if\n
(! (OBJECT_HASH_CODE_PROPERTY_NAME in obj)) {\n    var hash = (Math.random() * POW_2_32) | 0; //\n
Make 32-bit signed integer.\n    Object.defineProperty(obj, OBJECT_HASH_CODE_PROPERTY_NAME, {\n\n
value: hash, enumerable: false });\n  }\n  return\n
obj[OBJECT_HASH_CODE_PROPERTY_NAME];\n}\n\nfunction getStringHashCode(str) {\n  var hash = 0;\n\n
for (var i = 0; i < str.length; i++) {\n    var code = str.charCodeAt(i);\n    hash = (hash * 31 + code) | 0; // Keep\n
it 32-bit.\n  }\n  return hash;\n}\n\nKotlin.identityHashCode = getObjectHashCode;\n\n\"/*\n * Copyright 2010-\n
2018 JetBrains s.r.o. and Kotlin Programming Language contributors. \n * Use of this source code is governed by\n
the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n// Copyright 2009 The Closure

```

Library Authors. All Rights Reserved.
 Licensed under the Apache License, Version 2.0 (the "License");
 you may not use this file except in compliance with the License.
 You may obtain a copy of the License at
<http://www.apache.org/licenses/LICENSE-2.0>
 Unless required by applicable law or agreed to in writing,
 software distributed under the License is distributed on an "AS-IS" BASIS,
 WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

Constructs a 64-bit two's-complement integer, given its low and high 32-bit values as signed integers. See the from* functions below for more convenient ways of constructing Longs.

The internal representation of a long is the two given signed, 32-bit values. We use 32-bit pieces because these are the size of integers on which Javascript performs bit-operations. For operations like addition and multiplication, we split each number into 16-bit pieces, which can easily be multiplied within Javascript's floating-point representation without overflow or change in sign.

In the algorithms below, we frequently reduce the negative case to the positive case by negating the input(s) and then post-processing the result. Note that we must ALWAYS check specially whether those values are MIN_VALUE (-2^63) because -MIN_VALUE == MIN_VALUE (since 2^63 cannot be represented as a positive number, it overflows back into a negative). Not handling this case would often result in infinite recursion.

```

  @param {number} low The low (signed) 32 bits of the long.
  @param {number} high The high (signed) 32 bits of the long.
  @constructor
  @final
  ^\nKotlin.Long = function(low, high) {
  /**
  @type {number}
  @private
  ^\n this.low_ = low | 0; // force into 32 signed bits.
  /**
  @type {number}
  @private
  ^\n this.high_ = high | 0; // force into 32 signed bits.
  };
  \nKotlin.Long.$metadata$ = {
  \n  kind: "class",
  \n  simpleName: "Long",
  \n  interfaces: []
  };
  \n\n// NOTE: Common constant values ZERO, ONE, NEG_ONE, etc. are defined below the
  // from* methods on which they depend.
  \n\n/**
  @type {!Object}
  @private
  ^\nKotlin.Long.IntCache_ = {};
  \n\n/**
  @type {number}
  @private
  ^\n Returns a Long representing the given (32-bit) integer value.
  @param {number} value The 32-bit integer in question.
  @return {!Kotlin.Long} The corresponding Long value.
  ^\nKotlin.Long.fromInt = function(value) {
  \n  if (-128 <= value && value < 128) {
  \n    var cachedObj = Kotlin.Long.IntCache_[value];
  \n    if (cachedObj) {
  \n      return cachedObj;
  \n    }
  \n    var obj = new Kotlin.Long(value | 0, value < 0 ? -1 : 0);
  \n    if (-128 <= value && value < 128) {
  \n      Kotlin.Long.IntCache_[value] = obj;
  \n    }
  \n    return obj;
  \n  };
  \n\n/**
  Converts this number value to `Long`. The fractional part, if any, is rounded down towards zero. Returns zero if this `Double` value is `NaN`, `Long.MIN_VALUE` if it's less than `Long.MIN_VALUE`, `Long.MAX_VALUE` if it's bigger than `Long.MAX_VALUE`.
  @param {number} value The number in question.
  @return {!Kotlin.Long} The corresponding Long value.
  ^\nKotlin.Long.fromNumber = function(value) {
  \n  if (isNaN(value)) {
  \n    return Kotlin.Long.ZERO;
  \n  } else if (value <= -Kotlin.Long.TWO_PWR_63_DBL_) {
  \n    return Kotlin.Long.MIN_VALUE;
  \n  } else if (value + 1 >= Kotlin.Long.TWO_PWR_63_DBL_) {
  \n    return Kotlin.Long.MAX_VALUE;
  \n  } else if (value < 0) {
  \n    return Kotlin.Long.fromNumber(-value).negate();
  \n  } else {
  \n    return new Kotlin.Long((value % Kotlin.Long.TWO_PWR_32_DBL_) | 0, (value / Kotlin.Long.TWO_PWR_32_DBL_) | 0);
  \n  };
  \n\n/**
  Returns a Long representing the 64-bit integer that comes by concatenating the given high and low bits. Each is assumed to use 32 bits.
  @param {number} lowBits The low 32-bits.
  @param {number} highBits The high 32-bits.
  @return {!Kotlin.Long} The corresponding Long value.
  ^\nKotlin.Long.fromBits = function(lowBits, highBits) {
  \n  return new Kotlin.Long(lowBits, highBits);
  };
  \n\n/**
  Returns a Long representation of the given string, written using the given radix.
  @param {string} str The textual representation of the Long.
  @param {number=} opt_radix The radix in which the text is written.
  @return {!Kotlin.Long} The corresponding Long value.
  ^\nKotlin.Long.fromString = function(str, opt_radix) {
  \n  if (str.length == 0) {
  \n    throw Error('number format error: empty string');
  \n  }
  \n  var radix = opt_radix || 10;
  \n  if (radix < 2 || 36 < radix) {
  \n    throw Error('radix out of range: ' + radix);
  \n  }
  \n  if (str.charAt(0) == '-') {
  \n    return Kotlin.Long.fromString(str.substring(1), radix).negate();
  \n  } else if (str.indexOf('-') >= 0) {
  \n    throw Error('number format error: interior "-" character: ' + str);
  \n  }
  \n  // Do several (8) digits each time through the loop, so as to minimize the calls to the very expensive emulated div.
  \n  var radixToPower = Kotlin.Long.fromNumber(Math.pow(radix, 8));
  \n  var result = Kotlin.Long.ZERO;
  \n  for (var i = 0; i < str.length;

```

```

i += 8) {\n    var size = Math.min(8, str.length - i);\n    var value = parseInt(str.substring(i, i + size), radix);\n    if
(size < 8) {\n        var power = Kotlin.Long.fromNumber(Math.pow(radix, size));\n        result =
result.multiply(power).add(Kotlin.Long.fromNumber(value));\n    } else {\n        result =
result.multiply(radixToPower);\n        result = result.add(Kotlin.Long.fromNumber(value));\n    }\n}\n
return
result;\n};\n\n\n// NOTE: the compiler should inline these constant values below and then remove\n// these
variables, so there should be no runtime penalty for these.\n\n\n**\n * Number used repeated below in calculations.
This must appear before the\n * first call to any from* function below.\n * @type {number}\n * @private\n
*\nKotlin.Long.TWO_PWR_16_DBL_ = 1 << 16;\n\n\n**\n * @type {number}\n * @private\n
*\nKotlin.Long.TWO_PWR_24_DBL_ = 1 << 24;\n\n\n**\n * @type {number}\n * @private\n
*\nKotlin.Long.TWO_PWR_32_DBL_ =\n Kotlin.Long.TWO_PWR_16_DBL_ *
Kotlin.Long.TWO_PWR_16_DBL_;\n\n\n**\n * @type {number}\n * @private\n
*\nKotlin.Long.TWO_PWR_31_DBL_ =\n Kotlin.Long.TWO_PWR_32_DBL_ / 2;\n\n\n**\n * @type
{number}\n * @private\n *\nKotlin.Long.TWO_PWR_48_DBL_ =\n Kotlin.Long.TWO_PWR_32_DBL_ *
Kotlin.Long.TWO_PWR_16_DBL_;\n\n\n**\n * @type {number}\n * @private\n
*\nKotlin.Long.TWO_PWR_64_DBL_ =\n Kotlin.Long.TWO_PWR_32_DBL_ *
Kotlin.Long.TWO_PWR_32_DBL_;\n\n\n**\n * @type {number}\n * @private\n
*\nKotlin.Long.TWO_PWR_63_DBL_ =\n Kotlin.Long.TWO_PWR_64_DBL_ / 2;\n\n\n** @type
{!Kotlin.Long} *\nKotlin.Long.ZERO = Kotlin.Long.fromInt(0);\n\n\n** @type {!Kotlin.Long}
*\nKotlin.Long.ONE = Kotlin.Long.fromInt(1);\n\n\n** @type {!Kotlin.Long} *\nKotlin.Long.NEG_ONE =
Kotlin.Long.fromInt(-1);\n\n\n** @type {!Kotlin.Long} *\nKotlin.Long.MAX_VALUE =\n
Kotlin.Long.fromBits(0xFFFFFFFF | 0, 0x7FFFFFFF | 0);\n\n\n** @type {!Kotlin.Long}
*\nKotlin.Long.MIN_VALUE = Kotlin.Long.fromBits(0, 0x80000000 | 0);\n\n\n**\n * @type {!Kotlin.Long}\n *
@private\n *\nKotlin.Long.TWO_PWR_24_ = Kotlin.Long.fromInt(1 << 24);\n\n\n** @return {number} The
value, assuming it is a 32-bit integer. *\nKotlin.Long.prototype.toInt = function() {\n    return this.low_;\n};\n\n\n**
@return {number} The closest floating-point representation to this value. *\nKotlin.Long.prototype.toNumber =
function() {\n    return this.high_ * Kotlin.Long.TWO_PWR_32_DBL_ +\n
this.getLowBitsUnsigned();\n};\n\n\n** @return {number} The 32-bit hashCode of this value.
*\nKotlin.Long.prototype.hashCode = function() {\n    return this.high_ ^ this.low_;\n};\n\n\n**\n * @param
{number=} opt_radix The radix in which the text should be written.\n * @return {string} The textual representation
of this value.\n * @override\n *\nKotlin.Long.prototype.toString = function(opt_radix) {\n    var radix = opt_radix ||
10;\n    if (radix < 2 || 36 < radix) {\n        throw Error('radix out of range: ' + radix);\n    }\n\n    if (this.isZero()) {\n
return '0';\n    }\n\n    if (this.isNegative()) {\n        if (this.equalsLong(Kotlin.Long.MIN_VALUE)) {\n            // We need to
change the Long value before it can be negated, so we remove\n            // the bottom-most digit in this base and then
recurse to do the rest.\n            var radixLong = Kotlin.Long.fromNumber(radix);\n            var div = this.div(radixLong);\n
            var rem = div.multiply(radixLong).subtract(this);\n            return div.toString(radix) + rem.toInt().toString(radix);\n        }
else {\n            return '-' + this.negate().toString(radix);\n        }\n    }\n\n    // Do several (6) digits each time through the loop,
so as to\n    // minimize the calls to the very expensive emulated div.\n    var radixToPower =
Kotlin.Long.fromNumber(Math.pow(radix, 6));\n    var rem = this;\n    var result = '';\n    while (true) {\n        var
remDiv = rem.div(radixToPower);\n        var intVal = rem.subtract(remDiv.multiply(radixToPower)).toInt();\n        var
digits = intVal.toString(radix);\n        rem = remDiv;\n        if (rem.isZero()) {\n            return digits + result;\n        }
else {\n            while (digits.length < 6) {\n                digits = '0' + digits;\n            }\n            result = " + digits +
result;\n        }\n    }\n};\n\n\n**
@return {number} The high 32-bits as a signed value. *\nKotlin.Long.prototype.getHighBits = function() {\n    return
this.high_;\n};\n\n\n** @return {number} The low 32-bits as a signed value.
*\nKotlin.Long.prototype.getLowBits = function() {\n    return this.low_;\n};\n\n\n** @return {number} The low
32-bits as an unsigned value. *\nKotlin.Long.prototype.getLowBitsUnsigned = function() {\n    return (this.low_ >=
0) ?\n        this.low_ : Kotlin.Long.TWO_PWR_32_DBL_ + this.low_;\n};\n\n\n**\n * @return {number} Returns
the number of bits needed to represent the absolute\n * value of this Long.\n
*\nKotlin.Long.prototype.getNumBitsAbs = function() {\n    if (this.isNegative()) {\n        if

```

```

(this.equalsLong(Kotlin.Long.MIN_VALUE)) {\n    return 64;\n } else {\n    return
this.negate().getNumBitsAbs();\n }\n } else {\n    var val = this.high_ != 0 ? this.high_ : this.low_;\n    for (var bit
= 31; bit > 0; bit--) {\n        if ((val & (1 << bit)) != 0) {\n            break;\n        }\n    }\n    return this.high_ != 0 ? bit + 33
: bit + 1;\n }\n};\n\n/** @return {boolean} Whether this value is zero. */\nKotlin.Long.prototype.isZero =
function() {\n    return this.high_ == 0 && this.low_ == 0;\n};\n\n/** @return {boolean} Whether this value is
negative. */\nKotlin.Long.prototype.isNegative = function() {\n    return this.high_ < 0;\n};\n\n/** @return
{boolean} Whether this value is odd. */\nKotlin.Long.prototype.isOdd = function() {\n    return (this.low_ & 1) ==
1;\n};\n\n/**\n * @param {Kotlin.Long} other Long to compare against.\n * @return {boolean} Whether this
Long equals the other.\n */\nKotlin.Long.prototype.equalsLong = function(other) {\n    return (this.high_ ==
other.high_) && (this.low_ == other.low_);\n};\n\n/**\n * @param {Kotlin.Long} other Long to compare
against.\n * @return {boolean} Whether this Long does not equal the other.\n
*/\nKotlin.Long.prototype.notEqualsLong = function(other) {\n    return (this.high_ != other.high_) || (this.low_ !=
other.low_);\n};\n\n/**\n * @param {Kotlin.Long} other Long to compare against.\n * @return {boolean}
Whether this Long is less than the other.\n */\nKotlin.Long.prototype.lessThan = function(other) {\n    return
this.compare(other) < 0;\n};\n\n/**\n * @param {Kotlin.Long} other Long to compare against.\n * @return
{boolean} Whether this Long is less than or equal to the other.\n */\nKotlin.Long.prototype.lessThanOrEqual =
function(other) {\n    return this.compare(other) <= 0;\n};\n\n/**\n * @param {Kotlin.Long} other Long to
compare against.\n * @return {boolean} Whether this Long is greater than the other.\n
*/\nKotlin.Long.prototype.greaterThan = function(other) {\n    return this.compare(other) > 0;\n};\n\n/**\n *
@param {Kotlin.Long} other Long to compare against.\n * @return {boolean} Whether this Long is greater than or
equal to the other.\n */\nKotlin.Long.prototype.greaterThanOrEqual = function(other) {\n    return
this.compare(other) >= 0;\n};\n\n/**\n * @param {Kotlin.Long} other Long to compare against.\n * @return
{number} 0 if they are the same, 1 if the this is greater, and -1\n * if the given one is greater.\n */\nKotlin.Long.prototype.compare = function(other) {\n    if (this.equalsLong(other)) {\n
return 0;\n }\n\n    var thisNeg = this.isNegative();\n    var otherNeg = other.isNegative();\n    if (thisNeg &&
!otherNeg) {\n        return -1;\n    }\n    if (!thisNeg && otherNeg) {\n        return 1;\n    }\n\n    // at this point, the signs are the
same, so subtraction will not overflow\n    if (this.subtract(other).isNegative()) {\n        return -1;\n    } else {\n        return
1;\n    }\n};\n\n/** @return {!Kotlin.Long} The negation of this value. */\nKotlin.Long.prototype.negate =
function() {\n    if (this.equalsLong(Kotlin.Long.MIN_VALUE)) {\n        return Kotlin.Long.MIN_VALUE;\n    } else
{\n        return this.not().add(Kotlin.Long.ONE);\n    }\n};\n\n/**\n * Returns the sum of this and the given Long.\n *
@param {Kotlin.Long} other Long to add to this one.\n * @return {!Kotlin.Long} The sum of this and the given
Long.\n */\nKotlin.Long.prototype.add = function(other) {\n    // Divide each number into 4 chunks of 16 bits, and
then sum the chunks.\n\n    var a48 = this.high_ >>> 16;\n    var a32 = this.high_ & 0xFFFF;\n    var a16 = this.low_
>>> 16;\n    var a00 = this.low_ & 0xFFFF;\n\n    var b48 = other.high_ >>> 16;\n    var b32 = other.high_ & 0xFFFF;\n
var b16 = other.low_ >>> 16;\n    var b00 = other.low_ & 0xFFFF;\n\n    var c48 = 0, c32 = 0, c16 = 0, c00 = 0;\n    c00
+= a00 + b00;\n    c16 += c00 >>> 16;\n    c00 &= 0xFFFF;\n    c16 += a16 + b16;\n    c32 += c16 >>> 16;\n    c16 &=
0xFFFF;\n    c32 += a32 + b32;\n    c48 += c32 >>> 16;\n    c32 &= 0xFFFF;\n    c48 += a48 + b48;\n    c48 &=
0xFFFF;\n    return Kotlin.Long.fromBits((c16 << 16) | c00, (c48 << 16) | c32);\n};\n\n/**\n * Returns the
difference of this and the given Long.\n * @param {Kotlin.Long} other Long to subtract from this.\n * @return
{!Kotlin.Long} The difference of this and the given Long.\n */\nKotlin.Long.prototype.subtract = function(other)
{\n    return this.add(other.negate());\n};\n\n/**\n * Returns the product of this and the given long.\n * @param
{Kotlin.Long} other Long to multiply with this.\n * @return {!Kotlin.Long} The product of this and the other.\n
*/\nKotlin.Long.prototype.multiply = function(other) {\n    if (this.isZero()) {\n        return Kotlin.Long.ZERO;\n    } else
if (other.isZero()) {\n        return Kotlin.Long.ZERO;\n    }\n\n    if (this.equalsLong(Kotlin.Long.MIN_VALUE)) {\n
return other.isOdd() ? Kotlin.Long.MIN_VALUE : Kotlin.Long.ZERO;\n    } else if
(other.equalsLong(Kotlin.Long.MIN_VALUE)) {\n        return this.isOdd() ? Kotlin.Long.MIN_VALUE :
Kotlin.Long.ZERO;\n    }\n\n    if (this.isNegative()) {\n        if (other.isNegative()) {\n            return
this.negate().multiply(other.negate());\n        } else {\n            return this.negate().multiply(other);\n        }\n    } else if

```

```
(other.isNegative()) {\n  return this.multiply(other.negate()).negate();\n }\n\n // If both longs are small, use float\n multiplication\n if (this.lessThan(Kotlin.Long.TWO_PWR_24_) &&\n\n other.lessThan(Kotlin.Long.TWO_PWR_24_)) {\n  return Kotlin.Long.fromNumber(this.toNumber() *\n other.toNumber());\n }\n\n // Divide each long into 4 chunks of 16 bits, and then add up 4x4 products.\n // We can\n skip products that would overflow.\n\n var a48 = this.high_ >>> 16;\n var a32 = this.high_ & 0xFFFF;\n var a16 =\n this.low_ >>> 16;\n var a00 = this.low_ & 0xFFFF;\n\n var b48 = other.high_ >>> 16;\n var b32 = other.high_ &\n 0xFFFF;\n var b16 = other.low_ >>> 16;\n var b00 = other.low_ & 0xFFFF;\n\n var c48 = 0, c32 = 0, c16 = 0, c00\n = 0;\n c00 += a00 * b00;\n c16 += c00 >>> 16;\n c00 &= 0xFFFF;\n c16 += a16 * b00;\n c32 += c16 >>> 16;\n c16 &= 0xFFFF;\n c16 += a00 * b16;\n c32 += c16 >>> 16;\n c16 &= 0xFFFF;\n c32 += a32 * b00;\n c48 +=\n c32 >>> 16;\n c32 &= 0xFFFF;\n c32 += a16 * b16;\n c48 += c32 >>> 16;\n c32 &= 0xFFFF;\n c32 += a00 *\n b32;\n c48 += c32 >>> 16;\n c32 &= 0xFFFF;\n c48 += a48 * b00 + a32 * b16 + a16 * b32 + a00 * b48;\n c48\n &= 0xFFFF;\n return Kotlin.Long.fromBits((c16 << 16) | c00, (c48 << 16) | c32);\n};\n\n/**\n * Returns this\n Long divided by the given one.\n * @param {Kotlin.Long} other Long by which to divide.\n * @return\n {!Kotlin.Long} This Long divided by the given one.\n */\nKotlin.Long.prototype.div = function(other) {\n  if\n (other.isZero()) {\n    throw Error('division by zero');\n  }\n  else if (this.isZero()) {\n    return Kotlin.Long.ZERO;\n  }\n\n  if (this.equalsLong(Kotlin.Long.MIN_VALUE)) {\n    if (other.equalsLong(Kotlin.Long.ONE) ||\n other.equalsLong(Kotlin.Long.NEG_ONE)) {\n      return Kotlin.Long.MIN_VALUE; // recall that -MIN_VALUE\n == MIN_VALUE\n    }\n    else if (other.equalsLong(Kotlin.Long.MIN_VALUE)) {\n      return Kotlin.Long.ONE;\n    }\n    else {\n      // At this point, we have |other| >= 2, so |this/other| < |MIN_VALUE|.\n      var halfThis =\n this.shiftRight(1);\n      var approx = halfThis.div(other).shiftLeft(1);\n      if\n (approx.equalsLong(Kotlin.Long.ZERO)) {\n        return other.isNegative() ? Kotlin.Long.ONE :\n Kotlin.Long.NEG_ONE;\n      }\n      else {\n        var rem = this.subtract(other.multiply(approx));\n        var result =\n approx.add(rem.div(other));\n        return result;\n      }\n    }\n\n  } else if\n (other.equalsLong(Kotlin.Long.MIN_VALUE)) {\n    return Kotlin.Long.ZERO;\n  }\n\n  if (this.isNegative()) {\n    if (other.isNegative()) {\n      return this.negate().div(other.negate());\n    }\n    else {\n      return\n this.negate().div(other).negate();\n    }\n  } else if (other.isNegative()) {\n    return\n this.div(other.negate()).negate();\n  }\n\n  // Repeat the following until the remainder is less than other: find a\n // floating-point that approximates remainder / other *from below*, add this\n // into the result, and subtract it from\n the remainder. It is critical that\n // the approximate value is less than or equal to the real value so that the\n // remainder never becomes negative.\n  var res = Kotlin.Long.ZERO;\n  var rem = this;\n  while\n (rem.greaterThanOrEqual(other)) {\n    // Approximate the result of division. This may be a little greater or\n // smaller than the actual value.\n    var approx = Math.max(1, Math.floor(rem.toNumber() / other.toNumber()));\n\n    // We will tweak the approximate result by changing it in the 48-th digit or\n // the smallest non-fractional digit,\n whichever is larger.\n    var log2 = Math.ceil(Math.log(approx) / Math.LN2);\n    var delta = (log2 <= 48) ? 1 :\n Math.pow(2, log2 - 48);\n    // Decrease the approximation until it is smaller than the remainder. Note\n // that if\n it is too large, the product overflows and is negative.\n    var approxRes = Kotlin.Long.fromNumber(approx);\n    var approxRem = approxRes.multiply(other);\n    while (approxRem.isNegative() || approxRem.greaterThan(rem))\n {\n      approx -= delta;\n      approxRes = Kotlin.Long.fromNumber(approx);\n      approxRem =\n approxRes.multiply(other);\n    }\n\n    // We know the answer can't be zero... and actually, zero would cause\n // infinite recursion since we would make no progress.\n    if (approxRes.isZero()) {\n      approxRes =\n Kotlin.Long.ONE;\n    }\n\n    res = res.add(approxRes);\n    rem = rem.subtract(approxRem);\n  }\n  return\n res;\n};\n\n/**\n * Returns this Long modulo the given one.\n * @param {Kotlin.Long} other Long by which to\n mod.\n * @return {!Kotlin.Long} This Long modulo the given one.\n */\nKotlin.Long.prototype.modulo =\n function(other) {\n  return this.subtract(this.div(other).multiply(other));\n};\n\n/**\n * @return {!Kotlin.Long} The\n bitwise-NOT of this value.\n */\nKotlin.Long.prototype.not = function() {\n  return Kotlin.Long.fromBits(~this.low_,\n ~this.high_);\n};\n\n/**\n * Returns the bitwise-AND of this Long and the given one.\n * @param {Kotlin.Long}\n other The Long with which to AND.\n * @return {!Kotlin.Long} The bitwise-AND of this and the other.\n */\nKotlin.Long.prototype.and = function(other) {\n  return Kotlin.Long.fromBits(this.low_ & other.low_,\n
```



```

    this.high_ & other.high_);};\n\n\n/**\n * Returns the bitwise-OR of this Long and the given one.\n *
    @param {Kotlin.Long} other The Long with which to OR.\n * @return {!Kotlin.Long} The bitwise-OR of this and
    the other.\n */\nKotlin.Long.prototype.or = function(other) {\n    return Kotlin.Long.fromBits(this.low_ |
    other.low_,\n        this.high_ | other.high_);};\n\n\n/**\n * Returns the bitwise-XOR of this Long
    and the given one.\n * @param {Kotlin.Long} other The Long with which to XOR.\n * @return {!Kotlin.Long}
    The bitwise-XOR of this and the other.\n */\nKotlin.Long.prototype.xor = function(other) {\n    return
    Kotlin.Long.fromBits(this.low_ ^ other.low_,\n        this.high_ ^ other.high_);};\n\n\n/**\n *
    Returns this Long with bits shifted to the left by the given amount.\n * @param {number} numBits The number of
    bits by which to shift.\n * @return {!Kotlin.Long} This shifted to the left by the given amount.\n
    */\nKotlin.Long.prototype.shiftLeft = function(numBits) {\n    numBits &= 63;\n    if (numBits == 0) {\n        return
    this;\n    } else {\n        var low = this.low_;\n        if (numBits < 32) {\n            var high = this.high_;\n            return
    Kotlin.Long.fromBits(\n                low << numBits,\n                (high << numBits) | (low >>> (32 - numBits));\n            } else
    {\n                return Kotlin.Long.fromBits(0, low << (numBits - 32));\n            }\n        }\n    };\n\n\n/**\n * Returns this Long with
    bits shifted to the right by the given amount.\n * @param {number} numBits The number of bits by which to shift.\n
    * @return {!Kotlin.Long} This shifted to the right by the given amount.\n */\nKotlin.Long.prototype.shiftRight =
    function(numBits) {\n    numBits &= 63;\n    if (numBits == 0) {\n        return this;\n    } else {\n        var high = this.high_;\n
    if (numBits < 32) {\n        var low = this.low_;\n        return Kotlin.Long.fromBits(\n            (low >>> numBits) | (high
    <<< (32 - numBits)),\n            high >> numBits);\n    } else {\n        return Kotlin.Long.fromBits(\n            high >>
    (numBits - 32),\n            high >= 0 ? 0 : -1);\n    }\n    }\n};\n\n\n/**\n * Returns this Long with bits shifted to the right
    by the given amount, with\n * zeros placed into the new leading bits.\n * @param {number} numBits The number
    of bits by which to shift.\n * @return {!Kotlin.Long} This shifted to the right by the given amount, with\n *
    zeros placed into the new leading bits.\n */\nKotlin.Long.prototype.shiftRightUnsigned = function(numBits) {\n    numBits
    &= 63;\n    if (numBits == 0) {\n        return this;\n    } else {\n        var high = this.high_;\n        if (numBits < 32) {\n        var
    low = this.low_;\n        return Kotlin.Long.fromBits(\n            (low >>> numBits) | (high <<< (32 - numBits)),\n            high >>>
    numBits);\n    } else if (numBits == 32) {\n        return Kotlin.Long.fromBits(high, 0);\n    } else {\n        return
    Kotlin.Long.fromBits(high >>> (numBits - 32), 0);\n    }\n    }\n};\n\n\n// Support for
    Kotlin\nKotlin.Long.prototype.equals = function (other) {\n    return other instanceof Kotlin.Long &&
    this.equalsLong(other);\n};\n\nKotlin.Long.prototype.compareTo_11rb$ =
    Kotlin.Long.prototype.compareTo;\n\nKotlin.Long.prototype.inc = function() {\n    return
    this.add(Kotlin.Long.ONE);\n};\n\nKotlin.Long.prototype.dec = function() {\n    return
    this.add(Kotlin.Long.NEG_ONE);\n};\n\nKotlin.Long.prototype.valueOf = function() {\n    return
    this.toNumber();\n};\n\nKotlin.Long.prototype.unaryPlus = function() {\n    return
    this;\n};\n\nKotlin.Long.prototype.unaryMinus = Kotlin.Long.prototype.negate;\nKotlin.Long.prototype.inv =
    Kotlin.Long.prototype.not;\n\nKotlin.Long.prototype.rangeTo = function (other) {\n    return new
    Kotlin.kotlin.ranges.LongRange(this, other);\n};\n\n\n/**\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin
    Programming Language contributors. \n * Use of this source code is governed by the Apache 2.0 license that can be
    found in the license/LICENSE.txt file.\n */\n\n\n/**\n * @param {string} id\n * @param {Object} declaration\n
    */\nKotlin.defineModule = function (id, declaration) {\n};\n\nKotlin.defineInlineFunction = function(tag, fun) {\n
    return fun;\n};\n\nKotlin.wrapFunction = function(fun) {\n    var f = function() {\n        f = fun();\n        return
    f.apply(this, arguments);\n    };\n    return function() {\n        return f.apply(this, arguments);\n    };\n};\n\nKotlin.isTypeOf = function(type) {\n    return function (object) {\n        return typeof object === type;\n
    }\n};\n\nKotlin.isInstanceOf = function (class) {\n    return function (object) {\n        return Kotlin.isType(object,
    class);\n    }\n};\n\nKotlin.orNull = function (fn) {\n    return function (object) {\n        return object == null ||
    fn(object);\n    }\n};\n\nKotlin.andPredicate = function (a, b) {\n    return function (object) {\n        return a(object)
    && b(object);\n    }\n};\n\nKotlin.kotlinModuleMetadata = function (abiVersion, moduleName, data)
    {\n};\n\nKotlin.suspendCall = function(value) {\n    return value;\n};\n\nKotlin.coroutineResult = function(qualifier)
    {\n    throwMarkerError();\n};\n\nKotlin.coroutineController = function(qualifier) {\n
    throwMarkerError();\n};\n\nKotlin.coroutineReceiver = function(qualifier) {\n

```

```

throwMarkerError();\n};\n\nKotlin.setCoroutineResult = function(value, qualifier) {\n
throwMarkerError();\n};\n\nKotlin.getReifiedTypeParameterKType = function(typeParameter) {\n
throwMarkerError();\n};\n\nfunction throwMarkerError() {\n  throw new Error(\n    \"This marker function\n    should never been called. \" +\n    \"Looks like compiler did not eliminate it properly. \" +\n    \"Please, report\n    an issue if you caught this exception.\");\n}\n\nKotlin.getFunctionById = function(id, defaultValue) {\n  return\n  function() {\n    return defaultValue;\n  };\n};\n\n/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin\n  Programming Language contributors.\n  * Use of this source code is governed by the Apache 2.0 license that can be\n  found in the license/LICENSE.txt file.\n  */\n\nKotlin.compareTo = function(a, b) {\n  var typeA = typeof a;\n  if\n  (typeA === \"number\") {\n    if (typeof b === \"number\") {\n      return Kotlin.doubleCompareTo(a, b);\n    }\n    return Kotlin.primitiveCompareTo(a, b);\n  }\n  if (typeA === \"string\" || typeA === \"boolean\") {\n    return Kotlin.primitiveCompareTo(a, b);\n  }\n  return\n  a.compareTo_11rb$(b);\n};\n\nKotlin.primitiveCompareTo = function(a, b) {\n  return a < b ? -1 : a > b ? 1 :\n  0;\n};\n\nKotlin.doubleCompareTo = function(a, b) {\n  if (a < b) return -1;\n  if (a > b) return 1;\n  if (a ===\n  b) {\n    if (a !== 0) return 0;\n    var ia = 1 / a;\n    return ia === 1 / b ? 0 : (ia < 0 ? -1 : 1);\n  }\n  return a !== a ? (b !== b ? 0 : 1) : -1;\n};\n\nKotlin.charInc = function(value) {\n  return\n  Kotlin.toChar(value+1);\n};\n\nKotlin.charDec = function(value) {\n  return Kotlin.toChar(value-\n  1);\n};\n\nKotlin.imul = Math.imul || imul;\n\nKotlin.imulEmulated = imul;\n\nfunction imul(a, b) {\n  return ((a &\n  0xffff0000) * (b & 0xffff) + (a & 0xffff) * (b | 0)) | 0;\n}\n\n(function() {\n  var buf = new ArrayBuffer(8);\n  var\n  bufFloat64 = new Float64Array(buf);\n  var bufFloat32 = new Float32Array(buf);\n  var bufInt32 = new\n  Int32Array(buf);\n  var lowIndex = 0;\n  var highIndex = 1;\n  bufFloat64[0] = -1; // bff00000_00000000\n  if\n  (bufInt32[lowIndex] !== 0) {\n    lowIndex = 1;\n    highIndex = 0;\n  }\n  Kotlin.doubleToBits =\n  function(value) {\n    return Kotlin.doubleToRawBits(isNaN(value) ? NaN : value);\n  };\n\n  Kotlin.doubleToRawBits = function(value) {\n    bufFloat64[0] = value;\n    return\n    Kotlin.Long.fromBits(bufInt32[lowIndex], bufInt32[highIndex]);\n  };\n\n  Kotlin.doubleFromBits =\n  function(value) {\n    bufInt32[lowIndex] = value.low_;\n    bufInt32[highIndex] = value.high_;\n    return\n    bufFloat64[0];\n  };\n\n  Kotlin.floatToBits = function(value) {\n    return Kotlin.floatToRawBits(isNaN(value)\n    ? NaN : value);\n  };\n\n  Kotlin.floatToRawBits = function(value) {\n    bufFloat32[0] = value;\n    return\n    bufInt32[0];\n  };\n\n  Kotlin.floatFromBits = function(value) {\n    bufInt32[0] = value;\n    return\n    bufFloat32[0];\n  };\n\n  // returns zero value for number with positive sign bit and non-zero value for number\n  with negative sign bit.\n  Kotlin.doubleSignBit = function(value) {\n    bufFloat64[0] = value;\n    return\n    bufInt32[highIndex] & 0x80000000;\n  };\n\n  Kotlin.numberHashCode = function(obj) {\n    if ((obj | 0) ===\n    obj) {\n      return obj | 0;\n    }\n    else {\n      bufFloat64[0] = obj;\n      return (bufInt32[highIndex]\n      * 31 | 0) + bufInt32[lowIndex] | 0;\n    }\n  };\n}\n\nKotlin.ensureNotNull = function(x) {\n  return x != null\n  ? x : Kotlin.throwNPE();\n};\n\n/*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language\n  contributors.\n  * Use of this source code is governed by the Apache 2.0 license that can be found in the\n  license/LICENSE.txt file.\n  */\n\nif (typeof String.prototype.startsWith === \"undefined\") {\n  Object.defineProperty(String.prototype, \"startsWith\", {\n    value: function (searchString, position) {\n      position = position || 0;\n      return this.lastIndexOf(searchString, position) === position;\n    }\n  });\n}\n\nif (typeof String.prototype.endsWith === \"undefined\") {\n  Object.defineProperty(String.prototype, \"endsWith\", {\n    value: function (searchString, position) {\n      var subjectString = this.toString();\n      if (position\n      === undefined || position > subjectString.length) {\n        position = subjectString.length;\n      }\n      position -= searchString.length;\n      var lastIndex = subjectString.indexOf(searchString, position);\n      return lastIndex !== -1 && lastIndex === position;\n    }\n  });\n}\n\n// ES6 Math polyfills\n\nif (typeof Math.sign ===\n  \"undefined\") {\n  Math.sign = function(x) {\n    x = +x; // convert to a number\n    if (x === 0 ||\n    isNaN(x)) {\n      return Number(x);\n    }\n    return x > 0 ? 1 : -1;\n  };\n}\n\nif (typeof Math.trunc ===\n  \"undefined\") {\n  Math.trunc = function(x) {\n    if (isNaN(x)) {\n      return NaN;\n    }\n    if (x > 0)\n    {\n      return Math.floor(x);\n    }\n    return Math.ceil(x);\n  };\n}\n\n(function() {\n  var epsilon =\n  2.220446049250313E-16;\n  var taylor_2_bound = Math.sqrt(epsilon);\n  var taylor_n_bound =

```

```

Math.sqrt(taylor_2_bound);\n  var upper_taylor_2_bound = 1/taylor_2_bound;\n  var upper_taylor_n_bound =
1/taylor_n_bound;\n  if (typeof Math.sinh === \"undefined\") {\n    Math.sinh = function(x) {\n      if
(Math.abs(x) < taylor_n_bound) {\n        var result = x;\n        if (Math.abs(x) > taylor_2_bound) {\n
          result += (x * x * x) / 6;\n        }\n        return result;\n      } else {\n        var y =
Math.exp(x);\n        var y1 = 1 / y;\n        if (!isFinite(y)) return Math.exp(x - Math.LN2);\n        if
(!isFinite(y1)) return -Math.exp(-x - Math.LN2);\n        return (y - y1) / 2;\n      }\n    };\n  }\n  if
(typeof Math.cosh === \"undefined\") {\n    Math.cosh = function(x) {\n      var y = Math.exp(x);\n      var
y1 = 1 / y;\n      if (!isFinite(y) || !isFinite(y1)) return Math.exp(Math.abs(x) - Math.LN2);\n      return (y +
y1) / 2;\n    };\n  }\n  if (typeof Math.tanh === \"undefined\") {\n    Math.tanh = function(x) {\n      if
(Math.abs(x) < taylor_n_bound) {\n        var result = x;\n        if (Math.abs(x) > taylor_2_bound) {\n
          result -= (x * x * x) / 3;\n        }\n        return result;\n      }\n      else {\n        var a =
Math.exp(+x), b = Math.exp(-x);\n        return a === Infinity ? 1 : b === Infinity ? -1 : (a - b) / (a + b);\n
      }\n    };\n  }\n  // Inverse hyperbolic function implementations derived from boost special math functions,\n
// Copyright Eric Ford & Hubert Holin 2001.\n  if (typeof Math.asinh === \"undefined\") {\n    var asinh =
function(x) {\n      if (x >= +taylor_n_bound)\n        {\n          if (x > upper_taylor_n_bound)\n            {\n              if (x > upper_taylor_2_bound)\n                {\n                  // approximation by laurent series in
1/x at 0+ order from -1 to 0\n                  return Math.log(x) + Math.LN2;\n                }\n              else\n                {\n                  // approximation by laurent series in 1/x at 0+ order from -1 to 1\n                  return
Math.log(x * 2 + (1 / (x * 2)));\n                }\n            }\n          else if (x <= -taylor_n_bound)\n            {\n              // approximation by laurent series in x at 0 up to
order 2\n              var result = x;\n              if (Math.abs(x) >= taylor_2_bound)\n                {\n                  var x3 =
x * x * x;\n                  // approximation by laurent series in x at 0 up to order 4\n                  result -= x3 / 6;\n                }\n              return result;\n            }\n          }\n        }\n      Math.asinh = asinh;\n    }\n  }\n  if (typeof Math.acosh ===
\"undefined\") {\n    Math.acosh = function(x) {\n      if (x < 1)\n        {\n          return NaN;\n        }\n      else if (x - 1 >= taylor_n_bound)\n        {\n          if (x > upper_taylor_2_bound)\n            {\n              // approximation by laurent series in 1/x at 0+ order from -1 to 0\n              return Math.log(x) + Math.LN2;\n            }\n          else\n            {\n              return Math.log(x + Math.sqrt(x * x - 1));\n            }\n          }\n        }\n      else\n        {\n          var y = Math.sqrt(x - 1);\n          // approximation by laurent series in y at 0
up to order 2\n          var result = y;\n          if (y >= taylor_2_bound)\n            {\n              var y3 = y *
y * y;\n              // approximation by laurent series in y at 0 up to order 4\n              result -= y3 / 12;\n            }\n          return Math.sqrt(2) * result;\n        }\n      }\n    }\n  }\n  if (typeof Math.atanh === \"undefined\")
{\n    Math.atanh = function(x) {\n      if (Math.abs(x) < taylor_n_bound) {\n        var result = x;\n        if (Math.abs(x) > taylor_2_bound) {\n          result += (x * x * x) / 3;\n        }\n        return result;\n      }\n      return Math.log((1 + x) / (1 - x)) / 2;\n    };\n  }\n  if (typeof Math.log1p === \"undefined\") {\n    Math.log1p = function(x) {\n      if (Math.abs(x) < taylor_n_bound) {\n        var x2 = x * x;\n        var x3 = x2 * x;\n        var x4 = x3 * x;\n        // approximation by laurent series in x at 0 up to order 4\n        return (-x4 / 4 + x3 / 3 - x2 / 2 + x);\n      }\n      return Math.log(x + 1);\n    };\n  }\n  if (typeof
Math.expm1 === \"undefined\") {\n    Math.expm1 = function(x) {\n      if (Math.abs(x) < taylor_n_bound)
{\n        var x2 = x * x;\n        var x3 = x2 * x;\n        var x4 = x3 * x;\n        // approximation by
taylor series in x at 0 up to order 4\n        return (x4 / 24 + x3 / 6 + x2 / 2 + x);\n      }\n      return
Math.exp(x) - 1;\n    };\n  }\n  if (typeof Math.hypot === \"undefined\") {\n    Math.hypot = function() {\n      var y = 0;\n      var length = arguments.length;\n      for (var i = 0; i < length; i++) {\n        if (arguments[i]
=== Infinity || arguments[i] === -Infinity) {\n          return Infinity;\n        }\n        y += arguments[i] *
arguments[i];\n      }\n      return Math.sqrt(y);\n    };\n  }\n  if (typeof Math.log10 === \"undefined\") {\n    Math.log10 = function(x) {\n      return Math.log(x) * Math.LOG10E;\n    };\n  }\n  if (typeof Math.log2 ===
\"undefined\") {\n    Math.log2 = function(x) {\n      return Math.log(x) * Math.LOG2E;\n    };\n  }\n  if (typeof
Math.clz32 === \"undefined\") {\n    Math.clz32 = (function(log, LN2) {\n      return function(x) {\n        var

```

```

asUint = x >>> 0;\n      if (asUint === 0) {\n          return 32;\n      }\n      return 31 - (log(asUint) /
LN2 | 0) | 0; // the `| 0` acts like math.floor\n    });\n  })(Math.log, Math.LN2);\n}\n\n// For HtmlUnit and
PhantomJs\nif (typeof ArrayBuffer.isView === `undefined`) {\n  ArrayBuffer.isView = function(a) {\n    return a != null && a.__proto__ != null && a.__proto__.__proto__ === Int8Array.prototype.__proto__;\n  };\n}\n\nif (typeof Array.prototype.fill === `undefined`) {\n  // Polyfill from https://developer.mozilla.org/en-
US/docs/Web/JavaScript/Reference/Global_Objects/Array/fill#Polyfill\n  Object.defineProperty(Array.prototype,
'fill', {\n    value: function (value) {\n      // Steps 1-2.\n      if (this === null) {\n        throw new
TypeError('this is null or not defined');\n      }\n      var O = Object(this);\n      // Steps 3-5.\n      var len = O.length >>> 0;\n      // Steps 6-7.\n      var start = arguments[1];\n      var relativeStart = start
>> 0;\n      // Step 8.\n      var k = relativeStart < 0 ?\n        Math.max(len + relativeStart, 0) :\n        Math.min(relativeStart, len);\n      // Steps 9-10.\n      var end = arguments[2];\n      var
relativeEnd = end === undefined ?\n        len : end >> 0;\n      // Step 11.\n      var finalValue
= relativeEnd < 0 ?\n        Math.max(len + relativeEnd, 0) :\n        Math.min(relativeEnd,
len);\n      // Step 12.\n      while (k < finalValue) {\n        O[k] = value;\n        k++;\n      }\n      // Step 13.\n      return O;\n    };\n  });\n}\n\n(function() {\n  function normalizeOffset(offset, length)
{\n    if (offset < 0) return Math.max(0, offset + length);\n    return Math.min(offset, length);\n  }\n  function
typedArraySlice(begin, end) {\n    if (typeof end === `undefined`) {\n      end = this.length;\n    }\n    begin = normalizeOffset(begin || 0, this.length);\n    end = Math.max(begin, normalizeOffset(end, this.length));\n    return new this.constructor(this.subarray(begin, end));\n  }\n  var arrays = [Int8Array, Int16Array,
Uint16Array, Int32Array, Float32Array, Float64Array];\n  for (var i = 0; i < arrays.length; ++i) {\n    var
TypedArray = arrays[i];\n    if (typeof TypedArray.prototype.fill === `undefined`) {\n      Object.defineProperty(TypedArray.prototype, 'fill', {\n        value: Array.prototype.fill\n      });\n    }\n    if (typeof TypedArray.prototype.slice === `undefined`) {\n      Object.defineProperty(TypedArray.prototype,
'slice', {\n        value: typedArraySlice\n      });\n    }\n  }\n  // Patch apply to work with TypedArrays
if needed.\n  try {\n    (function() {}).apply(null, new Int32Array(0))\n  } catch (e) {\n    var apply =
Function.prototype.apply;\n    Object.defineProperty(Function.prototype, 'apply', {\n      value: function(self,
array) {\n        return apply.call(this, self, [].slice.call(array));\n      }\n    });\n  }\n  // Patch map to
work with TypedArrays if needed.\n  for (var i = 0; i < arrays.length; ++i) {\n    var TypedArray = arrays[i];\n    if (typeof TypedArray.prototype.map === `undefined`) {\n      Object.defineProperty(TypedArray.prototype,
'map', {\n        value: function(callback, self) {\n          return [].slice.call(this).map(callback, self);\n        }\n      });\n    }\n  }\n  // Patch sort to work with TypedArrays if needed.\n  // TODO: consider to
remove following function and replace it with `Kotlin.doubleCompareTo` (see misc.js)\n  var
totalOrderComparator = function (a, b) {\n    if (a < b) return -1;\n    if (a > b) return 1;\n\n    if (a === b) {\n      if (a !== 0) return 0;\n      var ia = 1 / a;\n      return ia === 1 / b ? 0 : (ia < 0 ? -1 : 1);\n    }\n    return a !== a ? (b !== b ? 0 : 1) : -1\n  };\n  for (var i = 0; i < arrays.length; ++i) {\n    var TypedArray =
arrays[i];\n    if (typeof TypedArray.prototype.sort === `undefined`) {\n      Object.defineProperty(TypedArray.prototype, 'sort', {\n        value: function(compareFunction) {\n          return Array.prototype.sort.call(this, compareFunction || totalOrderComparator);\n        }\n      });\n    }\n  }\n})();\n","/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors. \n * Use
of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*\n\nKotlin.Kind = {\n  CLASS: `class`,\n  INTERFACE: `interface`,\n  OBJECT:
`object`\n};\n\nKotlin.callGetter = function (thisObject, klass, propertyName) {\n  var propertyDescriptor =
Object.getOwnPropertyDescriptor(klass, propertyName);\n  if (propertyDescriptor != null &&
propertyDescriptor.get != null) {\n    return propertyDescriptor.get.call(thisObject);\n  }\n  propertyDescriptor
= Object.getOwnPropertyDescriptor(thisObject, propertyName);\n  if (propertyDescriptor != null && `value` in
propertyDescriptor) {\n    return thisObject[propertyName];\n  }\n  return Kotlin.callGetter(thisObject,
Object.getPrototypeOf(klass), propertyName);\n};\n\nKotlin.callSetter = function (thisObject, klass, propertyName,
value) {\n  var propertyDescriptor = Object.getOwnPropertyDescriptor(klass, propertyName);\n  if

```

```

(propertyDescriptor != null && propertyDescriptor.set != null) {\n    propertyDescriptor.set.call(thisObject,
value);\n    return;\n }\n\n propertyDescriptor = Object.getOwnPropertyDescriptor(thisObject,
propertyName);\n if (propertyDescriptor != null && \"value\" in propertyDescriptor) {\n
thisObject[propertyName] = value;\n    return\n }\n\n Kotlin.callSetter(thisObject,
Object.getPrototypeOf(klass), propertyName, value);\n};\n\nfunction isInheritanceFromInterface(ctor, iface) {\n if
(ctor === iface) return true;\n\n var metadata = ctor.$metadata$;\n if (metadata != null) {\n    var interfaces =
metadata.interfaces;\n    for (var i = 0; i < interfaces.length; i++) {\n        if
(isInheritanceFromInterface(interfaces[i], iface)) {\n            return true;\n        }\n    }\n\n var
superPrototype = ctor.prototype != null ? Object.getPrototypeOf(ctor.prototype) : null;\n    var superConstructor =
superPrototype != null ? superPrototype.constructor : null;\n    return superConstructor != null &&
isInheritanceFromInterface(superConstructor, iface);\n}\n\n/**\n * @param {*} object\n * @param
{Function|Object} klass\n * @returns {Boolean}\n */\nKotlin.isType = function (object, klass) {\n if (klass ===
Object) {\n    switch (typeof object) {\n        case \"string\":\n            case \"number\":\n            case
\"boolean\":\n            case \"function\":\n                return true;\n            default:\n                return object instanceof
Object;\n    }\n\n if (object == null || klass == null || (typeof object !== 'object' && typeof object !==
'function')) {\n    return false;\n }\n\n if (typeof klass === \"function\" && object instanceof klass) {\n
return true;\n }\n\n var proto = Object.getPrototypeOf(klass);\n    var constructor = proto != null ?
proto.constructor : null;\n    if (constructor != null && \"$metadata$\" in constructor) {\n        var metadata =
constructor.$metadata$;\n        if (metadata.kind === Kotlin.Kind.OBJECT) {\n            return object === klass;\n
}\n    }\n\n var klassMetadata = klass.$metadata$;\n\n // In WebKit (JavaScriptCore) for some interfaces from
DOM typeof returns \"object\", nevertheless they can be used in RHS of instanceof\n    if (klassMetadata == null)
{\n        return object instanceof klass;\n    }\n\n if (klassMetadata.kind === Kotlin.Kind.INTERFACE &&
object.constructor != null) {\n        return isInheritanceFromInterface(object.constructor, klass);\n    }\n\n return
false;\n};\n\nKotlin.isNumber = function (a) {\n    return typeof a == \"number\" || a instanceof
Kotlin.Long;\n};\n\nKotlin.isChar = function (value) {\n    return value instanceof
Kotlin.BoxedChar;\n};\n\nKotlin.isComparable = function (value) {\n    var type = typeof value;\n\n    return type
=== \"string\" ||\n        type === \"boolean\" ||\n        Kotlin.isNumber(value) ||\n        Kotlin.isType(value,
Kotlin.kotlin.Comparable);\n};\n\nKotlin.isCharSequence = function (value) {\n    return typeof value === \"string\"
|| Kotlin.isType(value, Kotlin.kotlin.CharSequence);\n};\n\n/*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n */\n\n// a package is omitted to get declarations directly under the
module\n\n@PublishedApi\nexternal fun <T> Array(size: Int): Array<T>\n\n@JsName(\"newArray\")\nfun
<T> newArray(size: Int, initialValue: T) = fillArrayVal(Array<T>(size),
initialValue)\n\n@JsName(\"newArrayF\")\ninline fun <T> arrayWithFun(size: Int, init: (Int) -> T) =
fillArrayFun(Array<T>(size), init)\n\n@JsName(\"fillArray\")\ninline fun <T> fillArrayFun(array: Array<T>, init:
(Int) -> T): Array<T> {\n    for (i in 0..array.size - 1) {\n        array[i] = init(i)\n    }\n    return
array\n}\n\n@JsName(\"booleanArray\")\nfun booleanArray(size: Int, init: dynamic): Array<Boolean> {\n    val
result: dynamic = Array<Boolean>(size)\n    result.`$type$` = \"BooleanArray\"\n    return when (init) {\n        null,
true -> fillArrayVal(result, false)\n        false -> result\n        else -> fillArrayFun<Boolean>(result, init)\n
}\n}\n\n@JsName(\"booleanArrayF\")\ninline fun booleanArrayWithFun(size: Int, init: (Int) -> Boolean):
Array<Boolean> = fillArrayFun(booleanArray(size, false),
init)\n\n@JsName(\"charArray\")\n@Suppress(\"UNUSED_PARAMETER\")\nfun charArray(size: Int, init:
dynamic): Array<Char> {\n    val result = js(\"new Uint16Array(size)\")\n    result.`$type$` = \"CharArray\"\n    return
when (init) {\n        null, true, false -> result // For consistency\n        else -> fillArrayFun<Char>(result,
init)\n    }\n}\n\n@JsName(\"charArrayF\")\ninline fun charArrayWithFun(size: Int, init: (Int) -> Char):
Array<Char> {\n    val array = charArray(size, null)\n    for (i in 0..array.size - 1) {\n
@Suppress(\"UNUSED_VARIABLE\") // used in js block\n        val value = init(i)\n        js(\"array[i] = value;\")\n
}\n    return array\n}\n\n@JsName(\"untypedCharArrayF\")\ninline fun untypedCharArrayWithFun(size: Int, init:

```

```

(Int) -> Char): Array<Char> {
    val array = Array<Char>(size)
    for (i in 0..array.size - 1) {
        @Suppress("UNUSED_VARIABLE") // used in js block
        val value = init(i)
        js("array[i] = value;")
    }
    return array
}

@JsName("longArray")
fun longArray(size: Int, init: dynamic): Array<Long> {
    val result: dynamic = Array<Long>(size)
    result.$type$ = "LongArray"
    return when (init) {
        null, true ->
        fillArrayVal(result, 0L)
        false -> result
        else -> fillArrayFun<Long>(result, init)
    }
}

@JsName("longArrayF")
inline fun longArrayWithFun(size: Int, init: (Int) -> Long): Array<Long> =
    fillArrayFun(longArray(size, false), init)

private fun <T> fillArrayVal(array: Array<T>, initialValue: T): Array<T> {
    for (i in 0..array.size - 1) {
        array[i] = initialValue
    }
    return array
}

/*
 * Copyright 2010-2018
 * JetBrains s.r.o. and Kotlin Programming Language contributors.
 * Use of this source code is governed by the
 * Apache 2.0 license that can be found in the license/LICENSE.txt file.
 */
package kotlin
public class
Enum<T : Enum<T>> : Comparable<Enum<T>> {
    @JsName("name$") private var _name: String = ""
    @JsName("ordinal$") private var _ordinal: Int = 0
    val name: String
    get() = _name
    val ordinal:
    Int
    get() = _ordinal
    override fun compareTo(other: Enum<T>) = ordinal.compareTo(other.ordinal)
    override fun equals(other: Any?) = this === other
    override fun hashCode(): Int =
    js("Kotlin.identityHashCode")(this)
    override fun toString() = name
    companion object {
        /*
         * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.
         * Use of this source code is
         * governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.
         */
        package kotlin.js.internal
        @JsName("DoubleCompanionObject")
        internal object DoubleCompanionObject {
            @JsName("MIN_VALUE")
            const val MIN_VALUE: Double = 4.9E-324
            @JsName("MAX_VALUE")
            const val MAX_VALUE: Double = 1.7976931348623157E308
            @JsName("POSITIVE_INFINITY")
            @Suppress("DIVISION_BY_ZERO")
            const val
            POSITIVE_INFINITY: Double = 1.0 / 0.0
            @JsName("NEGATIVE_INFINITY")
            @Suppress("DIVISION_BY_ZERO")
            const val NEGATIVE_INFINITY: Double = -1.0 / 0.0
            @JsName("NaN")
            @Suppress("DIVISION_BY_ZERO")
            const val NaN: Double = -(0.0 / 0.0)
            @JsName("SIZE_BYTES")
            const val SIZE_BYTES = 8
            @JsName("SIZE_BITS")
            const val
            SIZE_BITS = 64
        }
        @JsName("FloatCompanionObject")
        internal object FloatCompanionObject {
            @JsName("MIN_VALUE")
            const val MIN_VALUE: Float = 1.4E-45F
            @JsName("MAX_VALUE")
            const val MAX_VALUE: Float = 3.4028235E38F
            @JsName("POSITIVE_INFINITY")
            @Suppress("DIVISION_BY_ZERO")
            const val POSITIVE_INFINITY: Float = 1.0F / 0.0F
            @JsName("NEGATIVE_INFINITY")
            @Suppress("DIVISION_BY_ZERO")
            const val
            NEGATIVE_INFINITY: Float = -1.0F / 0.0F
            @JsName("NaN")
            @Suppress("DIVISION_BY_ZERO")
            const val NaN: Float = -(0.0F / 0.0F)
            @JsName("SIZE_BYTES")
            const val SIZE_BYTES = 4
            @JsName("SIZE_BITS")
            const val
            SIZE_BITS = 32
        }
        @JsName("IntCompanionObject")
        internal object IntCompanionObject {
            @JsName("MIN_VALUE")
            val MIN_VALUE: Int = -2147483647 - 1
            @JsName("MAX_VALUE")
            val MAX_VALUE: Int = 2147483647
            @JsName("SIZE_BYTES")
            const val SIZE_BYTES = 4
            @JsName("SIZE_BITS")
            const val SIZE_BITS = 32
        }
        @JsName("LongCompanionObject")
        internal
        object LongCompanionObject {
            @JsName("MIN_VALUE")
            val MIN_VALUE: Long =
            js("Kotlin.Long.MIN_VALUE")
            @JsName("MAX_VALUE")
            val MAX_VALUE: Long =
            js("Kotlin.Long.MAX_VALUE")
            @JsName("SIZE_BYTES")
            const val SIZE_BYTES = 8
            @JsName("SIZE_BITS")
            const val SIZE_BITS = 64
        }
        @JsName("ShortCompanionObject")
        internal
        object ShortCompanionObject {
            @JsName("MIN_VALUE")
            val MIN_VALUE: Short = -32768
            @JsName("MAX_VALUE")
            val MAX_VALUE: Short = 32767
            @JsName("SIZE_BYTES")
            const
            val SIZE_BYTES = 2
            @JsName("SIZE_BITS")
            const val SIZE_BITS =
            16
        }
        @JsName("ByteCompanionObject")
        internal object ByteCompanionObject {
            @JsName("MIN_VALUE")
            val MIN_VALUE: Byte = -128
            @JsName("MAX_VALUE")
            val
            MAX_VALUE: Byte = 127
            @JsName("SIZE_BYTES")
            const val SIZE_BYTES = 1
            @JsName("SIZE_BITS")
            const val SIZE_BITS = 8
        }
        @JsName("CharCompanionObject")
        internal
    }
}

```

```

object CharCompanionObject {
    @JsName("MIN_VALUE") public const val MIN_VALUE: Char =
        "\u0000"
    @JsName("MAX_VALUE") public const val MAX_VALUE: Char = "\uFFFF"
    @JsName("MIN_HIGH_SURROGATE") public const val MIN_HIGH_SURROGATE: Char = "\uD800"
    @JsName("MAX_HIGH_SURROGATE") public const val MAX_HIGH_SURROGATE: Char =
        "\uDBFF"
    @JsName("MIN_LOW_SURROGATE") public const val MIN_LOW_SURROGATE: Char =
        "\uDC00"
    @JsName("MAX_LOW_SURROGATE") public const val MAX_LOW_SURROGATE: Char =
        "\uDFFF"
    @JsName("MIN_SURROGATE") public const val MIN_SURROGATE: Char =
        MIN_HIGH_SURROGATE
    @JsName("MAX_SURROGATE") public const val MAX_SURROGATE:
        Char = MAX_LOW_SURROGATE
    @JsName("SIZE_BYTES") const val SIZE_BYTES = 2
    @JsName("SIZE_BITS") const val SIZE_BITS = 16
}
internal object StringCompanionObject
{
}
internal object BooleanCompanionObject {
}
}
/*
 * Copyright 2010-2021 JetBrains s.r.o. and Kotlin
 * Programming Language contributors.
 * Use of this source code is governed by the Apache 2.0 license that can be
 * found in the license/LICENSE.txt file.
 */
@file:kotlin.jvm.JvmMultifileClass
@file:kotlin.jvm.JvmName("ArraysKt")
package
kotlin.collections
// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt
// See:
// https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib
import kotlin.random.*
import
kotlin.ranges.contains
import kotlin.ranges.reversed
/**
 * Returns 1st element from the array.
 * If the
 * size of this array is less than 1, throws an [IndexOutOfBoundsException] except in Kotlin/JS
 * where the behavior
 * is unspecified.
 */
@kotlin.internal.InlineOnly
public inline operator fun <T> Array<out T>.component1(): T
{
    return get(0)
}
/**
 * Returns 1st element from the array.
 * If the
 * size of this array is less than 1,
 * throws an [IndexOutOfBoundsException] except in Kotlin/JS
 * where the behavior is unspecified.
 */
@kotlin.internal.InlineOnly
public inline operator fun ByteArray.component1(): Byte {
    return
    get(0)
}
/**
 * Returns 1st element from the array.
 * If the
 * size of this array is less than 1, throws an
 * [IndexOutOfBoundsException] except in Kotlin/JS
 * where the behavior is unspecified.
 */
@kotlin.internal.InlineOnly
public inline operator fun ShortArray.component1(): Short {
    return
    get(0)
}
/**
 * Returns 1st element from the array.
 * If the
 * size of this array is less than 1, throws an
 * [IndexOutOfBoundsException] except in Kotlin/JS
 * where the behavior is unspecified.
 */
@kotlin.internal.InlineOnly
public inline operator fun IntArray.component1(): Int {
    return
    get(0)
}
/**
 * Returns 1st element from the array.
 * If the
 * size of this array is less than 1, throws an
 * [IndexOutOfBoundsException] except in Kotlin/JS
 * where the behavior is unspecified.
 */
@kotlin.internal.InlineOnly
public inline operator fun LongArray.component1(): Long {
    return
    get(0)
}
/**
 * Returns 1st element from the array.
 * If the
 * size of this array is less than 1, throws an
 * [IndexOutOfBoundsException] except in Kotlin/JS
 * where the behavior is unspecified.
 */
@kotlin.internal.InlineOnly
public inline operator fun FloatArray.component1(): Float {
    return
    get(0)
}
/**
 * Returns 1st element from the array.
 * If the
 * size of this array is less than 1, throws an
 * [IndexOutOfBoundsException] except in Kotlin/JS
 * where the behavior is unspecified.
 */
@kotlin.internal.InlineOnly
public inline operator fun DoubleArray.component1(): Double {
    return
    get(0)
}
/**
 * Returns 1st element from the array.
 * If the
 * size of this array is less than 1, throws an
 * [IndexOutOfBoundsException] except in Kotlin/JS
 * where the behavior is unspecified.
 */
@kotlin.internal.InlineOnly
public inline operator fun BooleanArray.component1(): Boolean {
    return
    get(0)
}
/**
 * Returns 2nd element from the array.
 * If the
 * size of this array is less than 2, throws an
 * [IndexOutOfBoundsException] except in Kotlin/JS
 * where the behavior is unspecified.
 */
@kotlin.internal.InlineOnly
public inline operator fun <T> Array<out T>.component2(): T {
    return
    get(1)
}

```

```

*\n@kotlin.internal.InlineOnly\npublic inline operator fun ByteArray.component2(): Byte {\n    return
get(1)\n}\n\n/**\n * Returns 2nd *element* from the array.\n * \n * If the size of this array is less than 2, throws an
[IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun ShortArray.component2(): Short {\n    return
get(1)\n}\n\n/**\n * Returns 2nd *element* from the array.\n * \n * If the size of this array is less than 2, throws an
[IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun IntArray.component2(): Int {\n    return
get(1)\n}\n\n/**\n * Returns 2nd *element* from the array.\n * \n * If the size of this array is less than 2, throws an
[IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun LongArray.component2(): Long {\n    return
get(1)\n}\n\n/**\n * Returns 2nd *element* from the array.\n * \n * If the size of this array is less than 2, throws an
[IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun FloatArray.component2(): Float {\n    return
get(1)\n}\n\n/**\n * Returns 2nd *element* from the array.\n * \n * If the size of this array is less than 2, throws an
[IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun DoubleArray.component2(): Double {\n    return
get(1)\n}\n\n/**\n * Returns 2nd *element* from the array.\n * \n * If the size of this array is less than 2, throws an
[IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun BooleanArray.component2(): Boolean {\n    return
get(1)\n}\n\n/**\n * Returns 2nd *element* from the array.\n * \n * If the size of this array is less than 2, throws an
[IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun CharArray.component2(): Char {\n    return
get(1)\n}\n\n/**\n * Returns 3rd *element* from the array.\n * \n * If the size of this array is less than 3, throws an
[IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun <T> Array<out T>.component3(): T {\n    return
get(2)\n}\n\n/**\n * Returns 3rd *element* from the array.\n * \n * If the size of this array is less than 3, throws an
[IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun ByteArray.component3(): Byte {\n    return
get(2)\n}\n\n/**\n * Returns 3rd *element* from the array.\n * \n * If the size of this array is less than 3, throws an
[IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun ShortArray.component3(): Short {\n    return
get(2)\n}\n\n/**\n * Returns 3rd *element* from the array.\n * \n * If the size of this array is less than 3, throws an
[IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun IntArray.component3(): Int {\n    return
get(2)\n}\n\n/**\n * Returns 3rd *element* from the array.\n * \n * If the size of this array is less than 3, throws an
[IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun LongArray.component3(): Long {\n    return
get(2)\n}\n\n/**\n * Returns 3rd *element* from the array.\n * \n * If the size of this array is less than 3, throws an
[IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun FloatArray.component3(): Float {\n    return
get(2)\n}\n\n/**\n * Returns 3rd *element* from the array.\n * \n * If the size of this array is less than 3, throws an
[IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun DoubleArray.component3(): Double {\n    return
get(2)\n}\n\n/**\n * Returns 3rd *element* from the array.\n * \n * If the size of this array is less than 3, throws an
[IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun BooleanArray.component3(): Boolean {\n    return
get(2)\n}\n\n/**\n * Returns 3rd *element* from the array.\n * \n * If the size of this array is less than 3, throws an
[IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n

```



```

*\n@kotlin.internal.InlineOnly\npublic inline operator fun CharArray.component3(): Char {\n    return
get(2)\n}\n\n/**\n * Returns 4th *element* from the array.\n * \n * If the size of this array is less than 4, throws an
[IndexOutOfBoundsExcep] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun <T> Array<out T>.component4(): T {\n    return
get(3)\n}\n\n/**\n * Returns 4th *element* from the array.\n * \n * If the size of this array is less than 4, throws an
[IndexOutOfBoundsExcep] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun ByteArray.component4(): Byte {\n    return
get(3)\n}\n\n/**\n * Returns 4th *element* from the array.\n * \n * If the size of this array is less than 4, throws an
[IndexOutOfBoundsExcep] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun ShortArray.component4(): Short {\n    return
get(3)\n}\n\n/**\n * Returns 4th *element* from the array.\n * \n * If the size of this array is less than 4, throws an
[IndexOutOfBoundsExcep] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun IntArray.component4(): Int {\n    return
get(3)\n}\n\n/**\n * Returns 4th *element* from the array.\n * \n * If the size of this array is less than 4, throws an
[IndexOutOfBoundsExcep] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun LongArray.component4(): Long {\n    return
get(3)\n}\n\n/**\n * Returns 4th *element* from the array.\n * \n * If the size of this array is less than 4, throws an
[IndexOutOfBoundsExcep] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun FloatArray.component4(): Float {\n    return
get(3)\n}\n\n/**\n * Returns 4th *element* from the array.\n * \n * If the size of this array is less than 4, throws an
[IndexOutOfBoundsExcep] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun DoubleArray.component4(): Double {\n    return
get(3)\n}\n\n/**\n * Returns 4th *element* from the array.\n * \n * If the size of this array is less than 4, throws an
[IndexOutOfBoundsExcep] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun BooleanArray.component4(): Boolean {\n    return
get(3)\n}\n\n/**\n * Returns 4th *element* from the array.\n * \n * If the size of this array is less than 4, throws an
[IndexOutOfBoundsExcep] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun CharArray.component4(): Char {\n    return
get(3)\n}\n\n/**\n * Returns 5th *element* from the array.\n * \n * If the size of this array is less than 5, throws an
[IndexOutOfBoundsExcep] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun <T> Array<out T>.component5(): T {\n    return
get(4)\n}\n\n/**\n * Returns 5th *element* from the array.\n * \n * If the size of this array is less than 5, throws an
[IndexOutOfBoundsExcep] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun ByteArray.component5(): Byte {\n    return
get(4)\n}\n\n/**\n * Returns 5th *element* from the array.\n * \n * If the size of this array is less than 5, throws an
[IndexOutOfBoundsExcep] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun ShortArray.component5(): Short {\n    return
get(4)\n}\n\n/**\n * Returns 5th *element* from the array.\n * \n * If the size of this array is less than 5, throws an
[IndexOutOfBoundsExcep] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun IntArray.component5(): Int {\n    return
get(4)\n}\n\n/**\n * Returns 5th *element* from the array.\n * \n * If the size of this array is less than 5, throws an
[IndexOutOfBoundsExcep] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun LongArray.component5(): Long {\n    return
get(4)\n}\n\n/**\n * Returns 5th *element* from the array.\n * \n * If the size of this array is less than 5, throws an
[IndexOutOfBoundsExcep] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\n@kotlin.internal.InlineOnly\npublic inline operator fun FloatArray.component5(): Float {\n    return
get(4)\n}\n\n/**\n * Returns 5th *element* from the array.\n * \n * If the size of this array is less than 5, throws an
[IndexOutOfBoundsExcep] except in Kotlin/JS\n * where the behavior is unspecified.\n

```

```

*\/n@kotlin.internal.InlineOnly\npublic inline operator fun DoubleArray.component5(): Double {\n    return
get(4)\n}\n\n/**\n * Returns 5th *element* from the array.\n * \n * If the size of this array is less than 5, throws an
[IndexOutOfBoundsExcpetion] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\/n@kotlin.internal.InlineOnly\npublic inline operator fun BooleanArray.component5(): Boolean {\n    return
get(4)\n}\n\n/**\n * Returns 5th *element* from the array.\n * \n * If the size of this array is less than 5, throws an
[IndexOutOfBoundsExcpetion] except in Kotlin/JS\n * where the behavior is unspecified.\n
*\/n@kotlin.internal.InlineOnly\npublic inline operator fun CharArray.component5(): Char {\n    return
get(4)\n}\n\n/**\n * Returns `true` if [element] is found in the array.\n *\/n\npublic operator fun
<@kotlin.internal.OnlyInputTypes T> Array<out T>.contains(element: T): Boolean {\n    return indexOf(element)
>= 0\n}\n\n/**\n * Returns `true` if [element] is found in the array.\n *\/n\npublic operator fun
ByteArray.contains(element: Byte): Boolean {\n    return indexOf(element) >= 0\n}\n\n/**\n * Returns `true` if
[element] is found in the array.\n *\/n\npublic operator fun ShortArray.contains(element: Short): Boolean {\n    return
indexOf(element) >= 0\n}\n\n/**\n * Returns `true` if [element] is found in the array.\n *\/n\npublic operator fun
IntArray.contains(element: Int): Boolean {\n    return indexOf(element) >= 0\n}\n\n/**\n * Returns `true` if
[element] is found in the array.\n *\/n\npublic operator fun LongArray.contains(element: Long): Boolean {\n    return
indexOf(element) >= 0\n}\n\n/**\n * Returns `true` if [element] is found in the array.\n *\/n\n@Deprecated("The
function has unclear behavior when searching for NaN or zero values and will be removed soon. Use 'any { it ==
element }' instead to continue using this behavior, or '.asList().contains(element: T)' to get the same search behavior
as in a list.", ReplaceWith("any { it == element }"))\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.6")\n@Suppress("DEPRECATION_ERROR")\npublic operator fun FloatArray.contains(element: Float):
Boolean {\n    return indexOf(element) >= 0\n}\n\n/**\n * Returns `true` if [element] is found in the array.\n
*\/n\n@Deprecated("The function has unclear behavior when searching for NaN or zero values and will be removed
soon. Use 'any { it == element }' instead to continue using this behavior, or '.asList().contains(element: T)' to get the
same search behavior as in a list.", ReplaceWith("any { it == element
}"))\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince =
"1.6")\n@Suppress("DEPRECATION_ERROR")\npublic operator fun DoubleArray.contains(element: Double):
Boolean {\n    return indexOf(element) >= 0\n}\n\n/**\n * Returns `true` if [element] is found in the array.\n
*\/n\npublic operator fun BooleanArray.contains(element: Boolean): Boolean {\n    return indexOf(element) >=
0\n}\n\n/**\n * Returns `true` if [element] is found in the array.\n *\/n\npublic operator fun
CharArray.contains(element: Char): Boolean {\n    return indexOf(element) >= 0\n}\n\n/**\n * Returns an element
at the given [index] or throws an [IndexOutOfBoundsExcpetion] if the [index] is out of bounds of this array.\n * \n *
@sample samples.collections.Collections.Elements.elementAt\n *\/n\npublic expect fun <T> Array<out
T>.elementAt(index: Int): T\n\n/**\n * Returns an element at the given [index] or throws an
[IndexOutOfBoundsExcpetion] if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAt\n *\/n\npublic expect fun ByteArray.elementAt(index: Int):
Byte\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsExcpetion] if the [index] is
out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n *\/n\npublic
expect fun ShortArray.elementAt(index: Int): Short\n\n/**\n * Returns an element at the given [index] or throws an
[IndexOutOfBoundsExcpetion] if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAt\n *\/n\npublic expect fun IntArray.elementAt(index: Int):
Int\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsExcpetion] if the [index] is
out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n *\/n\npublic
expect fun LongArray.elementAt(index: Int): Long\n\n/**\n * Returns an element at the given [index] or throws an
[IndexOutOfBoundsExcpetion] if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAt\n *\/n\npublic expect fun FloatArray.elementAt(index: Int):
Float\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsExcpetion] if the [index]
is out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n *\/n\npublic
expect fun DoubleArray.elementAt(index: Int): Double\n\n/**\n * Returns an element at the given [index] or throws

```

an [IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n * \n * @sample

```

samples.collections.Collections.Elements.elementAt\n * \n\npublic expect fun BooleanArray.elementAt(index: Int):
Boolean\n\n**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the
[index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAt\n * \n\npublic expect fun CharArray.elementAt(index: Int): Char\n\n**\n * Returns an element at the given [index] or
the result of calling the [defaultValue] function if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n * \n\n@kotlin.internal.InlineOnly\n\npublic inline fun
<T> Array<out T>.elementAtOrElse(index: Int, defaultValue: (Int) -> T): T {\n    return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n\n**\n * Returns an element at the given [index] or the result of
calling the [defaultValue] function if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n * \n\n@kotlin.internal.InlineOnly\n\npublic inline fun
ByteArray.elementAtOrElse(index: Int, defaultValue: (Int) -> Byte): Byte {\n    return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n\n**\n * Returns an element at the given [index] or the result of
calling the [defaultValue] function if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n * \n\n@kotlin.internal.InlineOnly\n\npublic inline fun
ShortArray.elementAtOrElse(index: Int, defaultValue: (Int) -> Short): Short {\n    return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n\n**\n * Returns an element at the given [index] or the result of
calling the [defaultValue] function if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n * \n\n@kotlin.internal.InlineOnly\n\npublic inline fun
IntArray.elementAtOrElse(index: Int, defaultValue: (Int) -> Int): Int {\n    return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n\n**\n * Returns an element at the given [index] or the result of
calling the [defaultValue] function if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n * \n\n@kotlin.internal.InlineOnly\n\npublic inline fun
LongArray.elementAtOrElse(index: Int, defaultValue: (Int) -> Long): Long {\n    return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n\n**\n * Returns an element at the given [index] or the result of
calling the [defaultValue] function if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n * \n\n@kotlin.internal.InlineOnly\n\npublic inline fun
FloatArray.elementAtOrElse(index: Int, defaultValue: (Int) -> Float): Float {\n    return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n\n**\n * Returns an element at the given [index] or the result of
calling the [defaultValue] function if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n * \n\n@kotlin.internal.InlineOnly\n\npublic inline fun
DoubleArray.elementAtOrElse(index: Int, defaultValue: (Int) -> Double): Double {\n    return if (index >= 0 &&
index <= lastIndex) get(index) else defaultValue(index)\n}\n\n**\n * Returns an element at the given [index] or the
result of calling the [defaultValue] function if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n * \n\n@kotlin.internal.InlineOnly\n\npublic inline fun
BooleanArray.elementAtOrElse(index: Int, defaultValue: (Int) -> Boolean): Boolean {\n    return if (index >= 0 &&
index <= lastIndex) get(index) else defaultValue(index)\n}\n\n**\n * Returns an element at the given [index] or the
result of calling the [defaultValue] function if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n * \n\n@kotlin.internal.InlineOnly\n\npublic inline fun
CharArray.elementAtOrElse(index: Int, defaultValue: (Int) -> Char): Char {\n    return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n\n**\n * Returns an element at the given [index] or `null` if the
[index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrNull\n * \n\n@kotlin.internal.InlineOnly\n\npublic inline fun
<T> Array<out T>.elementAtOrNull(index: Int): T? {\n    return this.getOrNull(index)\n}\n\n**\n * Returns an
element at the given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrNull\n * \n\n@kotlin.internal.InlineOnly\n\npublic inline fun
ByteArray.elementAtOrNull(index: Int): Byte? {\n    return this.getOrNull(index)\n}\n\n**\n * Returns an element
at the given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample

```

```

samples.collections.Collections.Elements.elementAtOrNull\n *^n@kotlin.internal.InlineOnly\npublic inline fun
ShortArray.elementAtOrNull(index: Int): Short? {\n  return this.getOrNull(index)\n}\n\n/**\n * Returns an element
at the given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrNull\n *^n@kotlin.internal.InlineOnly\npublic inline fun
IntArray.elementAtOrNull(index: Int): Int? {\n  return this.getOrNull(index)\n}\n\n/**\n * Returns an element at
the given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrNull\n *^n@kotlin.internal.InlineOnly\npublic inline fun
LongArray.elementAtOrNull(index: Int): Long? {\n  return this.getOrNull(index)\n}\n\n/**\n * Returns an element
at the given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrNull\n *^n@kotlin.internal.InlineOnly\npublic inline fun
FloatArray.elementAtOrNull(index: Int): Float? {\n  return this.getOrNull(index)\n}\n\n/**\n * Returns an element
at the given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrNull\n *^n@kotlin.internal.InlineOnly\npublic inline fun
DoubleArray.elementAtOrNull(index: Int): Double? {\n  return this.getOrNull(index)\n}\n\n/**\n * Returns an
element at the given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrNull\n *^n@kotlin.internal.InlineOnly\npublic inline fun
BooleanArray.elementAtOrNull(index: Int): Boolean? {\n  return this.getOrNull(index)\n}\n\n/**\n * Returns an
element at the given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrNull\n *^n@kotlin.internal.InlineOnly\npublic inline fun
CharArray.elementAtOrNull(index: Int): Char? {\n  return this.getOrNull(index)\n}\n\n/**\n * Returns the first
element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n *^n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out
T>.find(predicate: (T) -> Boolean): T? {\n  return firstOrNull(predicate)\n}\n\n/**\n * Returns the first element
matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n *^n@kotlin.internal.InlineOnly\npublic inline fun
ByteArray.find(predicate: (Byte) -> Boolean): Byte? {\n  return firstOrNull(predicate)\n}\n\n/**\n * Returns the
first element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n *^n@kotlin.internal.InlineOnly\npublic inline fun
ShortArray.find(predicate: (Short) -> Boolean): Short? {\n  return firstOrNull(predicate)\n}\n\n/**\n * Returns the
first element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n *^n@kotlin.internal.InlineOnly\npublic inline fun
IntArray.find(predicate: (Int) -> Boolean): Int? {\n  return firstOrNull(predicate)\n}\n\n/**\n * Returns the first
element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n *^n@kotlin.internal.InlineOnly\npublic inline fun
LongArray.find(predicate: (Long) -> Boolean): Long? {\n  return firstOrNull(predicate)\n}\n\n/**\n * Returns the
first element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n *^n@kotlin.internal.InlineOnly\npublic inline fun
FloatArray.find(predicate: (Float) -> Boolean): Float? {\n  return firstOrNull(predicate)\n}\n\n/**\n * Returns the
first element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n *^n@kotlin.internal.InlineOnly\npublic inline fun
DoubleArray.find(predicate: (Double) -> Boolean): Double? {\n  return firstOrNull(predicate)\n}\n\n/**\n *
Returns the first element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n *^n@kotlin.internal.InlineOnly\npublic inline fun
BooleanArray.find(predicate: (Boolean) -> Boolean): Boolean? {\n  return firstOrNull(predicate)\n}\n\n/**\n *
Returns the first element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n *^n@kotlin.internal.InlineOnly\npublic inline fun
CharArray.find(predicate: (Char) -> Boolean): Char? {\n  return firstOrNull(predicate)\n}\n\n/**\n * Returns the
last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample

```

```

samples.collections.Collections.Elements.find\n */\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out
T>.findLast(predicate: (T) -> Boolean): T? {\n    return lastOrNull(predicate)\n}\n\n/**\n * Returns the last element
matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n */\n@kotlin.internal.InlineOnly\npublic inline fun
ByteArray.findLast(predicate: (Byte) -> Boolean): Byte? {\n    return lastOrNull(predicate)\n}\n\n/**\n * Returns
the last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n */\n@kotlin.internal.InlineOnly\npublic inline fun
ShortArray.findLast(predicate: (Short) -> Boolean): Short? {\n    return lastOrNull(predicate)\n}\n\n/**\n * Returns
the last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n */\n@kotlin.internal.InlineOnly\npublic inline fun
IntArray.findLast(predicate: (Int) -> Boolean): Int? {\n    return lastOrNull(predicate)\n}\n\n/**\n * Returns the last
element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n */\n@kotlin.internal.InlineOnly\npublic inline fun
LongArray.findLast(predicate: (Long) -> Boolean): Long? {\n    return lastOrNull(predicate)\n}\n\n/**\n * Returns
the last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n */\n@kotlin.internal.InlineOnly\npublic inline fun
FloatArray.findLast(predicate: (Float) -> Boolean): Float? {\n    return lastOrNull(predicate)\n}\n\n/**\n * Returns
the last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n */\n@kotlin.internal.InlineOnly\npublic inline fun
DoubleArray.findLast(predicate: (Double) -> Boolean): Double? {\n    return lastOrNull(predicate)\n}\n\n/**\n *
Returns the last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n */\n@kotlin.internal.InlineOnly\npublic inline fun
BooleanArray.findLast(predicate: (Boolean) -> Boolean): Boolean? {\n    return lastOrNull(predicate)\n}\n\n/**\n *
Returns the last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n */\n@kotlin.internal.InlineOnly\npublic inline fun
CharArray.findLast(predicate: (Char) -> Boolean): Char? {\n    return lastOrNull(predicate)\n}\n\n/**\n * Returns
first element.\n * @throws [NoSuchElementException] if the array is empty.\n */\npublic fun <T> Array<out
T>.first(): T {\n    if (isEmpty())\n        throw NoSuchElementException("Array is empty.")\n    return
this[0]\n}\n\n/**\n * Returns first element.\n * @throws [NoSuchElementException] if the array is empty.\n
*/\npublic fun ByteArray.first(): Byte {\n    if (isEmpty())\n        throw NoSuchElementException("Array is
empty.")\n    return this[0]\n}\n\n/**\n * Returns first element.\n * @throws [NoSuchElementException] if the
array is empty.\n */\npublic fun ShortArray.first(): Short {\n    if (isEmpty())\n        throw
NoSuchElementException("Array is empty.")\n    return this[0]\n}\n\n/**\n * Returns first element.\n * @throws
[NoSuchElementException] if the array is empty.\n */\npublic fun IntArray.first(): Int {\n    if (isEmpty())\n
throw NoSuchElementException("Array is empty.")\n    return this[0]\n}\n\n/**\n * Returns first element.\n *
@throws [NoSuchElementException] if the array is empty.\n */\npublic fun LongArray.first(): Long {\n    if
(isEmpty())\n        throw NoSuchElementException("Array is empty.")\n    return this[0]\n}\n\n/**\n * Returns first
element.\n * @throws [NoSuchElementException] if the array is empty.\n */\npublic fun FloatArray.first(): Float
{\n    if (isEmpty())\n        throw NoSuchElementException("Array is empty.")\n    return this[0]\n}\n\n/**\n *
Returns first element.\n * @throws [NoSuchElementException] if the array is empty.\n */\npublic fun
DoubleArray.first(): Double {\n    if (isEmpty())\n        throw NoSuchElementException("Array is empty.")\n
return this[0]\n}\n\n/**\n * Returns first element.\n * @throws [NoSuchElementException] if the array is empty.\n
*/\npublic fun BooleanArray.first(): Boolean {\n    if (isEmpty())\n        throw NoSuchElementException("Array is
empty.")\n    return this[0]\n}\n\n/**\n * Returns first element.\n * @throws [NoSuchElementException] if the
array is empty.\n */\npublic fun CharArray.first(): Char {\n    if (isEmpty())\n        throw
NoSuchElementException("Array is empty.")\n    return this[0]\n}\n\n/**\n * Returns the first element matching
the given [predicate].\n * @throws [NoSuchElementException] if no such element is found.\n */\npublic inline fun
<T> Array<out T>.first(predicate: (T) -> Boolean): T {\n    for (element in this) if (predicate(element)) return

```

```

element\n  throw NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n * Returns the first element matching the given [predicate].\n * @throws [NoSuchElementException] if no such element is found.\n */\npublic inline fun ByteArray.first(predicate: (Byte) -> Boolean): Byte {\n  for (element in this) if (predicate(element)) return element\n  throw NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n * Returns the first element matching the given [predicate].\n * @throws [NoSuchElementException] if no such element is found.\n */\npublic inline fun ShortArray.first(predicate: (Short) -> Boolean): Short {\n  for (element in this) if (predicate(element)) return element\n  throw NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n * Returns the first element matching the given [predicate].\n * @throws [NoSuchElementException] if no such element is found.\n */\npublic inline fun IntArray.first(predicate: (Int) -> Boolean): Int {\n  for (element in this) if (predicate(element)) return element\n  throw NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n * Returns the first element matching the given [predicate].\n * @throws [NoSuchElementException] if no such element is found.\n */\npublic inline fun LongArray.first(predicate: (Long) -> Boolean): Long {\n  for (element in this) if (predicate(element)) return element\n  throw NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n * Returns the first element matching the given [predicate].\n * @throws [NoSuchElementException] if no such element is found.\n */\npublic inline fun FloatArray.first(predicate: (Float) -> Boolean): Float {\n  for (element in this) if (predicate(element)) return element\n  throw NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n * Returns the first element matching the given [predicate].\n * @throws [NoSuchElementException] if no such element is found.\n */\npublic inline fun DoubleArray.first(predicate: (Double) -> Boolean): Double {\n  for (element in this) if (predicate(element)) return element\n  throw NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n * Returns the first element matching the given [predicate].\n * @throws [NoSuchElementException] if no such element is found.\n */\npublic inline fun BooleanArray.first(predicate: (Boolean) -> Boolean): Boolean {\n  for (element in this) if (predicate(element)) return element\n  throw NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n * Returns the first element matching the given [predicate].\n * @throws [NoSuchElementException] if no such element is found.\n */\npublic inline fun CharArray.first(predicate: (Char) -> Boolean): Char {\n  for (element in this) if (predicate(element)) return element\n  throw NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n * Returns the first non-null value produced by [transform] function being applied to elements of this array in iteration order,\n * or throws [NoSuchElementException] if no non-null value was produced.\n */\n\n * @sample\n samples.collections.Collections.Transformations.firstNotNullOf\n\n *\n * @SinceKotlin("1.5")\n * @kotlin.internal.InlineOnly\n */\npublic inline fun <T, R : Any> Array<out T>.firstNotNullOf(transform: (T) -> R?): R {\n  return firstNotNullOfOrNull(transform) ?: throw NoSuchElementException("No element of the array was transformed to a non-null value.")\n}\n\n/**\n * Returns the first non-null value produced by [transform] function being applied to elements of this array in iteration order,\n * or `null` if no non-null value was produced.\n */\n\n * @sample\n samples.collections.Collections.Transformations.firstNotNullOf\n\n *\n * @SinceKotlin("1.5")\n * @kotlin.internal.InlineOnly\n */\npublic inline fun <T, R : Any> Array<out T>.firstNotNullOfOrNull(transform: (T) -> R?): R? {\n  for (element in this) {\n    val result = transform(element)\n    if (result != null) {\n      return result\n    }\n  }\n  return null\n}\n\n/**\n * Returns the first element, or `null` if the array is empty.\n */\npublic fun <T> Array<out T>.firstOrNull(): T? {\n  return if (isEmpty()) null else this[0]\n}\n\n/**\n * Returns the first element, or `null` if the array is empty.\n */\npublic fun ByteArray.firstOrNull(): Byte? {\n  return if (isEmpty()) null else this[0]\n}\n\n/**\n * Returns the first element, or `null` if the array is empty.\n */\npublic fun ShortArray.firstOrNull(): Short? {\n  return if (isEmpty()) null else this[0]\n}\n\n/**\n * Returns the first element, or `null` if the array is empty.\n */\npublic fun IntArray.firstOrNull(): Int? {\n  return if (isEmpty()) null else this[0]\n}\n\n/**\n * Returns the first element, or `null` if the array is empty.\n */\npublic fun LongArray.firstOrNull(): Long? {\n  return if (isEmpty()) null else

```

`this[0]` Returns the first element, or `null` if the array is empty. `public fun`
`FloatArray.firstOrNull(): Float?` Returns the first element, or `null` if the array is empty. `public fun`
`DoubleArray.firstOrNull(): Double?` Returns the first element, or `null` if the array is empty. `public fun`
`BooleanArray.firstOrNull(): Boolean?` Returns the first element, or `null` if the array is empty. `public fun`
`CharArray.firstOrNull(): Char?` Returns the first element matching the given [predicate], or `null` if element was not found. `public inline fun`
`<T> Array<out T>.firstOrNull(predicate: (T) -> Boolean): T?` Returns the first element matching the given [predicate], or `null` if element was not found. `public inline fun`
`ByteArray.firstOrNull(predicate: (Byte) -> Boolean): Byte?` Returns the first element matching the given [predicate], or `null` if element was not found. `public inline fun`
`ShortArray.firstOrNull(predicate: (Short) -> Boolean): Short?` Returns the first element matching the given [predicate], or `null` if element was not found. `public inline fun`
`IntArray.firstOrNull(predicate: (Int) -> Boolean): Int?` Returns the first element matching the given [predicate], or `null` if element was not found. `public inline fun`
`LongArray.firstOrNull(predicate: (Long) -> Boolean): Long?` Returns the first element matching the given [predicate], or `null` if element was not found. `public inline fun`
`FloatArray.firstOrNull(predicate: (Float) -> Boolean): Float?` Returns the first element matching the given [predicate], or `null` if element was not found. `public inline fun`
`DoubleArray.firstOrNull(predicate: (Double) -> Boolean): Double?` Returns the first element matching the given [predicate], or `null` if element was not found. `public inline fun`
`BooleanArray.firstOrNull(predicate: (Boolean) -> Boolean): Boolean?` Returns the first element matching the given [predicate], or `null` if element was not found. `public inline fun`
`CharArray.firstOrNull(predicate: (Char) -> Boolean): Char?` Returns an element at the given [index] or the result of calling the [defaultValue] function if the [index] is out of bounds of this array. `public inline fun`
`@kotlin.internal.InlineOnly public inline fun <T> Array<out T>.getOrNull(index: Int, default: (Int) -> T): T?` Returns an element at the given [index] or the result of calling the [defaultValue] function if the [index] is out of bounds of this array. `public inline fun`
`@kotlin.internal.InlineOnly public inline fun ByteArray.getOrNull(index: Int, default: (Int) -> Byte): Byte?` Returns an element at the given [index] or the result of calling the [defaultValue] function if the [index] is out of bounds of this array. `public inline fun`
`@kotlin.internal.InlineOnly public inline fun ShortArray.getOrNull(index: Int, default: (Int) -> Short): Short?` Returns an element at the given [index] or the result of calling the [defaultValue] function if the [index] is out of bounds of this array. `public inline fun`
`@kotlin.internal.InlineOnly public inline fun IntArray.getOrNull(index: Int, default: (Int) -> Int): Int?` Returns an element at the given [index] or the result of calling the [defaultValue] function if the [index] is out of bounds of this array. `public inline fun`
`@kotlin.internal.InlineOnly public inline fun LongArray.getOrNull(index: Int, default: (Int) -> Long): Long?` Returns an element at the given [index] or the result of calling the [defaultValue] function if the [index] is out of bounds of this array. `public inline fun`
`@kotlin.internal.InlineOnly public inline fun FloatArray.getOrNull(index: Int, default: (Int) -> Float): Float?` Returns

an element at the given [index] or the result of calling the [defaultValue] function if the [index] is out of bounds of this array.

```

*\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.getOrNull(index: Int, defaultValue: (Int) -> Double): Double {\n    return if (index >= 0 && index <= lastIndex) get(index) else\n    defaultValue(index)\n}\n\n**\n * Returns an element at the given [index] or the result of calling the [defaultValue]\n function if the [index] is out of bounds of this array.
*\n@kotlin.internal.InlineOnly\npublic inline fun\n BooleanArray.getOrNull(index: Int, defaultValue: (Int) -> Boolean): Boolean {\n    return if (index >= 0 && index\n <= lastIndex) get(index) else defaultValue(index)\n}\n\n**\n * Returns an element at the given [index] or the result\n of calling the [defaultValue] function if the [index] is out of bounds of this array.
*\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.getOrNull(index: Int, defaultValue: (Int) -> Char):\n Char {\n    return if (index >= 0 && index <= lastIndex) get(index) else defaultValue(index)\n}\n\n**\n * Returns\n an element at the given [index] or `null` if the [index] is out of bounds of this array.
*\n * @sample\n samples.collections.Collections.Elements.getOrNull\n *\npublic fun <T> Array<out T>.getOrNull(index: Int): T?\n {\n    return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n**\n * Returns an element at the\n given [index] or `null` if the [index] is out of bounds of this array.
*\n * @sample\n samples.collections.Collections.Elements.getOrNull\n *\npublic fun ByteArray.getOrNull(index: Int): Byte? {\n\n return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n**\n * Returns an element at the given\n [index] or `null` if the [index] is out of bounds of this array.
*\n * @sample\n samples.collections.Collections.Elements.getOrNull\n *\npublic fun ShortArray.getOrNull(index: Int): Short? {\n\n return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n**\n * Returns an element at the given\n [index] or `null` if the [index] is out of bounds of this array.
*\n * @sample\n samples.collections.Collections.Elements.getOrNull\n *\npublic fun IntArray.getOrNull(index: Int): Int? {\n\n return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n**\n * Returns an element at the given\n [index] or `null` if the [index] is out of bounds of this array.
*\n * @sample\n samples.collections.Collections.Elements.getOrNull\n *\npublic fun LongArray.getOrNull(index: Int): Long? {\n\n return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n**\n * Returns an element at the given\n [index] or `null` if the [index] is out of bounds of this array.
*\n * @sample\n samples.collections.Collections.Elements.getOrNull\n *\npublic fun FloatArray.getOrNull(index: Int): Float? {\n\n return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n**\n * Returns an element at the given\n [index] or `null` if the [index] is out of bounds of this array.
*\n * @sample\n samples.collections.Collections.Elements.getOrNull\n *\npublic fun DoubleArray.getOrNull(index: Int): Double?\n {\n    return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n**\n * Returns an element at the\n given [index] or `null` if the [index] is out of bounds of this array.
*\n * @sample\n samples.collections.Collections.Elements.getOrNull\n *\npublic fun BooleanArray.getOrNull(index: Int): Boolean?\n {\n    return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n**\n * Returns an element at the\n given [index] or `null` if the [index] is out of bounds of this array.
*\n * @sample\n samples.collections.Collections.Elements.getOrNull\n *\npublic fun CharArray.getOrNull(index: Int): Char? {\n\n return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n**\n * Returns first index of [element], or -\n 1 if the array does not contain element.
*\npublic fun <@kotlin.internal.OnlyInputTypes T> Array<out\n T>.indexOf(element: T): Int {\n    if (element == null) {\n        for (index in indices) {\n            if (this[index] ==\n            null) {\n                return index\n            }\n        }\n    } else {\n        for (index in indices) {\n            if (element ==\n            this[index]) {\n                return index\n            }\n        }\n    }\n    return -1\n}\n\n**\n * Returns first index of\n [element], or -1 if the array does not contain element.
*\npublic fun ByteArray.indexOf(element: Byte): Int {\n\n for (index in indices) {\n    if (element == this[index]) {\n        return index\n    }\n}\n    return -\n 1\n}\n\n**\n * Returns first index of [element], or -1 if the array does not contain element.
*\npublic fun\n ShortArray.indexOf(element: Short): Int {\n    for (index in indices) {\n        if (element == this[index]) {\n\n return index\n        }\n    }\n    return -1\n}\n\n**\n * Returns first index of [element], or -1 if the array does not\n contain element.
*\npublic fun IntArray.indexOf(element: Int): Int {\n    for (index in indices) {\n        if (element\n == this[index]) {\n            return index\n        }\n    }\n    return -1\n}\n\n**\n * Returns first index of [element], or -

```



```

1 if the array does not contain element.
 */
public fun LongArray.indexOf(element: Long): Int {
    for (index in indices) {
        if (element == this[index]) {
            return index
        }
    }
    return -1
}
/* Returns first index of [element], or -1 if the array does not contain element.
 */
@Deprecated("The function has unclear behavior when searching for NaN or zero values and will be removed soon. Use 'indexOfFirst { it == element }' instead to continue using this behavior, or '.asList().indexOf(element: T)' to get the same search behavior as in a list.", ReplaceWith("indexOfFirst { it == element }"))
@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.6")
public fun FloatArray.indexOf(element: Float): Int {
    for (index in indices) {
        if (element == this[index]) {
            return index
        }
    }
    return -1
}
/* Returns first index of [element], or -1 if the array does not contain element.
 */
@Deprecated("The function has unclear behavior when searching for NaN or zero values and will be removed soon. Use 'indexOfFirst { it == element }' instead to continue using this behavior, or '.asList().indexOf(element: T)' to get the same search behavior as in a list.", ReplaceWith("indexOfFirst { it == element }"))
@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.6")
public fun DoubleArray.indexOf(element: Double): Int {
    for (index in indices) {
        if (element == this[index]) {
            return index
        }
    }
    return -1
}
/* Returns first index of [element], or -1 if the array does not contain element.
 */
public fun BooleanArray.indexOf(element: Boolean): Int {
    for (index in indices) {
        if (element == this[index]) {
            return index
        }
    }
    return -1
}
/* Returns first index of [element], or -1 if the array does not contain element.
 */
public fun CharArray.indexOf(element: Char): Int {
    for (index in indices) {
        if (element == this[index]) {
            return index
        }
    }
    return -1
}
/* Returns index of the first element matching the given [predicate], or -1 if the array does not contain such element.
 */
public inline fun <T> Array<out T>.indexOfFirst(predicate: (T) -> Boolean): Int {
    for (index in indices) {
        if (predicate(this[index])) {
            return index
        }
    }
    return -1
}
/* Returns index of the first element matching the given [predicate], or -1 if the array does not contain such element.
 */
public inline fun ByteArray.indexOfFirst(predicate: (Byte) -> Boolean): Int {
    for (index in indices) {
        if (predicate(this[index])) {
            return index
        }
    }
    return -1
}
/* Returns index of the first element matching the given [predicate], or -1 if the array does not contain such element.
 */
public inline fun ShortArray.indexOfFirst(predicate: (Short) -> Boolean): Int {
    for (index in indices) {
        if (predicate(this[index])) {
            return index
        }
    }
    return -1
}
/* Returns index of the first element matching the given [predicate], or -1 if the array does not contain such element.
 */
public inline fun IntArray.indexOfFirst(predicate: (Int) -> Boolean): Int {
    for (index in indices) {
        if (predicate(this[index])) {
            return index
        }
    }
    return -1
}
/* Returns index of the first element matching the given [predicate], or -1 if the array does not contain such element.
 */
public inline fun LongArray.indexOfFirst(predicate: (Long) -> Boolean): Int {
    for (index in indices) {
        if (predicate(this[index])) {
            return index
        }
    }
    return -1
}
/* Returns index of the first element matching the given [predicate], or -1 if the array does not contain such element.
 */
public inline fun FloatArray.indexOfFirst(predicate: (Float) -> Boolean): Int {
    for (index in indices) {
        if (predicate(this[index])) {
            return index
        }
    }
    return -1
}
/* Returns index of the first element matching the given [predicate], or -1 if the array does not contain such element.
 */
public inline fun DoubleArray.indexOfFirst(predicate: (Double) -> Boolean): Int {
    for (index in indices) {
        if (predicate(this[index])) {
            return index
        }
    }
    return -1
}
/* Returns index of the first element matching the given [predicate], or -1 if the array does not contain such element.
 */
public inline fun BooleanArray.indexOfFirst(predicate: (Boolean) -> Boolean): Int {
    for (index in indices) {
        if (predicate(this[index])) {
            return index
        }
    }
    return -1
}
/* Returns index of the first element matching the given [predicate], or -1 if the array does not contain such element.
 */
public inline fun CharArray.indexOfFirst(predicate: (Char) -> Boolean): Int {
    for (index in indices) {
        if (predicate(this[index])) {
            return index
        }
    }
    return -1
}
/* Returns index of the last element matching the given [predicate], or -1 if the array does not contain such element.
 */
public inline fun <T> Array<out T>.indexOfLast(predicate: (T) -> Boolean): Int {
    for (index in indices.reversed()) {
        if

```

```

(predicate(this[index])) {\n      return index\n    }\n  }\n  return -1\n}\n\n/**\n * Returns index of the last element matching the given [predicate], or -1 if the array does not contain such element.\n */\npublic inline fun ByteArray.indexOfLast(predicate: (Byte) -> Boolean): Int {\n  for (index in indices.reversed()) {\n    if (predicate(this[index])) {\n      return index\n    }\n  }\n  return -1\n}\n\n/**\n * Returns index of the last element matching the given [predicate], or -1 if the array does not contain such element.\n */\npublic inline fun ShortArray.indexOfLast(predicate: (Short) -> Boolean): Int {\n  for (index in indices.reversed()) {\n    if (predicate(this[index])) {\n      return index\n    }\n  }\n  return -1\n}\n\n/**\n * Returns index of the last element matching the given [predicate], or -1 if the array does not contain such element.\n */\npublic inline fun IntArray.indexOfLast(predicate: (Int) -> Boolean): Int {\n  for (index in indices.reversed()) {\n    if (predicate(this[index])) {\n      return index\n    }\n  }\n  return -1\n}\n\n/**\n * Returns index of the last element matching the given [predicate], or -1 if the array does not contain such element.\n */\npublic inline fun LongArray.indexOfLast(predicate: (Long) -> Boolean): Int {\n  for (index in indices.reversed()) {\n    if (predicate(this[index])) {\n      return index\n    }\n  }\n  return -1\n}\n\n/**\n * Returns index of the last element matching the given [predicate], or -1 if the array does not contain such element.\n */\npublic inline fun FloatArray.indexOfLast(predicate: (Float) -> Boolean): Int {\n  for (index in indices.reversed()) {\n    if (predicate(this[index])) {\n      return index\n    }\n  }\n  return -1\n}\n\n/**\n * Returns index of the last element matching the given [predicate], or -1 if the array does not contain such element.\n */\npublic inline fun DoubleArray.indexOfLast(predicate: (Double) -> Boolean): Int {\n  for (index in indices.reversed()) {\n    if (predicate(this[index])) {\n      return index\n    }\n  }\n  return -1\n}\n\n/**\n * Returns index of the last element matching the given [predicate], or -1 if the array does not contain such element.\n */\npublic inline fun BooleanArray.indexOfLast(predicate: (Boolean) -> Boolean): Int {\n  for (index in indices.reversed()) {\n    if (predicate(this[index])) {\n      return index\n    }\n  }\n  return -1\n}\n\n/**\n * Returns index of the last element matching the given [predicate], or -1 if the array does not contain such element.\n */\npublic inline fun CharArray.indexOfLast(predicate: (Char) -> Boolean): Int {\n  for (index in indices.reversed()) {\n    if (predicate(this[index])) {\n      return index\n    }\n  }\n  return -1\n}\n}\n\n/**\n * Returns the last element.\n */\n\n * @throws NoSuchElementException if the array is empty.\n */\n * @sample\n\nsamples.collections.Collections.Elements.last\n */\npublic fun <T> Array<out T>.last(): T {\n  if (isEmpty())\n    throw NoSuchElementException("Array is empty.")\n  return this[lastIndex]\n}\n\n/**\n * Returns the last element.\n */\n * @throws NoSuchElementException if the array is empty.\n */\n * @sample\n\nsamples.collections.Collections.Elements.last\n */\npublic fun ByteArray.last(): Byte {\n  if (isEmpty())\n    throw NoSuchElementException("Array is empty.")\n  return this[lastIndex]\n}\n\n/**\n * Returns the last element.\n */\n * @throws NoSuchElementException if the array is empty.\n */\n * @sample\n\nsamples.collections.Collections.Elements.last\n */\npublic fun ShortArray.last(): Short {\n  if (isEmpty())\n    throw NoSuchElementException("Array is empty.")\n  return this[lastIndex]\n}\n\n/**\n * Returns the last element.\n */\n * @throws NoSuchElementException if the array is empty.\n */\n * @sample\n\nsamples.collections.Collections.Elements.last\n */\npublic fun IntArray.last(): Int {\n  if (isEmpty())\n    throw NoSuchElementException("Array is empty.")\n  return this[lastIndex]\n}\n\n/**\n * Returns the last element.\n */\n * @throws NoSuchElementException if the array is empty.\n */\n * @sample\n\nsamples.collections.Collections.Elements.last\n */\npublic fun LongArray.last(): Long {\n  if (isEmpty())\n    throw NoSuchElementException("Array is empty.")\n  return this[lastIndex]\n}\n\n/**\n * Returns the last element.\n */\n * @throws NoSuchElementException if the array is empty.\n */\n * @sample\n\nsamples.collections.Collections.Elements.last\n */\npublic fun FloatArray.last(): Float {\n  if (isEmpty())\n    throw NoSuchElementException("Array is empty.")\n  return this[lastIndex]\n}\n\n/**\n * Returns the last element.\n */\n * @throws NoSuchElementException if the array is empty.\n */\n * @sample\n\nsamples.collections.Collections.Elements.last\n */\npublic fun DoubleArray.last(): Double {\n  if (isEmpty())\n    throw NoSuchElementException("Array is empty.")\n  return this[lastIndex]\n}\n\n/**\n * Returns the last element.\n */\n * @throws NoSuchElementException if the array is empty.\n */\n * @sample\n\nsamples.collections.Collections.Elements.last\n */\npublic fun BooleanArray.last(): Boolean {\n  if (isEmpty())\n
```

```

    throw NoSuchElementException("Array is empty.")\n    return this[lastIndex]\n}\n\n/**\n * Returns the last
element.\n * \n * @throws NoSuchElementException if the array is empty.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic fun CharArray.last(): Char {\n    if (isEmpty())\n    throw NoSuchElementException("Array is empty.")\n    return this[lastIndex]\n}\n\n/**\n * Returns the last
element matching the given [predicate].\n * \n * @throws NoSuchElementException if no such element is found.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic inline fun <T> Array<out
T>.last(predicate: (T) -> Boolean): T {\n    for (index in this.indices.reversed()) {\n        val element = this[index]\n        if (predicate(element)) return element\n    }\n    throw NoSuchElementException("Array contains no element
matching the predicate.")\n}\n\n/**\n * Returns the last element matching the given [predicate].\n * \n * @throws
NoSuchElementException if no such element is found.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic inline fun ByteArray.last(predicate: (Byte) -> Boolean):
Byte {\n    for (index in this.indices.reversed()) {\n        val element = this[index]\n        if (predicate(element)) return
element\n    }\n    throw NoSuchElementException("Array contains no element matching the
predicate.")\n}\n\n/**\n * Returns the last element matching the given [predicate].\n * \n * @throws
NoSuchElementException if no such element is found.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic inline fun ShortArray.last(predicate: (Short) -> Boolean):
Short {\n    for (index in this.indices.reversed()) {\n        val element = this[index]\n        if (predicate(element))
return element\n    }\n    throw NoSuchElementException("Array contains no element matching the
predicate.")\n}\n\n/**\n * Returns the last element matching the given [predicate].\n * \n * @throws
NoSuchElementException if no such element is found.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic inline fun IntArray.last(predicate: (Int) -> Boolean): Int
{\n    for (index in this.indices.reversed()) {\n        val element = this[index]\n        if (predicate(element)) return
element\n    }\n    throw NoSuchElementException("Array contains no element matching the
predicate.")\n}\n\n/**\n * Returns the last element matching the given [predicate].\n * \n * @throws
NoSuchElementException if no such element is found.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic inline fun LongArray.last(predicate: (Long) -> Boolean):
Long {\n    for (index in this.indices.reversed()) {\n        val element = this[index]\n        if (predicate(element))
return element\n    }\n    throw NoSuchElementException("Array contains no element matching the
predicate.")\n}\n\n/**\n * Returns the last element matching the given [predicate].\n * \n * @throws
NoSuchElementException if no such element is found.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic inline fun FloatArray.last(predicate: (Float) -> Boolean):
Float {\n    for (index in this.indices.reversed()) {\n        val element = this[index]\n        if (predicate(element))
return element\n    }\n    throw NoSuchElementException("Array contains no element matching the
predicate.")\n}\n\n/**\n * Returns the last element matching the given [predicate].\n * \n * @throws
NoSuchElementException if no such element is found.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic inline fun DoubleArray.last(predicate: (Double) ->
Boolean): Double {\n    for (index in this.indices.reversed()) {\n        val element = this[index]\n        if
(predicate(element)) return element\n    }\n    throw NoSuchElementException("Array contains no element
matching the predicate.")\n}\n\n/**\n * Returns the last element matching the given [predicate].\n * \n * @throws
NoSuchElementException if no such element is found.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic inline fun BooleanArray.last(predicate: (Boolean) ->
Boolean): Boolean {\n    for (index in this.indices.reversed()) {\n        val element = this[index]\n        if
(predicate(element)) return element\n    }\n    throw NoSuchElementException("Array contains no element
matching the predicate.")\n}\n\n/**\n * Returns the last element matching the given [predicate].\n * \n * @throws
NoSuchElementException if no such element is found.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic inline fun CharArray.last(predicate: (Char) -> Boolean):
Char {\n    for (index in this.indices.reversed()) {\n        val element = this[index]\n        if (predicate(element))
return element\n    }\n    throw NoSuchElementException("Array contains no element matching the

```

```

predicate.\n\n\n/**\n * Returns last index of [element], or -1 if the array does not contain element.\n */\npublic
fun <@kotlin.internal.OnlyInputTypes T> Array<out T>.lastIndexOf(element: T): Int {\n    if (element == null) {\n
        for (index in indices.reversed()) {\n            if (this[index] == null) {\n                return index\n
            }\n        }\n    } else {\n        for (index in indices.reversed()) {\n            if (element == this[index]) {\n
                return index\n            }\n        }\n    }\n    return -1\n}\n\n/**\n * Returns last index of [element], or -1 if the array does not contain
element.\n */\npublic fun ByteArray.lastIndexOf(element: Byte): Int {\n    for (index in indices.reversed()) {\n        if
(element == this[index]) {\n            return index\n        }\n    }\n    return -1\n}\n\n/**\n * Returns last index of
[element], or -1 if the array does not contain element.\n */\npublic fun ShortArray.lastIndexOf(element: Short): Int
{\n    for (index in indices.reversed()) {\n        if (element == this[index]) {\n            return index\n        }\n
    }\n    return -1\n}\n\n/**\n * Returns last index of [element], or -1 if the array does not contain element.\n */\npublic fun
IntArray.lastIndexOf(element: Int): Int {\n    for (index in indices.reversed()) {\n        if (element == this[index]) {\n
            return index\n        }\n    }\n    return -1\n}\n\n/**\n * Returns last index of [element], or -1 if the array does not
contain element.\n */\npublic fun LongArray.lastIndexOf(element: Long): Int {\n    for (index in indices.reversed())
{\n        if (element == this[index]) {\n            return index\n        }\n    }\n    return -1\n}\n\n/**\n * Returns last
index of [element], or -1 if the array does not contain element.\n */\n@Deprecated("The function has unclear
behavior when searching for NaN or zero values and will be removed soon. Use 'indexOfLast { it == element }'
instead to continue using this behavior, or '.asList().lastIndexOf(element: T)' to get the same search behavior as in a
list.", ReplaceWith("indexOfLast { it == element }"))\n@DeprecatedSinceKotlin(warningSince = "1.4",
errorSince = "1.6")\npublic fun FloatArray.lastIndexOf(element: Float): Int {\n    for (index in indices.reversed())
{\n        if (element == this[index]) {\n            return index\n        }\n    }\n    return -1\n}\n\n/**\n * Returns last
index of [element], or -1 if the array does not contain element.\n */\n@Deprecated("The function has unclear
behavior when searching for NaN or zero values and will be removed soon. Use 'indexOfLast { it == element }'
instead to continue using this behavior, or '.asList().lastIndexOf(element: T)' to get the same search behavior as in a
list.", ReplaceWith("indexOfLast { it == element }"))\n@DeprecatedSinceKotlin(warningSince = "1.4",
errorSince = "1.6")\npublic fun DoubleArray.lastIndexOf(element: Double): Int {\n    for (index in
indices.reversed()) {\n        if (element == this[index]) {\n            return index\n        }\n    }\n    return -1\n}\n\n/**\n * Returns last index of [element], or -1 if the array does not contain element.\n */\npublic fun
BooleanArray.lastIndexOf(element: Boolean): Int {\n    for (index in indices.reversed()) {\n        if (element ==
this[index]) {\n            return index\n        }\n    }\n    return -1\n}\n\n/**\n * Returns last index of [element], or -1 if
the array does not contain element.\n */\npublic fun CharArray.lastIndexOf(element: Char): Int {\n    for (index in
indices.reversed()) {\n        if (element == this[index]) {\n            return index\n        }\n    }\n    return -1\n}\n\n/**\n * Returns the last element, or `null` if the array is empty.\n */\n * @sample
samples.collections.Collections.Elements.last\n */\npublic fun <T> Array<out T>.lastOrNull(): T? {\n    return if
(isEmpty()) null else this[size - 1]\n}\n\n/**\n * Returns the last element, or `null` if the array is empty.\n */\n * @sample
samples.collections.Collections.Elements.last\n */\npublic fun ByteArray.lastOrNull(): Byte? {\n    return
if (isEmpty()) null else this[size - 1]\n}\n\n/**\n * Returns the last element, or `null` if the array is empty.\n */\n * @sample
samples.collections.Collections.Elements.last\n */\npublic fun ShortArray.lastOrNull(): Short? {\n    return
if (isEmpty()) null else this[size - 1]\n}\n\n/**\n * Returns the last element, or `null` if the array is empty.\n */\n * @sample
samples.collections.Collections.Elements.last\n */\npublic fun IntArray.lastOrNull(): Int? {\n    return
if (isEmpty()) null else this[size - 1]\n}\n\n/**\n * Returns the last element, or `null` if the array is empty.\n */\n * @sample
samples.collections.Collections.Elements.last\n */\npublic fun LongArray.lastOrNull(): Long? {\n    return
if (isEmpty()) null else this[size - 1]\n}\n\n/**\n * Returns the last element, or `null` if the array is empty.\n */\n * @sample
samples.collections.Collections.Elements.last\n */\npublic fun FloatArray.lastOrNull(): Float? {\n    return
if (isEmpty()) null else this[size - 1]\n}\n\n/**\n * Returns the last element, or `null` if the array is empty.\n */\n * @sample
samples.collections.Collections.Elements.last\n */\npublic fun DoubleArray.lastOrNull(): Double? {\n    return
if (isEmpty()) null else this[size - 1]\n}\n\n/**\n * Returns the last element, or `null` if the array is empty.\n */\n * @sample
samples.collections.Collections.Elements.last\n */\npublic fun BooleanArray.lastOrNull(): Boolean? {\n    return
if (isEmpty()) null else this[size - 1]\n}\n\n/**\n * Returns the last element, or `null` if the array is

```

```

empty.\n * \n * @sample samples.collections.Collections.Elements.last\n */\npublic fun CharArray.lastOrNull():
Char? {\n    return if (isEmpty()) null else this[size - 1]\n}\n\n/**\n * Returns the last element matching the given
[predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic inline fun <T> Array<out T>.lastOrNull(predicate: (T) ->
Boolean): T? {\n    for (index in this.indices.reversed()) {\n        val element = this[index]\n        if
(predicate(element)) return element\n    }\n    return null\n}\n\n/**\n * Returns the last element matching the given
[predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic inline fun ByteArray.lastOrNull(predicate: (Byte) ->
Boolean): Byte? {\n    for (index in this.indices.reversed()) {\n        val element = this[index]\n        if
(predicate(element)) return element\n    }\n    return null\n}\n\n/**\n * Returns the last element matching the given
[predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic inline fun ShortArray.lastOrNull(predicate: (Short) ->
Boolean): Short? {\n    for (index in this.indices.reversed()) {\n        val element = this[index]\n        if
(predicate(element)) return element\n    }\n    return null\n}\n\n/**\n * Returns the last element matching the given
[predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic inline fun IntArray.lastOrNull(predicate: (Int) ->
Boolean): Int? {\n    for (index in this.indices.reversed()) {\n        val element = this[index]\n        if
(predicate(element)) return element\n    }\n    return null\n}\n\n/**\n * Returns the last element matching the given
[predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic inline fun LongArray.lastOrNull(predicate: (Long) ->
Boolean): Long? {\n    for (index in this.indices.reversed()) {\n        val element = this[index]\n        if
(predicate(element)) return element\n    }\n    return null\n}\n\n/**\n * Returns the last element matching the given
[predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic inline fun FloatArray.lastOrNull(predicate: (Float) ->
Boolean): Float? {\n    for (index in this.indices.reversed()) {\n        val element = this[index]\n        if
(predicate(element)) return element\n    }\n    return null\n}\n\n/**\n * Returns the last element matching the given
[predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic inline fun DoubleArray.lastOrNull(predicate: (Double) ->
Boolean): Double? {\n    for (index in this.indices.reversed()) {\n        val element = this[index]\n        if
(predicate(element)) return element\n    }\n    return null\n}\n\n/**\n * Returns the last element matching the given
[predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic inline fun BooleanArray.lastOrNull(predicate: (Boolean)
-> Boolean): Boolean? {\n    for (index in this.indices.reversed()) {\n        val element = this[index]\n        if
(predicate(element)) return element\n    }\n    return null\n}\n\n/**\n * Returns the last element matching the given
[predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.last\n */\npublic inline fun CharArray.lastOrNull(predicate: (Char) ->
Boolean): Char? {\n    for (index in this.indices.reversed()) {\n        val element = this[index]\n        if
(predicate(element)) return element\n    }\n    return null\n}\n\n/**\n * Returns a random element from this array.\n *
\n * @throws NoSuchElementException if this array is empty.\n */
\n\n*/\n\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.random(): T {\n
return random(Random)\n}\n\n/**\n * Returns a random element from this array.\n * \n * @throws
NoSuchElementException if this array is empty.\n */
\n\n*/\n\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.random(): Byte {\n
return random(Random)\n}\n\n/**\n * Returns a random element from
this array.\n * \n * @throws NoSuchElementException if this array is empty.\n */
\n\n*/\n\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.random(): Short {\n
return random(Random)\n}\n\n/**\n * Returns a random element from this array.\n * \n * @throws
NoSuchElementException if this array is empty.\n */
\n\n*/\n\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.random(): Int {\n
return random(Random)\n}\n\n/**\n * Returns a random element from this

```

```

array.\n * \n * @throws NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.random(): Long {\n    return\n    random(Random)\n}\n\n/**\n * Returns a random element from this array.\n * \n * @throws\n    NoSuchElementException if this array is empty.\n */\n*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic\n    inline fun FloatArray.random(): Float {\n        return random(Random)\n    }\n\n    /**\n     * Returns a random element from\n     * this array.\n     * \n     * @throws NoSuchElementException if this array is empty.\n     */\n    *\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.random(): Double {\n    return\n    random(Random)\n}\n\n/**\n * Returns a random element from this array.\n * \n * @throws\n    NoSuchElementException if this array is empty.\n */\n*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.random(): Boolean {\n    return\n    random(Random)\n}\n\n/**\n * Returns a random element\n * from this array.\n * \n * @throws NoSuchElementException if this array is empty.\n */\n*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.random(): Char {\n    return\n    random(Random)\n}\n\n/**\n * Returns a random element from this array using the specified source of\n * randomness.\n * \n * @throws NoSuchElementException if this array is empty.\n */\n*\n@SinceKotlin("1.3")\npublic\n    fun <T> Array<out T>.random(random: Random): T {\n        if (isEmpty())\n            throw\n            NoSuchElementException("Array is empty.")\n        return\n        get(random.nextInt(size))\n    }\n\n    /**\n     * Returns a random\n     * element from this array using the specified source of\n     * randomness.\n     * \n     * @throws NoSuchElementException if this array is empty.\n     */\n    *\n@SinceKotlin("1.3")\npublic fun ByteArray.random(random: Random): Byte {\n    if\n    (isEmpty())\n        throw\n        NoSuchElementException("Array is empty.")\n    return\n    get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of\n * randomness.\n * \n * @throws NoSuchElementException if this array is empty.\n */\n*\n@SinceKotlin("1.3")\npublic\n    fun ShortArray.random(random: Random): Short {\n        if (isEmpty())\n            throw\n            NoSuchElementException("Array is empty.")\n        return\n        get(random.nextInt(size))\n    }\n\n    /**\n     * Returns a random\n     * element from this array using the specified source of\n     * randomness.\n     * \n     * @throws NoSuchElementException if\n     * this array is empty.\n     */\n    *\n@SinceKotlin("1.3")\npublic fun IntArray.random(random: Random): Int {\n    if\n    (isEmpty())\n        throw\n        NoSuchElementException("Array is empty.")\n    return\n    get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of\n * randomness.\n * \n * @throws NoSuchElementException if this array is empty.\n */\n*\n@SinceKotlin("1.3")\npublic\n    fun LongArray.random(random: Random): Long {\n        if (isEmpty())\n            throw\n            NoSuchElementException("Array is empty.")\n        return\n        get(random.nextInt(size))\n    }\n\n    /**\n     * Returns a random\n     * element from this array using the specified source of\n     * randomness.\n     * \n     * @throws NoSuchElementException if\n     * this array is empty.\n     */\n    *\n@SinceKotlin("1.3")\npublic fun FloatArray.random(random: Random): Float {\n    if\n    (isEmpty())\n        throw\n        NoSuchElementException("Array is empty.")\n    return\n    get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of\n * randomness.\n * \n * @throws NoSuchElementException if this array is empty.\n */\n*\n@SinceKotlin("1.3")\npublic\n    fun DoubleArray.random(random: Random): Double {\n        if (isEmpty())\n            throw\n            NoSuchElementException("Array is empty.")\n        return\n        get(random.nextInt(size))\n    }\n\n    /**\n     * Returns a random\n     * element from this array using the specified source of\n     * randomness.\n     * \n     * @throws NoSuchElementException if\n     * this array is empty.\n     */\n    *\n@SinceKotlin("1.3")\npublic fun BooleanArray.random(random: Random): Boolean {\n    if\n    (isEmpty())\n        throw\n        NoSuchElementException("Array is empty.")\n    return\n    get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of\n * randomness.\n * \n * @throws NoSuchElementException if this array is empty.\n */\n*\n@SinceKotlin("1.3")\npublic\n    fun CharArray.random(random: Random): Char {\n        if (isEmpty())\n            throw\n            NoSuchElementException("Array\n            is empty.")\n        return\n        get(random.nextInt(size))\n    }\n\n    /**\n     * Returns a random element from this array, or `null` if\n     * this array is empty.\n     */\n    *\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic\n    inline fun <T> Array<out T>.randomOrNull(): T? {\n        return\n        randomOrNull(Random)\n    }\n\n    /**\n     * Returns a\n     * random element from this array, or `null` if this array is empty.\n     */\n}

```

```

*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.randomOrNull(): Byte? {\n    return randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this array, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.randomOrNull(): Short? {\n    return randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this array, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.randomOrNull(): Int? {\n    return randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this array, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.randomOrNull(): Long? {\n    return randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this array, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.randomOrNull(): Float? {\n    return randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this array, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.randomOrNull(): Double? {\n    return randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this array, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.randomOrNull(): Boolean? {\n    return randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this array, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.randomOrNull(): Char? {\n    return randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this array using the specified source of randomness, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun <T> Array<out T>.randomOrNull(random: Random): T? {\n    if (isEmpty())\n        return null\n    return get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of randomness, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun ByteArray.randomOrNull(random: Random): Byte? {\n    if (isEmpty())\n        return null\n    return get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of randomness, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun ShortArray.randomOrNull(random: Random): Short? {\n    if (isEmpty())\n        return null\n    return get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of randomness, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun IntArray.randomOrNull(random: Random): Int? {\n    if (isEmpty())\n        return null\n    return get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of randomness, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun LongArray.randomOrNull(random: Random): Long? {\n    if (isEmpty())\n        return null\n    return get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of randomness, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun FloatArray.randomOrNull(random: Random): Float? {\n    if (isEmpty())\n        return null\n    return get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of randomness, or `null` if this array is empty.\n

```

```

*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun
DoubleArray.randomOrNull(random: Random): Double? {\n if (isEmpty())\n return null\n return
get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of
randomness, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun
BooleanArray.randomOrNull(random: Random): Boolean? {\n if (isEmpty())\n return null\n return
get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of
randomness, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun
CharArray.randomOrNull(random: Random): Char? {\n if (isEmpty())\n return null\n return
get(random.nextInt(size))\n}\n\n/**\n * Returns the single element, or throws an exception if the array is empty or
has more than one element.\n */\npublic fun <T> Array<out T>.single(): T {\n return when (size) {\n 0 ->
throw NoSuchElementException("Array is empty.")\n 1 -> this[0]\n else -> throw
IllegalArgumentException("Array has more than one element.")\n }\n}\n\n/**\n * Returns the single element, or
throws an exception if the array is empty or has more than one element.\n */\npublic fun ByteArray.single(): Byte
{\n return when (size) {\n 0 -> throw NoSuchElementException("Array is empty.")\n 1 -> this[0]\n
else -> throw IllegalArgumentException("Array has more than one element.")\n }\n}\n\n/**\n * Returns the
single element, or throws an exception if the array is empty or has more than one element.\n */\npublic fun
ShortArray.single(): Short {\n return when (size) {\n 0 -> throw NoSuchElementException("Array is
empty.")\n 1 -> this[0]\n else -> throw IllegalArgumentException("Array has more than one element.")\n
}\n}\n\n/**\n * Returns the single element, or throws an exception if the array is empty or has more than one
element.\n */\npublic fun IntArray.single(): Int {\n return when (size) {\n 0 -> throw
NoSuchElementException("Array is empty.")\n 1 -> this[0]\n else -> throw
IllegalArgumentException("Array has more than one element.")\n }\n}\n\n/**\n * Returns the single element, or
throws an exception if the array is empty or has more than one element.\n */\npublic fun LongArray.single(): Long
{\n return when (size) {\n 0 -> throw NoSuchElementException("Array is empty.")\n 1 -> this[0]\n
else -> throw IllegalArgumentException("Array has more than one element.")\n }\n}\n\n/**\n * Returns the
single element, or throws an exception if the array is empty or has more than one element.\n */\npublic fun
FloatArray.single(): Float {\n return when (size) {\n 0 -> throw NoSuchElementException("Array is
empty.")\n 1 -> this[0]\n else -> throw IllegalArgumentException("Array has more than one element.")\n
}\n}\n\n/**\n * Returns the single element, or throws an exception if the array is empty or has more than one
element.\n */\npublic fun DoubleArray.single(): Double {\n return when (size) {\n 0 -> throw
NoSuchElementException("Array is empty.")\n 1 -> this[0]\n else -> throw
IllegalArgumentException("Array has more than one element.")\n }\n}\n\n/**\n * Returns the single element, or
throws an exception if the array is empty or has more than one element.\n */\npublic fun BooleanArray.single():
Boolean {\n return when (size) {\n 0 -> throw NoSuchElementException("Array is empty.")\n 1 ->
this[0]\n else -> throw IllegalArgumentException("Array has more than one element.")\n }\n}\n\n/**\n *
Returns the single element, or throws an exception if the array is empty or has more than one element.\n */\npublic
fun CharArray.single(): Char {\n return when (size) {\n 0 -> throw NoSuchElementException("Array is
empty.")\n 1 -> this[0]\n else -> throw IllegalArgumentException("Array has more than one element.")\n
}\n}\n\n/**\n * Returns the single element matching the given [predicate], or throws exception if there is no or
more than one matching element.\n */\npublic inline fun <T> Array<out T>.single(predicate: (T) -> Boolean): T {\n
var single: T? = null\n var found = false\n for (element in this) {\n if (predicate(element)) {\n if
(found) throw IllegalArgumentException("Array contains more than one matching element.")\n single =
element\n found = true\n }\n }\n if (!found) throw NoSuchElementException("Array contains no
element matching the predicate.")\n @Suppress("UNCHECKED_CAST")\n return single as T\n}\n\n/**\n * Returns the
single element matching the given [predicate], or throws exception if there is no or more than one
matching element.\n */\npublic inline fun ByteArray.single(predicate: (Byte) -> Boolean): Byte {\n var single:

```



```

Byte? = null\n var found = false\n for (element in this) {\n     if (predicate(element)) {\n         if (found) throw
IllegalArgumentException("Array contains more than one matching element.")\n         single = element\n
found = true\n     }\n }\n if (!found) throw NoSuchElementException("Array contains no element matching
the predicate.")\n @Suppress("UNCHECKED_CAST")\n return single as Byte\n}\n\n/**\n * Returns the
single element matching the given [predicate], or throws exception if there is no or more than one matching
element.\n */\npublic inline fun ShortArray.single(predicate: (Short) -> Boolean): Short {\n var single: Short? =
null\n var found = false\n for (element in this) {\n     if (predicate(element)) {\n         if (found) throw
IllegalArgumentException("Array contains more than one matching element.")\n         single = element\n
found = true\n     }\n }\n if (!found) throw NoSuchElementException("Array contains no element matching
the predicate.")\n @Suppress("UNCHECKED_CAST")\n return single as Short\n}\n\n/**\n * Returns the
single element matching the given [predicate], or throws exception if there is no or more than one matching
element.\n */\npublic inline fun IntArray.single(predicate: (Int) -> Boolean): Int {\n var single: Int? = null\n var
found = false\n for (element in this) {\n     if (predicate(element)) {\n         if (found) throw
IllegalArgumentException("Array contains more than one matching element.")\n         single = element\n
found = true\n     }\n }\n if (!found) throw NoSuchElementException("Array contains no element matching
the predicate.")\n @Suppress("UNCHECKED_CAST")\n return single as Int\n}\n\n/**\n * Returns the single
element matching the given [predicate], or throws exception if there is no or more than one matching element.\n
*/\npublic inline fun LongArray.single(predicate: (Long) -> Boolean): Long {\n var single: Long? = null\n var
found = false\n for (element in this) {\n     if (predicate(element)) {\n         if (found) throw
IllegalArgumentException("Array contains more than one matching element.")\n         single = element\n
found = true\n     }\n }\n if (!found) throw NoSuchElementException("Array contains no element matching
the predicate.")\n @Suppress("UNCHECKED_CAST")\n return single as Long\n}\n\n/**\n * Returns the
single element matching the given [predicate], or throws exception if there is no or more than one matching
element.\n */\npublic inline fun FloatArray.single(predicate: (Float) -> Boolean): Float {\n var single: Float? =
null\n var found = false\n for (element in this) {\n     if (predicate(element)) {\n         if (found) throw
IllegalArgumentException("Array contains more than one matching element.")\n         single = element\n
found = true\n     }\n }\n if (!found) throw NoSuchElementException("Array contains no element matching
the predicate.")\n @Suppress("UNCHECKED_CAST")\n return single as Float\n}\n\n/**\n * Returns the
single element matching the given [predicate], or throws exception if there is no or more than one matching
element.\n */\npublic inline fun DoubleArray.single(predicate: (Double) -> Boolean): Double {\n var single:
Double? = null\n var found = false\n for (element in this) {\n     if (predicate(element)) {\n         if (found)
throw IllegalArgumentException("Array contains more than one matching element.")\n         single = element\n
found = true\n     }\n }\n if (!found) throw NoSuchElementException("Array contains no element
matching the predicate.")\n @Suppress("UNCHECKED_CAST")\n return single as Double\n}\n\n/**\n *
Returns the single element matching the given [predicate], or throws exception if there is no or more than one
matching element.\n */\npublic inline fun BooleanArray.single(predicate: (Boolean) -> Boolean): Boolean {\n var
single: Boolean? = null\n var found = false\n for (element in this) {\n     if (predicate(element)) {\n         if
(found) throw IllegalArgumentException("Array contains more than one matching element.")\n         single =
element\n         found = true\n     }\n }\n if (!found) throw NoSuchElementException("Array contains no
element matching the predicate.")\n @Suppress("UNCHECKED_CAST")\n return single as
Boolean\n}\n\n/**\n * Returns the single element matching the given [predicate], or throws exception if there is no
or more than one matching element.\n */\npublic inline fun CharArray.single(predicate: (Char) -> Boolean): Char
{\n var single: Char? = null\n var found = false\n for (element in this) {\n     if (predicate(element)) {\n
if (found) throw IllegalArgumentException("Array contains more than one matching element.")\n         single =
element\n         found = true\n     }\n }\n if (!found) throw NoSuchElementException("Array contains no
element matching the predicate.")\n @Suppress("UNCHECKED_CAST")\n return single as Char\n}\n\n/**\n *
Returns single element, or `null` if the array is empty or has more than one element.\n */\npublic fun <T>
Array<out T>.singleOrNull(): T? {\n return if (size == 1) this[0] else null\n}\n\n/**\n * Returns single element, or

```

```

`null` if the array is empty or has more than one element.\n *\npublic fun ByteArray.singleOrNull(): Byte? {\n
return if (size == 1) this[0] else null\n}\n\n/**\n * Returns single element, or `null` if the array is empty or has more
than one element.\n *\npublic fun ShortArray.singleOrNull(): Short? {\n  return if (size == 1) this[0] else
null\n}\n\n/**\n * Returns single element, or `null` if the array is empty or has more than one element.\n *\npublic
fun IntArray.singleOrNull(): Int? {\n  return if (size == 1) this[0] else null\n}\n\n/**\n * Returns single element, or
`null` if the array is empty or has more than one element.\n *\npublic fun LongArray.singleOrNull(): Long? {\n
return if (size == 1) this[0] else null\n}\n\n/**\n * Returns single element, or `null` if the array is empty or has more
than one element.\n *\npublic fun FloatArray.singleOrNull(): Float? {\n  return if (size == 1) this[0] else
null\n}\n\n/**\n * Returns single element, or `null` if the array is empty or has more than one element.\n *\npublic
fun DoubleArray.singleOrNull(): Double? {\n  return if (size == 1) this[0] else null\n}\n\n/**\n * Returns single
element, or `null` if the array is empty or has more than one element.\n *\npublic fun BooleanArray.singleOrNull():
Boolean? {\n  return if (size == 1) this[0] else null\n}\n\n/**\n * Returns single element, or `null` if the array is
empty or has more than one element.\n *\npublic fun CharArray.singleOrNull(): Char? {\n  return if (size == 1)
this[0] else null\n}\n\n/**\n * Returns the single element matching the given [predicate], or `null` if element was not
found or more than one element was found.\n *\npublic inline fun <T> Array<out T>.singleOrNull(predicate: (T) -
> Boolean): T? {\n  var single: T? = null\n  var found = false\n  for (element in this) {\n    if
(predicate(element)) {\n      if (found) return null\n      single = element\n      found = true\n    }\n  }\n  if (!found) return null\n  return single\n}\n\n/**\n * Returns the single element matching the given [predicate], or
`null` if element was not found or more than one element was found.\n *\npublic inline fun
ByteArray.singleOrNull(predicate: (Byte) -> Boolean): Byte? {\n  var single: Byte? = null\n  var found = false\n
for (element in this) {\n    if (predicate(element)) {\n      if (found) return null\n      single = element\n
found = true\n    }\n  }\n  if (!found) return null\n  return single\n}\n\n/**\n * Returns the single element
matching the given [predicate], or `null` if element was not found or more than one element was found.\n *\npublic
inline fun ShortArray.singleOrNull(predicate: (Short) -> Boolean): Short? {\n  var single: Short? = null\n  var
found = false\n  for (element in this) {\n    if (predicate(element)) {\n      if (found) return null\n      single
= element\n      found = true\n    }\n  }\n  if (!found) return null\n  return single\n}\n\n/**\n * Returns the
single element matching the given [predicate], or `null` if element was not found or more than one element was
found.\n *\npublic inline fun IntArray.singleOrNull(predicate: (Int) -> Boolean): Int? {\n  var single: Int? = null\n
var found = false\n  for (element in this) {\n    if (predicate(element)) {\n      if (found) return null\n
single = element\n      found = true\n    }\n  }\n  if (!found) return null\n  return single\n}\n\n/**\n *
Returns the single element matching the given [predicate], or `null` if element was not found or more than one
element was found.\n *\npublic inline fun LongArray.singleOrNull(predicate: (Long) -> Boolean): Long? {\n  var
single: Long? = null\n  var found = false\n  for (element in this) {\n    if (predicate(element)) {\n      if
(found) return null\n      single = element\n      found = true\n    }\n  }\n  if (!found) return null\n  return
single\n}\n\n/**\n * Returns the single element matching the given [predicate], or `null` if element was not found or
more than one element was found.\n *\npublic inline fun FloatArray.singleOrNull(predicate: (Float) -> Boolean):
Float? {\n  var single: Float? = null\n  var found = false\n  for (element in this) {\n    if (predicate(element))
{\n      if (found) return null\n      single = element\n      found = true\n    }\n  }\n  if (!found) return
null\n  return single\n}\n\n/**\n * Returns the single element matching the given [predicate], or `null` if element
was not found or more than one element was found.\n *\npublic inline fun DoubleArray.singleOrNull(predicate:
(Double) -> Boolean): Double? {\n  var single: Double? = null\n  var found = false\n  for (element in this) {\n
if (predicate(element)) {\n      if (found) return null\n      single = element\n      found = true\n    }\n  }\n
if (!found) return null\n  return single\n}\n\n/**\n * Returns the single element matching the given
[predicate], or `null` if element was not found or more than one element was found.\n *\npublic inline fun
BooleanArray.singleOrNull(predicate: (Boolean) -> Boolean): Boolean? {\n  var single: Boolean? = null\n  var
found = false\n  for (element in this) {\n    if (predicate(element)) {\n      if (found) return null\n      single
= element\n      found = true\n    }\n  }\n  if (!found) return null\n  return single\n}\n\n/**\n * Returns the
single element matching the given [predicate], or `null` if element was not found or more than one element was

```

```

found.\n *\npublic inline fun CharArray.singleOrNull(predicate: (Char) -> Boolean): Char? {\n  var single: Char?
= null\n  var found = false\n  for (element in this) {\n    if (predicate(element)) {\n      if (found) return
null\n      single = element\n      found = true\n    }\n  }\n  if (!found) return null\n  return
single\n}\n\n/**\n * Returns a list containing all elements except first [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun <T> Array<out T>.drop(n: Int): List<T> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n  return takeLast((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except first [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun ByteArray.drop(n: Int): List<Byte> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n  return takeLast((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except first [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun ShortArray.drop(n: Int): List<Short> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n  return takeLast((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except first [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun IntArray.drop(n: Int): List<Int> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n  return takeLast((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except first [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun LongArray.drop(n: Int): List<Long> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n  return takeLast((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except first [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun FloatArray.drop(n: Int): List<Float> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n  return takeLast((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except first [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun DoubleArray.drop(n: Int): List<Double> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n  return takeLast((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except first [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun BooleanArray.drop(n: Int): List<Boolean>
{\n  require(n >= 0) { \"Requested element count $n is less than zero.\" }\n  return takeLast((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except first [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun CharArray.drop(n: Int): List<Char> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n  return takeLast((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun <T> Array<out T>.dropLast(n: Int): List<T>
{\n  require(n >= 0) { \"Requested element count $n is less than zero.\" }\n  return take((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun ByteArray.dropLast(n: Int): List<Byte> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n  return take((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws

```

IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun ShortArray.dropLast(n: Int): List<Short> {\n
require(n >= 0) { \"Requested element count \$n is less than zero.\" }\n return take((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun IntArray.dropLast(n: Int): List<Int> {\n
require(n >= 0) { \"Requested element count \$n is less than zero.\" }\n return take((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun LongArray.dropLast(n: Int): List<Long> {\n
require(n >= 0) { \"Requested element count \$n is less than zero.\" }\n return take((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun FloatArray.dropLast(n: Int): List<Float> {\n
require(n >= 0) { \"Requested element count \$n is less than zero.\" }\n return take((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun DoubleArray.dropLast(n: Int): List<Double>
{\n require(n >= 0) { \"Requested element count \$n is less than zero.\" }\n return take((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun BooleanArray.dropLast(n: Int):
List<Boolean> {\n require(n >= 0) { \"Requested element count \$n is less than zero.\" }\n return take((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun CharArray.dropLast(n: Int): List<Char> {\n
require(n >= 0) { \"Requested element count \$n is less than zero.\" }\n return take((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last elements that satisfy the given
[predicate].\n * \n * @sample samples.collections.Collections.Transformations.drop\n *\npublic inline fun <T>
Array<out T>.dropLastWhile(predicate: (T) -> Boolean): List<T> {\n for (index in lastIndex downTo 0) {\n if
(!predicate(this[index])) {\n return take(index + 1)\n }\n }\n return emptyList()\n}\n\n/**\n * Returns
a list containing all elements except last elements that satisfy the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic inline fun ByteArray.dropLastWhile(predicate:
(Byte) -> Boolean): List<Byte> {\n for (index in lastIndex downTo 0) {\n if (!predicate(this[index])) {\n
return take(index + 1)\n }\n }\n return emptyList()\n}\n\n/**\n * Returns a list containing all elements
except last elements that satisfy the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic inline fun ShortArray.dropLastWhile(predicate:
(Short) -> Boolean): List<Short> {\n for (index in lastIndex downTo 0) {\n if (!predicate(this[index])) {\n
return take(index + 1)\n }\n }\n return emptyList()\n}\n\n/**\n * Returns a list containing all elements
except last elements that satisfy the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic inline fun IntArray.dropLastWhile(predicate:
(Int) -> Boolean): List<Int> {\n for (index in lastIndex downTo 0) {\n if (!predicate(this[index])) {\n
return take(index + 1)\n }\n }\n return emptyList()\n}\n\n/**\n * Returns a list containing all elements
except last elements that satisfy the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic inline fun LongArray.dropLastWhile(predicate:
(Long) -> Boolean): List<Long> {\n for (index in lastIndex downTo 0) {\n if (!predicate(this[index])) {\n
return take(index + 1)\n }\n }\n return emptyList()\n}\n\n/**\n * Returns a list containing all elements
except last elements that satisfy the given [predicate].\n * \n * @sample

```

samples.collections.Collections.Transformations.drop\n *\npublic inline fun FloatArray.dropLastWhile(predicate:
(Float) -> Boolean): List<Float> {\n  for (index in lastIndex downTo 0) {\n    if (!predicate(this[index])) {\n
  return take(index + 1)\n    }\n  }\n  return emptyList()\n}\n\n/**\n * Returns a list containing all elements
except last elements that satisfy the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic inline fun DoubleArray.dropLastWhile(predicate:
(Double) -> Boolean): List<Double> {\n  for (index in lastIndex downTo 0) {\n    if (!predicate(this[index])) {\n
  return take(index + 1)\n    }\n  }\n  return emptyList()\n}\n\n/**\n * Returns a list containing all elements
except last elements that satisfy the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic inline fun
BooleanArray.dropLastWhile(predicate: (Boolean) -> Boolean): List<Boolean> {\n  for (index in lastIndex
downTo 0) {\n    if (!predicate(this[index])) {\n      return take(index + 1)\n    }\n  }\n  return
emptyList()\n}\n\n/**\n * Returns a list containing all elements except last elements that satisfy the given
[predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic inline fun
CharArray.dropLastWhile(predicate: (Char) -> Boolean): List<Char> {\n  for (index in lastIndex downTo 0) {\n
  if (!predicate(this[index])) {\n    return take(index + 1)\n  }\n}\n  return emptyList()\n}\n\n/**\n *
Returns a list containing all elements except first elements that satisfy the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic inline fun <T> Array<out
T>.dropWhile(predicate: (T) -> Boolean): List<T> {\n  var yielding = false\n  val list = ArrayList<T>()\n  for
(item in this)\n    if (yielding)\n      list.add(item)\n    else if (!predicate(item)) {\n      list.add(item)\n
  yielding = true\n    }\n  return list\n}\n\n/**\n * Returns a list containing all elements except first elements that
satisfy the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic
inline fun ByteArray.dropWhile(predicate: (Byte) -> Boolean): List<Byte> {\n  var yielding = false\n  val list =
ArrayList<Byte>()\n  for (item in this)\n    if (yielding)\n      list.add(item)\n    else if (!predicate(item)) {\n
  list.add(item)\n    yielding = true\n    }\n  return list\n}\n\n/**\n * Returns a list containing all
elements except first elements that satisfy the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic inline fun ShortArray.dropWhile(predicate:
(Short) -> Boolean): List<Short> {\n  var yielding = false\n  val list = ArrayList<Short>()\n  for (item in this)\n
  if (yielding)\n    list.add(item)\n  else if (!predicate(item)) {\n    list.add(item)\n    yielding =
true\n  }\n  return list\n}\n\n/**\n * Returns a list containing all elements except first elements that satisfy the
given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic inline fun
IntArray.dropWhile(predicate: (Int) -> Boolean): List<Int> {\n  var yielding = false\n  val list =
ArrayList<Int>()\n  for (item in this)\n    if (yielding)\n      list.add(item)\n    else if (!predicate(item)) {\n
  list.add(item)\n    yielding = true\n    }\n  return list\n}\n\n/**\n * Returns a list containing all elements
except first elements that satisfy the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic inline fun LongArray.dropWhile(predicate:
(Long) -> Boolean): List<Long> {\n  var yielding = false\n  val list = ArrayList<Long>()\n  for (item in this)\n
  if (yielding)\n    list.add(item)\n  else if (!predicate(item)) {\n    list.add(item)\n    yielding =
true\n  }\n  return list\n}\n\n/**\n * Returns a list containing all elements except first elements that satisfy the
given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic inline fun
FloatArray.dropWhile(predicate: (Float) -> Boolean): List<Float> {\n  var yielding = false\n  val list =
ArrayList<Float>()\n  for (item in this)\n    if (yielding)\n      list.add(item)\n    else if (!predicate(item))
{\n  list.add(item)\n    yielding = true\n    }\n  return list\n}\n\n/**\n * Returns a list containing all
elements except first elements that satisfy the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic inline fun DoubleArray.dropWhile(predicate:
(Double) -> Boolean): List<Double> {\n  var yielding = false\n  val list = ArrayList<Double>()\n  for (item in
this)\n    if (yielding)\n      list.add(item)\n    else if (!predicate(item)) {\n      list.add(item)\n
  yielding = true\n    }\n  return list\n}\n\n/**\n * Returns a list containing all elements except first elements that
satisfy the given [predicate].\n * \n * @sample

```

```

inline fun BooleanArray.dropWhile(predicate: (Boolean) -> Boolean): List<Boolean> {\n  var yielding = false\n  val list = ArrayList<Boolean>()\n  for (item in this)\n    if (yielding)\n      list.add(item)\n    else if\n      (!predicate(item))\n        list.add(item)\n        yielding = true\n  }\n  return list\n}\n\n/**\n * Returns a list\n * containing all elements except first elements that satisfy the given [predicate].\n * \n * @sample\n * samples.collections.Collections.Transformations.drop\n */\npublic inline fun CharArray.dropWhile(predicate:\n(Char) -> Boolean): List<Char> {\n  var yielding = false\n  val list = ArrayList<Char>()\n  for (item in this)\n    if (yielding)\n      list.add(item)\n    else if (!predicate(item))\n      list.add(item)\n      yielding =\n      true\n  }\n  return list\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n * \n * @sample\n * samples.collections.Collections.Filtering.filter\n */\npublic inline fun <T> Array<out\nT>.filter(predicate: (T) -> Boolean): List<T> {\n  return filterTo(ArrayList<T>(), predicate)\n}\n\n/**\n * Returns\n * a list containing only elements matching the given [predicate].\n * \n * @sample\n * samples.collections.Collections.Filtering.filter\n */\npublic inline fun ByteArray.filter(predicate: (Byte) -> Boolean):\nList<Byte> {\n  return filterTo(ArrayList<Byte>(), predicate)\n}\n\n/**\n * Returns a list containing only elements\n * matching the given [predicate].\n * \n * @sample\n * samples.collections.Collections.Filtering.filter\n */\npublic inline\nfun ShortArray.filter(predicate: (Short) -> Boolean): List<Short> {\n  return filterTo(ArrayList<Short>(),\n  predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n * \n * @sample\n * samples.collections.Collections.Filtering.filter\n */\npublic inline fun IntArray.filter(predicate: (Int) -> Boolean):\nList<Int> {\n  return filterTo(ArrayList<Int>(), predicate)\n}\n\n/**\n * Returns a list containing only elements\n * matching the given [predicate].\n * \n * @sample\n * samples.collections.Collections.Filtering.filter\n */\npublic inline\nfun LongArray.filter(predicate: (Long) -> Boolean): List<Long> {\n  return filterTo(ArrayList<Long>(),\n  predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n * \n * @sample\n * samples.collections.Collections.Filtering.filter\n */\npublic inline fun FloatArray.filter(predicate: (Float) ->\nBoolean): List<Float> {\n  return filterTo(ArrayList<Float>(), predicate)\n}\n\n/**\n * Returns a list containing\n * only elements matching the given [predicate].\n * \n * @sample\n * samples.collections.Collections.Filtering.filter\n */\npublic inline fun DoubleArray.filter(predicate: (Double) -> Boolean): List<Double> {\n  return\n  filterTo(ArrayList<Double>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given\n * [predicate].\n * \n * @sample\n * samples.collections.Collections.Filtering.filter\n */\npublic inline fun\nBooleanArray.filter(predicate: (Boolean) -> Boolean): List<Boolean> {\n  return filterTo(ArrayList<Boolean>(),\n  predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n * \n * @sample\n * samples.collections.Collections.Filtering.filter\n */\npublic inline fun CharArray.filter(predicate: (Char) ->\nBoolean): List<Char> {\n  return filterTo(ArrayList<Char>(), predicate)\n}\n\n/**\n * Returns a list containing\n * only elements matching the given [predicate].\n * \n * @param [predicate] function that takes the index of an element\n * and the element itself\n * and returns the result of predicate evaluation on the element.\n * \n * @sample\n * samples.collections.Collections.Filtering.filterIndexed\n */\npublic inline fun <T> Array<out\nT>.filterIndexed(predicate: (index: Int, T) -> Boolean): List<T> {\n  return filterIndexedTo(ArrayList<T>(),\n  predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n * \n * @param\n * [predicate] function that takes the index of an element and the element itself\n * and returns the result of predicate\n * evaluation on the element.\n * \n * @sample\n * samples.collections.Collections.Filtering.filterIndexed\n */\npublic inline\nfun ByteArray.filterIndexed(predicate: (index: Int, Byte) -> Boolean): List<Byte> {\n  return\n  filterIndexedTo(ArrayList<Byte>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the\n * given [predicate].\n * \n * @param [predicate] function that takes the index of an element and the element itself\n * and\n * returns the result of predicate evaluation on the element.\n * \n * @sample\n * samples.collections.Collections.Filtering.filterIndexed\n */\npublic inline fun ShortArray.filterIndexed(predicate:\n(index: Int, Short) -> Boolean): List<Short> {\n  return filterIndexedTo(ArrayList<Short>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n * \n * @param [predicate] function that takes\n * the index of an element and the element itself\n * and returns the result of predicate evaluation on the element.\n * \n * @sample\n * samples.collections.Collections.Filtering.filterIndexed\n */\npublic inline fun\nIntArray.filterIndexed(predicate: (index: Int, Int) -> Boolean): List<Int> {\n  return

```

```

filterIndexedTo(ArrayList<Int>(), predicate)\n\n/**\n * Returns a list containing only elements matching the
given [predicate].\n * @param [predicate] function that takes the index of an element and the element itself\n * and
returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexed\n */\npublic inline fun LongArray.filterIndexed(predicate:
(index: Int, Long) -> Boolean): List<Long> {\n    return filterIndexedTo(ArrayList<Long>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n * @param [predicate] function that takes
the index of an element and the element itself\n * and returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexed\n */\npublic inline fun
FloatArray.filterIndexed(predicate: (index: Int, Float) -> Boolean): List<Float> {\n    return
filterIndexedTo(ArrayList<Float>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the
given [predicate].\n * @param [predicate] function that takes the index of an element and the element itself\n * and
returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexed\n */\npublic inline fun
DoubleArray.filterIndexed(predicate:
(index: Int, Double) -> Boolean): List<Double> {\n    return filterIndexedTo(ArrayList<Double>(),
predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n * @param
[predicate] function that takes the index of an element and the element itself\n * and returns the result of predicate
evaluation on the element.\n * \n * @sample samples.collections.Collections.Filtering.filterIndexed\n */\npublic
inline fun BooleanArray.filterIndexed(predicate: (index: Int, Boolean) -> Boolean): List<Boolean> {\n    return
filterIndexedTo(ArrayList<Boolean>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching
the given [predicate].\n * @param [predicate] function that takes the index of an element and the element itself\n *
and returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexed\n */\npublic inline fun CharArray.filterIndexed(predicate:
(index: Int, Char) -> Boolean): List<Char> {\n    return filterIndexedTo(ArrayList<Char>(), predicate)\n}\n\n/**\n *
Appends all elements matching the given [predicate] to the given [destination].\n * @param [predicate] function that
takes the index of an element and the element itself\n * and returns the result of predicate evaluation on the
element.\n * \n * @sample samples.collections.Collections.Filtering.filterIndexedTo\n */\npublic inline fun <T, C :
MutableCollection<in T>> Array<out T>.filterIndexedTo(destination: C, predicate: (index: Int, T) -> Boolean): C
{\n    forEachIndexed { index, element ->\n        if (predicate(index, element)) destination.add(element)\n    }\n    return destination\n}\n\n/**\n * Appends all elements matching the given [predicate] to the given [destination].\n *
@param [predicate] function that takes the index of an element and the element itself\n * and returns the result of
predicate evaluation on the element.\n * \n * @sample samples.collections.Collections.Filtering.filterIndexedTo\n */\npublic inline fun <C : MutableCollection<in Byte>> ByteArray.filterIndexedTo(destination: C, predicate:
(index: Int, Byte) -> Boolean): C {\n    forEachIndexed { index, element ->\n        if (predicate(index, element))
destination.add(element)\n    }\n    return destination\n}\n\n/**\n * Appends all elements matching the given
[predicate] to the given [destination].\n * @param [predicate] function that takes the index of an element and the
element itself\n * and returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexedTo\n */\npublic inline fun <C : MutableCollection<in Short>>
ShortArray.filterIndexedTo(destination: C, predicate: (index: Int, Short) -> Boolean): C {\n    forEachIndexed {
index, element ->\n        if (predicate(index, element)) destination.add(element)\n    }\n    return
destination\n}\n\n/**\n * Appends all elements matching the given [predicate] to the given [destination].\n *
@param [predicate] function that takes the index of an element and the element itself\n * and returns the result of
predicate evaluation on the element.\n * \n * @sample samples.collections.Collections.Filtering.filterIndexedTo\n */\npublic inline fun <C : MutableCollection<in Int>> IntArray.filterIndexedTo(destination: C, predicate: (index:
Int, Int) -> Boolean): C {\n    forEachIndexed { index, element ->\n        if (predicate(index, element))
destination.add(element)\n    }\n    return destination\n}\n\n/**\n * Appends all elements matching the given
[predicate] to the given [destination].\n * @param [predicate] function that takes the index of an element and the
element itself\n * and returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexedTo\n */\npublic inline fun <C : MutableCollection<in Long>>

```

```

LongArray.filterIndexedTo(destination: C, predicate: (index: Int, Long) -> Boolean): C {
    forEachIndexed { index, element ->
        if (predicate(index, element)) destination.add(element)
    }
    return destination
}
Append all elements matching the given [predicate] to the given [destination].
@param [predicate] function that takes the index of an element and the element itself
and returns the result of predicate evaluation on the element.
@sample samples.collections.Collections.Filtering.filterIndexedTo

public inline fun <C : MutableCollection<in Float>> FloatArray.filterIndexedTo(destination: C, predicate:
(index: Int, Float) -> Boolean): C {
    forEachIndexed { index, element ->
        if (predicate(index, element)) destination.add(element)
    }
    return destination
}
Append all elements matching the given [predicate] to the given [destination].
@param [predicate] function that takes the index of an element and the element itself
and returns the result of predicate evaluation on the element.
@sample samples.collections.Collections.Filtering.filterIndexedTo

public inline fun <C : MutableCollection<in Double>> DoubleArray.filterIndexedTo(destination: C, predicate: (index: Int, Double) -> Boolean): C {
    forEachIndexed { index, element ->
        if (predicate(index, element)) destination.add(element)
    }
    return destination
}
Append all elements matching the given [predicate] to the given [destination].
@param [predicate] function that takes the index of an element and the element itself
and returns the result of predicate evaluation on the element.
@sample samples.collections.Collections.Filtering.filterIndexedTo

public inline fun <C : MutableCollection<in Boolean>> BooleanArray.filterIndexedTo(destination: C, predicate:
(index: Int, Boolean) -> Boolean): C {
    forEachIndexed { index, element ->
        if (predicate(index, element)) destination.add(element)
    }
    return destination
}
Append all elements matching the given [predicate] to the given [destination].
@param [predicate] function that takes the index of an element and the element itself
and returns the result of predicate evaluation on the element.
@sample samples.collections.Collections.Filtering.filterIndexedTo

public inline fun <C : MutableCollection<in Char>> CharArray.filterIndexedTo(destination: C, predicate: (index: Int, Char) -> Boolean): C {
    forEachIndexed { index, element ->
        if (predicate(index, element)) destination.add(element)
    }
    return destination
}
Returns a list containing all elements that are instances of specified type parameter R.
@sample samples.collections.Collections.Filtering.filterIsInstance

public inline fun <reified R> Array<*>.filterIsInstance(): List<@kotlin.internal.NoInfer R> {
    return filterIsInstanceTo(ArrayList<R>())
}
Append all elements that are instances of specified type parameter R to the given [destination].
@sample samples.collections.Collections.Filtering.filterIsInstanceTo

public inline fun <reified R, C : MutableCollection<in R>> Array<*>.filterIsInstanceTo(destination: C): C {
    for (element in this) if (element is R) destination.add(element)
    return destination
}
Returns a list containing all elements not matching the given [predicate].
@sample samples.collections.Collections.Filtering.filter

public inline fun <T> Array<out T>.filterNot(predicate: (T) -> Boolean): List<T> {
    return filterNotTo(ArrayList<T>(), predicate)
}
Returns a list containing all elements not matching the given [predicate].
@sample samples.collections.Collections.Filtering.filter

public inline fun ByteArray.filterNot(predicate: (Byte) -> Boolean): List<Byte> {
    return filterNotTo(ArrayList<Byte>(), predicate)
}
Returns a list containing all elements not matching the given [predicate].
@sample samples.collections.Collections.Filtering.filter

public inline fun ShortArray.filterNot(predicate: (Short) -> Boolean): List<Short> {
    return filterNotTo(ArrayList<Short>(), predicate)
}
Returns a list containing all elements not matching the given [predicate].
@sample samples.collections.Collections.Filtering.filter

public inline fun IntArray.filterNot(predicate: (Int) -> Boolean): List<Int> {
    return filterNotTo(ArrayList<Int>(), predicate)
}
Returns a list containing all elements not matching the given [predicate].
@sample samples.collections.Collections.Filtering.filter

public inline fun LongArray.filterNot(predicate: (Long) -> Boolean): List<Long> {
    return filterNotTo(ArrayList<Long>(), predicate)
}
Returns a list containing all elements not matching the given [predicate].
@sample samples.collections.Collections.Filtering.filter

public inline fun FloatArray.filterNot(predicate: (Float) -> Boolean): List<Float> {
    return filterNotTo(ArrayList<Float>(), predicate)
}
Returns a list

```



```

containing all elements not matching the given [predicate].\n * \n * @sample
samples.collections.Collections.Filtering.filter\n *\n\npublic inline fun DoubleArray.filterNot(predicate: (Double) ->
Boolean): List<Double> {\n    return filterNotTo(ArrayList<Double>(), predicate)\n}\n\n/**\n * Returns a list
containing all elements not matching the given [predicate].\n * \n * @sample
samples.collections.Collections.Filtering.filter\n *\n\npublic inline fun BooleanArray.filterNot(predicate: (Boolean) -
> Boolean): List<Boolean> {\n    return filterNotTo(ArrayList<Boolean>(), predicate)\n}\n\n/**\n * Returns a list
containing all elements not matching the given [predicate].\n * \n * @sample
samples.collections.Collections.Filtering.filter\n *\n\npublic inline fun CharArray.filterNot(predicate: (Char) ->
Boolean): List<Char> {\n    return filterNotTo(ArrayList<Char>(), predicate)\n}\n\n/**\n * Returns a list containing
all elements that are not `null`.\n * \n * @sample samples.collections.Collections.Filtering.filterNotNull\n *\n\npublic
fun <T : Any> Array<out T?>.filterNotNull(): List<T> {\n    return filterNotNullTo(ArrayList<T>())\n}\n\n/**\n *
Appends all elements that are not `null` to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterNotNullTo\n *\n\npublic fun <C : MutableCollection<in T>, T : Any>
Array<out T?>.filterNotNullTo(destination: C): C {\n    for (element in this) if (element != null)
destination.add(element)\n    return destination\n}\n\n/**\n * Appends all elements not matching the given
[predicate] to the given [destination].\n * \n * @sample samples.collections.Collections.Filtering.filterTo\n
*\n\npublic inline fun <T, C : MutableCollection<in T>> Array<out T>.filterNotTo(destination: C, predicate: (T) ->
Boolean): C {\n    for (element in this) if (!predicate(element)) destination.add(element)\n    return
destination\n}\n\n/**\n * Appends all elements not matching the given [predicate] to the given [destination].\n * \n *
@sample samples.collections.Collections.Filtering.filterTo\n *\n\npublic inline fun <C : MutableCollection<in
Byte>> ByteArray.filterNotTo(destination: C, predicate: (Byte) -> Boolean): C {\n    for (element in this) if
(!predicate(element)) destination.add(element)\n    return destination\n}\n\n/**\n * Appends all elements not
matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n *\n\npublic inline fun <C : MutableCollection<in Short>>
ShortArray.filterNotTo(destination: C, predicate: (Short) -> Boolean): C {\n    for (element in this) if
(!predicate(element)) destination.add(element)\n    return destination\n}\n\n/**\n * Appends all elements not
matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n *\n\npublic inline fun <C : MutableCollection<in Int>>
IntArray.filterNotTo(destination: C, predicate: (Int) -> Boolean): C {\n    for (element in this) if
(!predicate(element)) destination.add(element)\n    return destination\n}\n\n/**\n * Appends all elements not
matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n *\n\npublic inline fun <C : MutableCollection<in Long>>
LongArray.filterNotTo(destination: C, predicate: (Long) -> Boolean): C {\n    for (element in this) if
(!predicate(element)) destination.add(element)\n    return destination\n}\n\n/**\n * Appends all elements not
matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n *\n\npublic inline fun <C : MutableCollection<in Float>>
FloatArray.filterNotTo(destination: C, predicate: (Float) -> Boolean): C {\n    for (element in this) if
(!predicate(element)) destination.add(element)\n    return destination\n}\n\n/**\n * Appends all elements not
matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n *\n\npublic inline fun <C : MutableCollection<in Double>>
DoubleArray.filterNotTo(destination: C, predicate: (Double) -> Boolean): C {\n    for (element in this) if
(!predicate(element)) destination.add(element)\n    return destination\n}\n\n/**\n * Appends all elements not
matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n *\n\npublic inline fun <C : MutableCollection<in Boolean>>
BooleanArray.filterNotTo(destination: C, predicate: (Boolean) -> Boolean): C {\n    for (element in this) if
(!predicate(element)) destination.add(element)\n    return destination\n}\n\n/**\n * Appends all elements not
matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n *\n\npublic inline fun <C : MutableCollection<in Char>>

```

```

CharArray.filterNotTo(destination: C, predicate: (Char) -> Boolean): C {\n  for (element in this) if
(!predicate(element)) destination.add(element)\n  return destination\n}\n\n/**\n * Appends all elements matching
the given [predicate] to the given [destination].\n * \n * @sample samples.collections.Collections.Filtering.filterTo\n
*/\npublic inline fun <T, C : MutableCollection<in T>> Array<out T>.filterTo(destination: C, predicate: (T) ->
Boolean): C {\n  for (element in this) if (predicate(element)) destination.add(element)\n  return
destination\n}\n\n/**\n * Appends all elements matching the given [predicate] to the given [destination].\n * \n *
@sample samples.collections.Collections.Filtering.filterTo\n */\npublic inline fun <C : MutableCollection<in
Byte>> ByteArray.filterTo(destination: C, predicate: (Byte) -> Boolean): C {\n  for (element in this) if
(predicate(element)) destination.add(element)\n  return destination\n}\n\n/**\n * Appends all elements matching
the given [predicate] to the given [destination].\n * \n * @sample samples.collections.Collections.Filtering.filterTo\n
*/\npublic inline fun <C : MutableCollection<in Short>> ShortArray.filterTo(destination: C, predicate: (Short) ->
Boolean): C {\n  for (element in this) if (predicate(element)) destination.add(element)\n  return
destination\n}\n\n/**\n * Appends all elements matching the given [predicate] to the given [destination].\n * \n *
@sample samples.collections.Collections.Filtering.filterTo\n */\npublic inline fun <C : MutableCollection<in Int>>
IntArray.filterTo(destination: C, predicate: (Int) -> Boolean): C {\n  for (element in this) if (predicate(element))
destination.add(element)\n  return destination\n}\n\n/**\n * Appends all elements matching the given [predicate] to
the given [destination].\n * \n * @sample samples.collections.Collections.Filtering.filterTo\n */\npublic inline fun
<C : MutableCollection<in Long>> LongArray.filterTo(destination: C, predicate: (Long) -> Boolean): C {\n  for
(element in this) if (predicate(element)) destination.add(element)\n  return destination\n}\n\n/**\n * Appends all
elements matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n */\npublic inline fun <C : MutableCollection<in Float>>
FloatArray.filterTo(destination: C, predicate: (Float) -> Boolean): C {\n  for (element in this) if
(predicate(element)) destination.add(element)\n  return destination\n}\n\n/**\n * Appends all elements matching
the given [predicate] to the given [destination].\n * \n * @sample samples.collections.Collections.Filtering.filterTo\n
*/\npublic inline fun <C : MutableCollection<in Double>> DoubleArray.filterTo(destination: C, predicate: (Double)
-> Boolean): C {\n  for (element in this) if (predicate(element)) destination.add(element)\n  return
destination\n}\n\n/**\n * Appends all elements matching the given [predicate] to the given [destination].\n * \n *
@sample samples.collections.Collections.Filtering.filterTo\n */\npublic inline fun <C : MutableCollection<in
Boolean>> BooleanArray.filterTo(destination: C, predicate: (Boolean) -> Boolean): C {\n  for (element in this) if
(predicate(element)) destination.add(element)\n  return destination\n}\n\n/**\n * Appends all elements matching
the given [predicate] to the given [destination].\n * \n * @sample samples.collections.Collections.Filtering.filterTo\n
*/\npublic inline fun <C : MutableCollection<in Char>> CharArray.filterTo(destination: C, predicate: (Char) ->
Boolean): C {\n  for (element in this) if (predicate(element)) destination.add(element)\n  return
destination\n}\n\n/**\n * Returns a list containing elements at indices in the specified [indices] range.\n */\npublic
fun <T> Array<out T>.slice(indices: IntRange): List<T> {\n  if (indices.isEmpty()) return listOf()\n  return
copyOfRange(indices.start, indices.endInclusive + 1).asList()\n}\n\n/**\n * Returns a list containing elements at
indices in the specified [indices] range.\n */\npublic fun ByteArray.slice(indices: IntRange): List<Byte> {\n  if
(indices.isEmpty()) return listOf()\n  return copyOfRange(indices.start, indices.endInclusive +
1).asList()\n}\n\n/**\n * Returns a list containing elements at indices in the specified [indices] range.\n */\npublic
fun ShortArray.slice(indices: IntRange): List<Short> {\n  if (indices.isEmpty()) return listOf()\n  return
copyOfRange(indices.start, indices.endInclusive + 1).asList()\n}\n\n/**\n * Returns a list containing elements at
indices in the specified [indices] range.\n */\npublic fun IntArray.slice(indices: IntRange): List<Int> {\n  if
(indices.isEmpty()) return listOf()\n  return copyOfRange(indices.start, indices.endInclusive +
1).asList()\n}\n\n/**\n * Returns a list containing elements at indices in the specified [indices] range.\n */\npublic
fun LongArray.slice(indices: IntRange): List<Long> {\n  if (indices.isEmpty()) return listOf()\n  return
copyOfRange(indices.start, indices.endInclusive + 1).asList()\n}\n\n/**\n * Returns a list containing elements at
indices in the specified [indices] range.\n */\npublic fun FloatArray.slice(indices: IntRange): List<Float> {\n  if
(indices.isEmpty()) return listOf()\n  return copyOfRange(indices.start, indices.endInclusive +

```

```

1).asList()\n}\n\n/**\n * Returns a list containing elements at indices in the specified [indices] range.\n */\npublic
fun DoubleArray.slice(indices: IntRange): List<Double> {\n    if (indices.isEmpty()) return listOf()\n    return
copyOfRange(indices.start, indices.endInclusive + 1).asList()\n}\n\n/**\n * Returns a list containing elements at
indices in the specified [indices] range.\n */\npublic fun BooleanArray.slice(indices: IntRange): List<Boolean> {\n
if (indices.isEmpty()) return listOf()\n    return copyOfRange(indices.start, indices.endInclusive +
1).asList()\n}\n\n/**\n * Returns a list containing elements at indices in the specified [indices] range.\n */\npublic
fun CharArray.slice(indices: IntRange): List<Char> {\n    if (indices.isEmpty()) return listOf()\n    return
copyOfRange(indices.start, indices.endInclusive + 1).asList()\n}\n\n/**\n * Returns a list containing elements at
specified [indices].\n */\npublic fun <T> Array<out T>.slice(indices: Iterable<Int>): List<T> {\n    val size =
indices.collectionSizeOrDefault(10)\n    if (size == 0) return emptyList()\n    val list = ArrayList<T>(size)\n    for
(index in indices) {\n        list.add(get(index))\n    }\n    return list\n}\n\n/**\n * Returns a list containing elements at
specified [indices].\n */\npublic fun ByteArray.slice(indices: Iterable<Int>): List<Byte> {\n    val size =
indices.collectionSizeOrDefault(10)\n    if (size == 0) return emptyList()\n    val list = ArrayList<Byte>(size)\n    for
(index in indices) {\n        list.add(get(index))\n    }\n    return list\n}\n\n/**\n * Returns a list containing elements at
specified [indices].\n */\npublic fun ShortArray.slice(indices: Iterable<Int>): List<Short> {\n    val size =
indices.collectionSizeOrDefault(10)\n    if (size == 0) return emptyList()\n    val list = ArrayList<Short>(size)\n
for (index in indices) {\n        list.add(get(index))\n    }\n    return list\n}\n\n/**\n * Returns a list containing
elements at specified [indices].\n */\npublic fun IntArray.slice(indices: Iterable<Int>): List<Int> {\n    val size =
indices.collectionSizeOrDefault(10)\n    if (size == 0) return emptyList()\n    val list = ArrayList<Int>(size)\n    for
(index in indices) {\n        list.add(get(index))\n    }\n    return list\n}\n\n/**\n * Returns a list containing elements at
specified [indices].\n */\npublic fun LongArray.slice(indices: Iterable<Int>): List<Long> {\n    val size =
indices.collectionSizeOrDefault(10)\n    if (size == 0) return emptyList()\n    val list = ArrayList<Long>(size)\n
for (index in indices) {\n        list.add(get(index))\n    }\n    return list\n}\n\n/**\n * Returns a list containing
elements at specified [indices].\n */\npublic fun FloatArray.slice(indices: Iterable<Int>): List<Float> {\n    val size =
indices.collectionSizeOrDefault(10)\n    if (size == 0) return emptyList()\n    val list = ArrayList<Float>(size)\n
for (index in indices) {\n        list.add(get(index))\n    }\n    return list\n}\n\n/**\n * Returns a list containing
elements at specified [indices].\n */\npublic fun DoubleArray.slice(indices: Iterable<Int>): List<Double> {\n    val
size = indices.collectionSizeOrDefault(10)\n    if (size == 0) return emptyList()\n    val list =
ArrayList<Double>(size)\n    for (index in indices) {\n        list.add(get(index))\n    }\n    return list\n}\n\n/**\n *
Returns a list containing elements at specified [indices].\n */\npublic fun BooleanArray.slice(indices: Iterable<Int>):
List<Boolean> {\n    val size = indices.collectionSizeOrDefault(10)\n    if (size == 0) return emptyList()\n    val list
= ArrayList<Boolean>(size)\n    for (index in indices) {\n        list.add(get(index))\n    }\n    return list\n}\n\n/**\n *
Returns a list containing elements at specified [indices].\n */\npublic fun CharArray.slice(indices: Iterable<Int>):
List<Char> {\n    val size = indices.collectionSizeOrDefault(10)\n    if (size == 0) return emptyList()\n    val list =
ArrayList<Char>(size)\n    for (index in indices) {\n        list.add(get(index))\n    }\n    return list\n}\n\n/**\n *
Returns an array containing elements of this array at specified [indices].\n */\npublic fun <T>
Array<T>.sliceArray(indices: Collection<Int>): Array<T> {\n    val result = arrayOfNulls(this, indices.size)\n    var
targetIndex = 0\n    for (sourceIndex in indices) {\n        result[targetIndex++] = this[sourceIndex]\n    }\n    return
result\n}\n\n/**\n * Returns an array containing elements of this array at specified [indices].\n */\npublic fun
ByteArray.sliceArray(indices: Collection<Int>): ByteArray {\n    val result = ByteArray(indices.size)\n    var
targetIndex = 0\n    for (sourceIndex in indices) {\n        result[targetIndex++] = this[sourceIndex]\n    }\n    return
result\n}\n\n/**\n * Returns an array containing elements of this array at specified [indices].\n */\npublic fun
ShortArray.sliceArray(indices: Collection<Int>): ShortArray {\n    val result = ShortArray(indices.size)\n    var
targetIndex = 0\n    for (sourceIndex in indices) {\n        result[targetIndex++] = this[sourceIndex]\n    }\n    return
result\n}\n\n/**\n * Returns an array containing elements of this array at specified [indices].\n */\npublic fun
IntArray.sliceArray(indices: Collection<Int>): IntArray {\n    val result = IntArray(indices.size)\n    var targetIndex
= 0\n    for (sourceIndex in indices) {\n        result[targetIndex++] = this[sourceIndex]\n    }\n    return
result\n}\n\n/**\n * Returns an array containing elements of this array at specified [indices].\n */\npublic fun

```

```

LongArray.sliceArray(indices: Collection<Int>): LongArray {\n  val result = LongArray(indices.size)\n  var\n  targetIndex = 0\n  for (sourceIndex in indices) {\n    result[targetIndex++] = this[sourceIndex]\n  }\n  return\n  result}\n\n/**\n * Returns an array containing elements of this array at specified [indices].\n */\n\npublic fun\nFloatArray.sliceArray(indices: Collection<Int>): FloatArray {\n  val result = FloatArray(indices.size)\n  var\n  targetIndex = 0\n  for (sourceIndex in indices) {\n    result[targetIndex++] = this[sourceIndex]\n  }\n  return\n  result}\n\n/**\n * Returns an array containing elements of this array at specified [indices].\n */\n\npublic fun\nDoubleArray.sliceArray(indices: Collection<Int>): DoubleArray {\n  val result = DoubleArray(indices.size)\n  var\n  targetIndex = 0\n  for (sourceIndex in indices) {\n    result[targetIndex++] = this[sourceIndex]\n  }\n  return\n  result}\n\n/**\n * Returns an array containing elements of this array at specified [indices].\n */\n\npublic fun\nBooleanArray.sliceArray(indices: Collection<Int>): BooleanArray {\n  val result = BooleanArray(indices.size)\n  var\n  targetIndex = 0\n  for (sourceIndex in indices) {\n    result[targetIndex++] = this[sourceIndex]\n  }\n  return\n  result}\n\n/**\n * Returns an array containing elements of this array at specified [indices].\n */\n\npublic fun\nCharArray.sliceArray(indices: Collection<Int>): CharArray {\n  val result = CharArray(indices.size)\n  var\n  targetIndex = 0\n  for (sourceIndex in indices) {\n    result[targetIndex++] = this[sourceIndex]\n  }\n  return\n  result}\n\n/**\n * Returns an array containing elements at indices in the specified [indices] range.\n */\n\npublic fun\n<T> Array<T>.sliceArray(indices: IntRange): Array<T> {\n  if (indices.isEmpty()) return copyOfRange(0, 0)\n  return\n  copyOfRange(indices.start, indices.endInclusive + 1)\n}\n\n/**\n * Returns an array containing elements at\n  indices in the specified [indices] range.\n */\n\npublic fun\nByteArray.sliceArray(indices: IntRange): ByteArray {\n  if\n  (indices.isEmpty()) return ByteArray(0)\n  return\n  copyOfRange(indices.start, indices.endInclusive + 1)\n}\n\n/**\n * Returns an array containing elements at indices in the specified [indices] range.\n */\n\npublic fun\nShortArray.sliceArray(indices: IntRange): ShortArray {\n  if (indices.isEmpty()) return ShortArray(0)\n  return\n  copyOfRange(indices.start, indices.endInclusive + 1)\n}\n\n/**\n * Returns an array containing elements at indices\n  in the specified [indices] range.\n */\n\npublic fun\nIntArray.sliceArray(indices: IntRange): IntArray {\n  if\n  (indices.isEmpty()) return IntArray(0)\n  return\n  copyOfRange(indices.start, indices.endInclusive + 1)\n}\n\n/**\n * Returns an array containing elements at indices in the specified [indices] range.\n */\n\npublic fun\nLongArray.sliceArray(indices: IntRange): LongArray {\n  if (indices.isEmpty()) return LongArray(0)\n  return\n  copyOfRange(indices.start, indices.endInclusive + 1)\n}\n\n/**\n * Returns an array containing elements at indices\n  in the specified [indices] range.\n */\n\npublic fun\nFloatArray.sliceArray(indices: IntRange): FloatArray {\n  if\n  (indices.isEmpty()) return FloatArray(0)\n  return\n  copyOfRange(indices.start, indices.endInclusive + 1)\n}\n\n/**\n * Returns an array containing elements at indices in the specified [indices] range.\n */\n\npublic fun\nDoubleArray.sliceArray(indices: IntRange): DoubleArray {\n  if (indices.isEmpty()) return DoubleArray(0)\n  return\n  copyOfRange(indices.start, indices.endInclusive + 1)\n}\n\n/**\n * Returns an array containing elements at\n  indices in the specified [indices] range.\n */\n\npublic fun\nBooleanArray.sliceArray(indices: IntRange): BooleanArray\n{\n  if (indices.isEmpty()) return BooleanArray(0)\n  return\n  copyOfRange(indices.start, indices.endInclusive +\n  1)\n}\n\n/**\n * Returns an array containing elements at indices in the specified [indices] range.\n */\n\npublic fun\nCharArray.sliceArray(indices: IntRange): CharArray {\n  if (indices.isEmpty()) return CharArray(0)\n  return\n  copyOfRange(indices.start, indices.endInclusive + 1)\n}\n\n/**\n * Returns a list containing first [n] elements.\n */\n\n * @throws IllegalArgumentException if [n] is negative.\n */\n\n * @sample\nsamples.collections.Collections.Transformations.take\n\npublic fun\n<T> Array<out T>.take(n: Int): List<T> {\n  require(n >= 0) { \"Requested element count $n is less than zero.\" }\n  if (n == 0) return emptyList()\n  if (n >=\n  size) return toList()\n  if (n == 1) return listOf(this[0])\n  var count = 0\n  val list = ArrayList<T>(n)\n  for\n  (item in this) {\n    list.add(item)\n    if (++count == n)\n      break\n  }\n  return\n  list}\n\n/**\n * Returns\n  a list containing first [n] elements.\n */\n\n * @throws IllegalArgumentException if [n] is negative.\n */\n\n * @sample\nsamples.collections.Collections.Transformations.take\n\npublic fun\nByteArray.take(n: Int): List<Byte> {\n  require(n >= 0) { \"Requested element count $n is less than zero.\" }\n  if (n == 0) return emptyList()\n  if (n >=\n  size) return toList()\n  if (n == 1) return listOf(this[0])\n  var count = 0\n  val list = ArrayList<Byte>(n)\n  for\n  (item in this) {\n    list.add(item)\n    if (++count == n)\n      break\n  }\n  return\n  list}\n\n/**\n * Returns\n  a list containing first [n] elements.\n */\n\n * @throws IllegalArgumentException if [n] is negative.\n */\n\n * @sample

```

```

samples.collections.Collections.Transformations.take\n *^\npublic fun ShortArray.take(n: Int): List<Short> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n if (n >=
size) return toList()\n if (n == 1) return listOf(this[0])\n var count = 0\n val list = ArrayList<Short>(n)\n for
(item in this) {\n list.add(item)\n if (++count == n)\n break\n }\n return list\n}\n\n/**\n * Returns
a list containing first [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic fun IntArray.take(n: Int): List<Int> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n if (n >=
size) return toList()\n if (n == 1) return listOf(this[0])\n var count = 0\n val list = ArrayList<Int>(n)\n for
(item in this) {\n list.add(item)\n if (++count == n)\n break\n }\n return list\n}\n\n/**\n * Returns
a list containing first [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic fun LongArray.take(n: Int): List<Long> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n if (n >=
size) return toList()\n if (n == 1) return listOf(this[0])\n var count = 0\n val list = ArrayList<Long>(n)\n for
(item in this) {\n list.add(item)\n if (++count == n)\n break\n }\n return list\n}\n\n/**\n * Returns
a list containing first [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic fun FloatArray.take(n: Int): List<Float> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n if (n >=
size) return toList()\n if (n == 1) return listOf(this[0])\n var count = 0\n val list = ArrayList<Float>(n)\n for
(item in this) {\n list.add(item)\n if (++count == n)\n break\n }\n return list\n}\n\n/**\n * Returns
a list containing first [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic fun DoubleArray.take(n: Int): List<Double> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n if (n >=
size) return toList()\n if (n == 1) return listOf(this[0])\n var count = 0\n val list = ArrayList<Double>(n)\n
for (item in this) {\n list.add(item)\n if (++count == n)\n break\n }\n return list\n}\n\n/**\n *
Returns a list containing first [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n *
@sample samples.collections.Collections.Transformations.take\n *^\npublic fun BooleanArray.take(n: Int):
List<Boolean> {\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return
emptyList()\n if (n >= size) return toList()\n if (n == 1) return listOf(this[0])\n var count = 0\n val list =
ArrayList<Boolean>(n)\n for (item in this) {\n list.add(item)\n if (++count == n)\n break\n }\n
return list\n}\n\n/**\n * Returns a list containing first [n] elements.\n * \n * @throws IllegalArgumentException if
[n] is negative.\n * \n * @sample samples.collections.Collections.Transformations.take\n *^\npublic fun
CharArray.take(n: Int): List<Char> {\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if
(n == 0) return emptyList()\n if (n >= size) return toList()\n if (n == 1) return listOf(this[0])\n var count = 0\n
val list = ArrayList<Char>(n)\n for (item in this) {\n list.add(item)\n if (++count == n)\n break\n
}\n return list\n}\n\n/**\n * Returns a list containing last [n] elements.\n * \n * @throws
IllegalArgument\n * Exception if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic fun <T> Array<out T>.takeLast(n: Int): List<T>
{\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n val
size = size\n if (n >= size) return toList()\n if (n == 1) return listOf(this[size - 1])\n val list =
ArrayList<T>(n)\n for (index in size - n until size)\n list.add(this[index])\n return list\n}\n\n/**\n *
Returns a list containing last [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n *
@sample
samples.collections.Collections.Transformations.take\n *^\npublic fun ByteArray.takeLast(n: Int): List<Byte> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n val size =
size\n if (n >= size) return toList()\n if (n == 1) return listOf(this[size - 1])\n val list = ArrayList<Byte>(n)\n
for (index in size - n until size)\n list.add(this[index])\n return list\n}\n\n/**\n * Returns a list containing last
[n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic fun ShortArray.takeLast(n: Int): List<Short> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n val size =

```

```

size\n if (n >= size) return toList()\n if (n == 1) return listOf(this[size - 1])\n val list = ArrayList<Short>(n)\n for (index in size - n until size)\n list.add(this[index])\n return list\n}\n\n/**\n * Returns a list containing last\n [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample\n samples.collections.Collections.Transformations.take\n */\npublic fun IntArray.takeLast(n: Int): List<Int> {\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n val size =\n size\n if (n >= size) return toList()\n if (n == 1) return listOf(this[size - 1])\n val list = ArrayList<Int>(n)\n for (index in size - n until size)\n list.add(this[index])\n return list\n}\n\n/**\n * Returns a list containing last\n [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample\n samples.collections.Collections.Transformations.take\n */\npublic fun LongArray.takeLast(n: Int): List<Long> {\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n val size =\n size\n if (n >= size) return toList()\n if (n == 1) return listOf(this[size - 1])\n val list = ArrayList<Long>(n)\n for (index in size - n until size)\n list.add(this[index])\n return list\n}\n\n/**\n * Returns a list containing last\n [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample\n samples.collections.Collections.Transformations.take\n */\npublic fun FloatArray.takeLast(n: Int): List<Float> {\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n val size =\n size\n if (n >= size) return toList()\n if (n == 1) return listOf(this[size - 1])\n val list = ArrayList<Float>(n)\n for (index in size - n until size)\n list.add(this[index])\n return list\n}\n\n/**\n * Returns a list containing last\n [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample\n samples.collections.Collections.Transformations.take\n */\npublic fun DoubleArray.takeLast(n: Int): List<Double>\n {\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return emptyList()\n val\n size = size\n if (n >= size) return toList()\n if (n == 1) return listOf(this[size - 1])\n val list =\n ArrayList<Double>(n)\n for (index in size - n until size)\n list.add(this[index])\n return list\n}\n\n/**\n * Returns a list containing last [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * \n * @sample\n samples.collections.Collections.Transformations.take\n */\npublic fun BooleanArray.takeLast(n: Int):\n List<Boolean> {\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return\n emptyList()\n val size = size\n if (n >= size) return toList()\n if (n == 1) return listOf(this[size - 1])\n val list\n = ArrayList<Boolean>(n)\n for (index in size - n until size)\n list.add(this[index])\n return list\n}\n\n/**\n * Returns a list containing last [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * \n * @sample\n samples.collections.Collections.Transformations.take\n */\npublic fun CharArray.takeLast(n: Int):\n List<Char> {\n require(n >= 0) { \"Requested element count $n is less than zero.\" }\n if (n == 0) return\n emptyList()\n val size = size\n if (n >= size) return toList()\n if (n == 1) return listOf(this[size - 1])\n val list\n = ArrayList<Char>(n)\n for (index in size - n until size)\n list.add(this[index])\n return list\n}\n\n/**\n * Returns a list containing last elements satisfying the given [predicate].\n * \n * @sample\n samples.collections.Collections.Transformations.take\n */\npublic inline fun <T> Array<out\n T>.takeLastWhile(predicate: (T) -> Boolean): List<T> {\n for (index in lastIndex downTo 0) {\n if\n (!predicate(this[index])) {\n return drop(index + 1)\n }\n }\n return toList()\n}\n\n/**\n * Returns a\n list containing last elements satisfying the given [predicate].\n * \n * @sample\n samples.collections.Collections.Transformations.take\n */\npublic inline fun ByteArray.takeLastWhile(predicate:\n (Byte) -> Boolean): List<Byte> {\n for (index in lastIndex downTo 0) {\n if (!predicate(this[index])) {\n\n return drop(index + 1)\n }\n }\n return toList()\n}\n\n/**\n * Returns a list containing last elements\n satisfying the given [predicate].\n * \n * @sample\n samples.collections.Collections.Transformations.take\n */\npublic inline fun ShortArray.takeLastWhile(predicate: (Short) -> Boolean): List<Short> {\n for (index in lastIndex\n downTo 0) {\n if (!predicate(this[index])) {\n return drop(index + 1)\n }\n }\n return\n toList()\n}\n\n/**\n * Returns a list containing last elements satisfying the given [predicate].\n * \n * @sample\n samples.collections.Collections.Transformations.take\n */\npublic inline fun IntArray.takeLastWhile(predicate: (Int)\n -> Boolean): List<Int> {\n for (index in lastIndex downTo 0) {\n if (!predicate(this[index])) {\n return\n drop(index + 1)\n }\n }\n return toList()\n}\n\n/**\n * Returns a list containing last elements satisfying the\n given [predicate].\n * \n * @sample\n samples.collections.Collections.Transformations.take\n */\npublic inline fun

```

```

LongArray.takeLastWhile(predicate: (Long) -> Boolean): List<Long> {\n  for (index in lastIndex downTo 0) {\n
  if (!predicate(this[index])) {\n    return drop(index + 1)\n  } \n } \n return toList()\n}\n\n * Returns
a list containing last elements satisfying the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic inline fun FloatArray.takeLastWhile(predicate:
(Float) -> Boolean): List<Float> {\n  for (index in lastIndex downTo 0) {\n  if (!predicate(this[index])) {\n
  return drop(index + 1)\n  } \n } \n return toList()\n}\n\n **\n * Returns a list containing last elements
satisfying the given [predicate].\n * \n * @sample samples.collections.Collections.Transformations.take\n *^\npublic
inline fun DoubleArray.takeLastWhile(predicate: (Double) -> Boolean): List<Double> {\n  for (index in lastIndex
downTo 0) {\n  if (!predicate(this[index])) {\n    return drop(index + 1)\n  } \n } \n return
toList()\n}\n\n **\n * Returns a list containing last elements satisfying the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic inline fun
BooleanArray.takeLastWhile(predicate: (Boolean) -> Boolean): List<Boolean> {\n  for (index in lastIndex
downTo 0) {\n  if (!predicate(this[index])) {\n    return drop(index + 1)\n  } \n } \n return
toList()\n}\n\n **\n * Returns a list containing last elements satisfying the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic inline fun CharArray.takeLastWhile(predicate:
(Char) -> Boolean): List<Char> {\n  for (index in lastIndex downTo 0) {\n  if (!predicate(this[index])) {\n
  return drop(index + 1)\n  } \n } \n return toList()\n}\n\n **\n * Returns a list containing first elements
satisfying the given [predicate].\n * \n * @sample samples.collections.Collections.Transformations.take\n *^\npublic
inline fun <T> Array<out T>.takeWhile(predicate: (T) -> Boolean): List<T> {\n  val list = ArrayList<T>()\n  for
(item in this) {\n  if (!predicate(item))\n    break\n  list.add(item)\n } \n return list\n}\n\n **\n *
Returns a list containing first elements satisfying the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic inline fun ByteArray.takeWhile(predicate: (Byte)
-> Boolean): List<Byte> {\n  val list = ArrayList<Byte>()\n  for (item in this) {\n  if (!predicate(item))\n
  break\n  list.add(item)\n } \n return list\n}\n\n **\n * Returns a list containing first elements satisfying the
given [predicate].\n * \n * @sample samples.collections.Collections.Transformations.take\n *^\npublic inline fun
ShortArray.takeWhile(predicate: (Short) -> Boolean): List<Short> {\n  val list = ArrayList<Short>()\n  for (item
in this) {\n  if (!predicate(item))\n    break\n  list.add(item)\n } \n return list\n}\n\n **\n * Returns a
list containing first elements satisfying the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic inline fun IntArray.takeWhile(predicate: (Int) ->
Boolean): List<Int> {\n  val list = ArrayList<Int>()\n  for (item in this) {\n  if (!predicate(item))\n
  break\n  list.add(item)\n } \n return list\n}\n\n **\n * Returns a list containing first elements satisfying the
given [predicate].\n * \n * @sample samples.collections.Collections.Transformations.take\n *^\npublic inline fun
LongArray.takeWhile(predicate: (Long) -> Boolean): List<Long> {\n  val list = ArrayList<Long>()\n  for (item
in this) {\n  if (!predicate(item))\n    break\n  list.add(item)\n } \n return list\n}\n\n **\n * Returns a
list containing first elements satisfying the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic inline fun FloatArray.takeWhile(predicate:
(Float) -> Boolean): List<Float> {\n  val list = ArrayList<Float>()\n  for (item in this) {\n  if
(!predicate(item))\n    break\n  list.add(item)\n } \n return list\n}\n\n **\n * Returns a list containing first
elements satisfying the given [predicate].\n * \n * @sample samples.collections.Collections.Transformations.take\n
*^\npublic inline fun DoubleArray.takeWhile(predicate: (Double) -> Boolean): List<Double> {\n  val list =
ArrayList<Double>()\n  for (item in this) {\n  if (!predicate(item))\n    break\n  list.add(item)\n } \n
return list\n}\n\n **\n * Returns a list containing first elements satisfying the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.take\n *^\npublic inline fun BooleanArray.takeWhile(predicate:
(Boolean) -> Boolean): List<Boolean> {\n  val list = ArrayList<Boolean>()\n  for (item in this) {\n  if
(!predicate(item))\n    break\n  list.add(item)\n } \n return list\n}\n\n **\n * Returns a list containing first
elements satisfying the given [predicate].\n * \n * @sample samples.collections.Collections.Transformations.take\n
*^\npublic inline fun CharArray.takeWhile(predicate: (Char) -> Boolean): List<Char> {\n  val list =
ArrayList<Char>()\n  for (item in this) {\n  if (!predicate(item))\n    break\n  list.add(item)\n } \n

```

```

return list\n}\n\n/**\n * Reverses elements in the array in-place.\n */\npublic fun <T> Array<T>.reverse(): Unit {\n
val midPoint = (size / 2) - 1\n if (midPoint < 0) return\n var reverseIndex = lastIndex\n for (index in
0..midPoint) {\n val tmp = this[index]\n this[index] = this[reverseIndex]\n this[reverseIndex] = tmp\n
reverseIndex--\n }\n}\n\n/**\n * Reverses elements in the array in-place.\n */\npublic fun ByteArray.reverse():
Unit {\n val midPoint = (size / 2) - 1\n if (midPoint < 0) return\n var reverseIndex = lastIndex\n for (index in
0..midPoint) {\n val tmp = this[index]\n this[index] = this[reverseIndex]\n this[reverseIndex] = tmp\n
reverseIndex--\n }\n}\n\n/**\n * Reverses elements in the array in-place.\n */\npublic fun ShortArray.reverse():
Unit {\n val midPoint = (size / 2) - 1\n if (midPoint < 0) return\n var reverseIndex = lastIndex\n for (index in
0..midPoint) {\n val tmp = this[index]\n this[index] = this[reverseIndex]\n this[reverseIndex] = tmp\n
reverseIndex--\n }\n}\n\n/**\n * Reverses elements in the array in-place.\n */\npublic fun IntArray.reverse():
Unit {\n val midPoint = (size / 2) - 1\n if (midPoint < 0) return\n var reverseIndex = lastIndex\n for (index in
0..midPoint) {\n val tmp = this[index]\n this[index] = this[reverseIndex]\n this[reverseIndex] = tmp\n
reverseIndex--\n }\n}\n\n/**\n * Reverses elements in the array in-place.\n */\npublic fun LongArray.reverse():
Unit {\n val midPoint = (size / 2) - 1\n if (midPoint < 0) return\n var reverseIndex = lastIndex\n for (index in
0..midPoint) {\n val tmp = this[index]\n this[index] = this[reverseIndex]\n this[reverseIndex] = tmp\n
reverseIndex--\n }\n}\n\n/**\n * Reverses elements in the array in-place.\n */\npublic fun FloatArray.reverse():
Unit {\n val midPoint = (size / 2) - 1\n if (midPoint < 0) return\n var reverseIndex = lastIndex\n for (index in
0..midPoint) {\n val tmp = this[index]\n this[index] = this[reverseIndex]\n this[reverseIndex] = tmp\n
reverseIndex--\n }\n}\n\n/**\n * Reverses elements in the array in-place.\n */\npublic fun
DoubleArray.reverse(): Unit {\n val midPoint = (size / 2) - 1\n if (midPoint < 0) return\n var reverseIndex =
lastIndex\n for (index in 0..midPoint) {\n val tmp = this[index]\n this[index] = this[reverseIndex]\n
this[reverseIndex] = tmp\n reverseIndex--\n }\n}\n\n/**\n * Reverses elements in the array in-place.\n
*/\npublic fun BooleanArray.reverse(): Unit {\n val midPoint = (size / 2) - 1\n if (midPoint < 0) return\n var
reverseIndex = lastIndex\n for (index in 0..midPoint) {\n val tmp = this[index]\n this[index] =
this[reverseIndex]\n this[reverseIndex] = tmp\n reverseIndex--\n }\n}\n\n/**\n * Reverses elements in the
array in-place.\n */\npublic fun CharArray.reverse(): Unit {\n val midPoint = (size / 2) - 1\n if (midPoint < 0)
return\n var reverseIndex = lastIndex\n for (index in 0..midPoint) {\n val tmp = this[index]\n this[index]
= this[reverseIndex]\n this[reverseIndex] = tmp\n reverseIndex--\n }\n}\n\n/**\n * Reverses elements of
the array in the specified range in-place.\n * \n * @param fromIndex the start of the range (inclusive) to reverse.\n *
@param toIndex the end of the range (exclusive) to reverse.\n * \n * @throws IndexOutOfBoundsException if
[fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws
IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n@SinceKotlin("1.4")\npublic fun <T>
Array<T>.reverse(fromIndex: Int, toIndex: Int): Unit {\n AbstractList.checkRangeIndexes(fromIndex, toIndex,
size)\n val midPoint = (fromIndex + toIndex) / 2\n if (fromIndex == midPoint) return\n var reverseIndex =
toIndex - 1\n for (index in fromIndex until midPoint) {\n val tmp = this[index]\n this[index] =
this[reverseIndex]\n this[reverseIndex] = tmp\n reverseIndex--\n }\n}\n\n/**\n * Reverses elements of the
array in the specified range in-place.\n * \n * @param fromIndex the start of the range (inclusive) to reverse.\n *
@param toIndex the end of the range (exclusive) to reverse.\n * \n * @throws IndexOutOfBoundsException if
[fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws
IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n@SinceKotlin("1.4")\npublic fun
ByteArray.reverse(fromIndex: Int, toIndex: Int): Unit {\n AbstractList.checkRangeIndexes(fromIndex, toIndex,
size)\n val midPoint = (fromIndex + toIndex) / 2\n if (fromIndex == midPoint) return\n var reverseIndex =
toIndex - 1\n for (index in fromIndex until midPoint) {\n val tmp = this[index]\n this[index] =
this[reverseIndex]\n this[reverseIndex] = tmp\n reverseIndex--\n }\n}\n\n/**\n * Reverses elements of the
array in the specified range in-place.\n * \n * @param fromIndex the start of the range (inclusive) to reverse.\n *
@param toIndex the end of the range (exclusive) to reverse.\n * \n * @throws IndexOutOfBoundsException if
[fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws
IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n@SinceKotlin("1.4")\npublic fun

```



```

ShortArray.reverse(fromIndex: Int, toIndex: Int): Unit {
    AbstractList.checkRangeIndexes(fromIndex, toIndex,
    size)
    val midPoint = (fromIndex + toIndex) / 2
    if (fromIndex == midPoint) return
    var reverseIndex =
    toIndex - 1
    for (index in fromIndex until midPoint) {
        val tmp = this[index]
        this[index] =
        this[reverseIndex]
        this[reverseIndex] = tmp
        reverseIndex--
    }
}

/**
 * Reverses elements of the
array in the specified range in-place.
 * @param fromIndex the start of the range (inclusive) to reverse.
 * @param toIndex the end of the range (exclusive) to reverse.
 * @throws IndexOutOfBoundsException if
[fromIndex] is less than zero or [toIndex] is greater than the size of this array.
 * @throws
IllegalArgumentOutOfRangeException if [fromIndex] is greater than [toIndex].
 */
@SinceKotlin("1.4")
public fun

IntArray.reverse(fromIndex: Int, toIndex: Int): Unit {
    AbstractList.checkRangeIndexes(fromIndex, toIndex,
    size)
    val midPoint = (fromIndex + toIndex) / 2
    if (fromIndex == midPoint) return
    var reverseIndex =
    toIndex - 1
    for (index in fromIndex until midPoint) {
        val tmp = this[index]
        this[index] =
        this[reverseIndex]
        this[reverseIndex] = tmp
        reverseIndex--
    }
}

/**
 * Reverses elements of the
array in the specified range in-place.
 * @param fromIndex the start of the range (inclusive) to reverse.
 * @param toIndex the end of the range (exclusive) to reverse.
 * @throws IndexOutOfBoundsException if
[fromIndex] is less than zero or [toIndex] is greater than the size of this array.
 * @throws
IllegalArgumentOutOfRangeException if [fromIndex] is greater than [toIndex].
 */
@SinceKotlin("1.4")
public fun

LongArray.reverse(fromIndex: Int, toIndex: Int): Unit {
    AbstractList.checkRangeIndexes(fromIndex, toIndex,
    size)
    val midPoint = (fromIndex + toIndex) / 2
    if (fromIndex == midPoint) return
    var reverseIndex =
    toIndex - 1
    for (index in fromIndex until midPoint) {
        val tmp = this[index]
        this[index] =
        this[reverseIndex]
        this[reverseIndex] = tmp
        reverseIndex--
    }
}

/**
 * Reverses elements of the
array in the specified range in-place.
 * @param fromIndex the start of the range (inclusive) to reverse.
 * @param toIndex the end of the range (exclusive) to reverse.
 * @throws IndexOutOfBoundsException if
[fromIndex] is less than zero or [toIndex] is greater than the size of this array.
 * @throws
IllegalArgumentOutOfRangeException if [fromIndex] is greater than [toIndex].
 */
@SinceKotlin("1.4")
public fun

FloatArray.reverse(fromIndex: Int, toIndex: Int): Unit {
    AbstractList.checkRangeIndexes(fromIndex, toIndex,
    size)
    val midPoint = (fromIndex + toIndex) / 2
    if (fromIndex == midPoint) return
    var reverseIndex =
    toIndex - 1
    for (index in fromIndex until midPoint) {
        val tmp = this[index]
        this[index] =
        this[reverseIndex]
        this[reverseIndex] = tmp
        reverseIndex--
    }
}

/**
 * Reverses elements of the
array in the specified range in-place.
 * @param fromIndex the start of the range (inclusive) to reverse.
 * @param toIndex the end of the range (exclusive) to reverse.
 * @throws IndexOutOfBoundsException if
[fromIndex] is less than zero or [toIndex] is greater than the size of this array.
 * @throws
IllegalArgumentOutOfRangeException if [fromIndex] is greater than [toIndex].
 */
@SinceKotlin("1.4")
public fun

DoubleArray.reverse(fromIndex: Int, toIndex: Int): Unit {
    AbstractList.checkRangeIndexes(fromIndex, toIndex,
    size)
    val midPoint = (fromIndex + toIndex) / 2
    if (fromIndex == midPoint) return
    var reverseIndex =
    toIndex - 1
    for (index in fromIndex until midPoint) {
        val tmp = this[index]
        this[index] =
        this[reverseIndex]
        this[reverseIndex] = tmp
        reverseIndex--
    }
}

/**
 * Reverses elements of the
array in the specified range in-place.
 * @param fromIndex the start of the range (inclusive) to reverse.
 * @param toIndex the end of the range (exclusive) to reverse.
 * @throws IndexOutOfBoundsException if
[fromIndex] is less than zero or [toIndex] is greater than the size of this array.
 * @throws
IllegalArgumentOutOfRangeException if [fromIndex] is greater than [toIndex].
 */
@SinceKotlin("1.4")
public fun

BooleanArray.reverse(fromIndex: Int, toIndex: Int): Unit {
    AbstractList.checkRangeIndexes(fromIndex,
    toIndex, size)
    val midPoint = (fromIndex + toIndex) / 2
    if (fromIndex == midPoint) return
    var
reverseIndex = toIndex - 1
    for (index in fromIndex until midPoint) {
        val tmp = this[index]
        this[index] = this[reverseIndex]
        this[reverseIndex] = tmp
        reverseIndex--
    }
}

/**
 * Reverses
elements of the array in the specified range in-place.
 * @param fromIndex the start of the range (inclusive) to
reverse.
 * @param toIndex the end of the range (exclusive) to reverse.
 * @throws
IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.
 * @throws
IllegalArgumentOutOfRangeException if [fromIndex] is greater than [toIndex].
 */
@SinceKotlin("1.4")
public

```

```

fun CharArray.reverse(fromIndex: Int, toIndex: Int): Unit { \n  AbstractList.checkRangeIndexes(fromIndex,
toIndex, size)\n  val midPoint = (fromIndex + toIndex) / 2\n  if (fromIndex == midPoint) return\n  var
reverseIndex = toIndex - 1\n  for (index in fromIndex until midPoint) { \n    val tmp = this[index]\n
this[index] = this[reverseIndex]\n    this[reverseIndex] = tmp\n    reverseIndex--\n  }\n}\n\n/n/**\n * Returns a
list with elements in reversed order.\n */\npublic fun <T> Array<out T>.reversed(): List<T> { \n  if (isEmpty())
return emptyList()\n  val list = toMutableList()\n  list.reverse()\n  return list\n}\n\n/n/**\n * Returns a list with
elements in reversed order.\n */\npublic fun ByteArray.reversed(): List<Byte> { \n  if (isEmpty()) return
emptyList()\n  val list = toMutableList()\n  list.reverse()\n  return list\n}\n\n/n/**\n * Returns a list with elements
in reversed order.\n */\npublic fun ShortArray.reversed(): List<Short> { \n  if (isEmpty()) return emptyList()\n  val
list = toMutableList()\n  list.reverse()\n  return list\n}\n\n/n/**\n * Returns a list with elements in reversed order.\n
*/\npublic fun IntArray.reversed(): List<Int> { \n  if (isEmpty()) return emptyList()\n  val list = toMutableList()\n
list.reverse()\n  return list\n}\n\n/n/**\n * Returns a list with elements in reversed order.\n */\npublic fun
LongArray.reversed(): List<Long> { \n  if (isEmpty()) return emptyList()\n  val list = toMutableList()\n
list.reverse()\n  return list\n}\n\n/n/**\n * Returns a list with elements in reversed order.\n */\npublic fun
FloatArray.reversed(): List<Float> { \n  if (isEmpty()) return emptyList()\n  val list = toMutableList()\n
list.reverse()\n  return list\n}\n\n/n/**\n * Returns a list with elements in reversed order.\n */\npublic fun
DoubleArray.reversed(): List<Double> { \n  if (isEmpty()) return emptyList()\n  val list = toMutableList()\n
list.reverse()\n  return list\n}\n\n/n/**\n * Returns a list with elements in reversed order.\n */\npublic fun
BooleanArray.reversed(): List<Boolean> { \n  if (isEmpty()) return emptyList()\n  val list = toMutableList()\n
list.reverse()\n  return list\n}\n\n/n/**\n * Returns a list with elements in reversed order.\n */\npublic fun
CharArray.reversed(): List<Char> { \n  if (isEmpty()) return emptyList()\n  val list = toMutableList()\n
list.reverse()\n  return list\n}\n\n/n/**\n * Returns an array with elements of this array in reversed order.\n */\npublic
fun <T> Array<T>.reversedArray(): Array<T> { \n  if (isEmpty()) return this\n  val result = arrayOfNulls(this,
size)\n  val lastIndex = lastIndex\n  for (i in 0..lastIndex)\n    result[lastIndex - i] = this[i]\n  return
result\n}\n\n/n/**\n * Returns an array with elements of this array in reversed order.\n */\npublic fun
ByteArray.reversedArray(): ByteArray { \n  if (isEmpty()) return this\n  val result = ByteArray(size)\n  val
lastIndex = lastIndex\n  for (i in 0..lastIndex)\n    result[lastIndex - i] = this[i]\n  return result\n}\n\n/n/**\n *
Returns an array with elements of this array in reversed order.\n */\npublic fun ShortArray.reversedArray():
ShortArray { \n  if (isEmpty()) return this\n  val result = ShortArray(size)\n  val lastIndex = lastIndex\n  for (i in
0..lastIndex)\n    result[lastIndex - i] = this[i]\n  return result\n}\n\n/n/**\n * Returns an array with elements of this
array in reversed order.\n */\npublic fun IntArray.reversedArray(): IntArray { \n  if (isEmpty()) return this\n  val
result = IntArray(size)\n  val lastIndex = lastIndex\n  for (i in 0..lastIndex)\n    result[lastIndex - i] = this[i]\n
return result\n}\n\n/n/**\n * Returns an array with elements of this array in reversed order.\n */\npublic fun
LongArray.reversedArray(): LongArray { \n  if (isEmpty()) return this\n  val result = LongArray(size)\n  val
lastIndex = lastIndex\n  for (i in 0..lastIndex)\n    result[lastIndex - i] = this[i]\n  return result\n}\n\n/n/**\n *
Returns an array with elements of this array in reversed order.\n */\npublic fun FloatArray.reversedArray():
FloatArray { \n  if (isEmpty()) return this\n  val result = FloatArray(size)\n  val lastIndex = lastIndex\n  for (i in
0..lastIndex)\n    result[lastIndex - i] = this[i]\n  return result\n}\n\n/n/**\n * Returns an array with elements of this
array in reversed order.\n */\npublic fun DoubleArray.reversedArray(): DoubleArray { \n  if (isEmpty()) return
this\n  val result = DoubleArray(size)\n  val lastIndex = lastIndex\n  for (i in 0..lastIndex)\n    result[lastIndex -
i] = this[i]\n  return result\n}\n\n/n/**\n * Returns an array with elements of this array in reversed order.\n */\npublic
fun BooleanArray.reversedArray(): BooleanArray { \n  if (isEmpty()) return this\n  val result =
BooleanArray(size)\n  val lastIndex = lastIndex\n  for (i in 0..lastIndex)\n    result[lastIndex - i] = this[i]\n
return result\n}\n\n/n/**\n * Returns an array with elements of this array in reversed order.\n */\npublic fun
CharArray.reversedArray(): CharArray { \n  if (isEmpty()) return this\n  val result = CharArray(size)\n  val
lastIndex = lastIndex\n  for (i in 0..lastIndex)\n    result[lastIndex - i] = this[i]\n  return result\n}\n\n/n/**\n *
Randomly shuffles elements in this array in-place.\n */\n@SinceKotlin("1.4")\npublic fun <T>
Array<T>.shuffle(): Unit { \n  shuffle(Random)\n}\n\n/n/**\n * Randomly shuffles elements in this array in-place.\n
}

```

```

*\n@SinceKotlin("1.4")\npublic fun ByteArray.shuffle(): Unit {\n    shuffle(Random)\n}\n\n**\n * Randomly
shuffles elements in this array in-place.\n *\n@SinceKotlin("1.4")\npublic fun ShortArray.shuffle(): Unit {\n
shuffle(Random)\n}\n\n**\n * Randomly shuffles elements in this array in-place.\n
*\n@SinceKotlin("1.4")\npublic fun IntArray.shuffle(): Unit {\n    shuffle(Random)\n}\n\n**\n * Randomly
shuffles elements in this array in-place.\n *\n@SinceKotlin("1.4")\npublic fun LongArray.shuffle(): Unit {\n
shuffle(Random)\n}\n\n**\n * Randomly shuffles elements in this array in-place.\n
*\n@SinceKotlin("1.4")\npublic fun FloatArray.shuffle(): Unit {\n    shuffle(Random)\n}\n\n**\n * Randomly
shuffles elements in this array in-place.\n *\n@SinceKotlin("1.4")\npublic fun DoubleArray.shuffle(): Unit {\n
shuffle(Random)\n}\n\n**\n * Randomly shuffles elements in this array in-place.\n
*\n@SinceKotlin("1.4")\npublic fun BooleanArray.shuffle(): Unit {\n    shuffle(Random)\n}\n\n**\n * Randomly
shuffles elements in this array in-place.\n *\n@SinceKotlin("1.4")\npublic fun CharArray.shuffle(): Unit {\n
shuffle(Random)\n}\n\n**\n * Randomly shuffles elements in this array in-place using the specified [random]
instance as the source of randomness.\n * \n * See:
https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\_shuffle#The\_modern\_algorithm\n
*\n@SinceKotlin("1.4")\npublic fun <T> Array<T>.shuffle(random: Random): Unit {\n    for (i in lastIndex
downTo 1) {\n        val j = random.nextInt(i + 1)\n        val copy = this[i]\n        this[i] = this[j]\n        this[j] = copy\n
    }\n}\n\n**\n * Randomly shuffles elements in this array in-place using the specified [random] instance as the
source of randomness.\n * \n * See:
https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\_shuffle#The\_modern\_algorithm\n
*\n@SinceKotlin("1.4")\npublic fun ByteArray.shuffle(random: Random): Unit {\n    for (i in lastIndex downTo
1) {\n        val j = random.nextInt(i + 1)\n        val copy = this[i]\n        this[i] = this[j]\n        this[j] = copy\n
    }\n}\n\n**\n * Randomly shuffles elements in this array in-place using the specified [random] instance as the
source of randomness.\n * \n * See:
https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\_shuffle#The\_modern\_algorithm\n
*\n@SinceKotlin("1.4")\npublic fun ShortArray.shuffle(random: Random): Unit {\n    for (i in lastIndex downTo
1) {\n        val j = random.nextInt(i + 1)\n        val copy = this[i]\n        this[i] = this[j]\n        this[j] = copy\n
    }\n}\n\n**\n * Randomly shuffles elements in this array in-place using the specified [random] instance as the
source of randomness.\n * \n * See:
https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\_shuffle#The\_modern\_algorithm\n
*\n@SinceKotlin("1.4")\npublic fun IntArray.shuffle(random: Random): Unit {\n    for (i in lastIndex downTo 1)
{\n        val j = random.nextInt(i + 1)\n        val copy = this[i]\n        this[i] = this[j]\n        this[j] = copy\n
    }\n}\n\n**\n * Randomly shuffles elements in this array in-place using the specified [random] instance as the
source of randomness.\n * \n * See:
https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\_shuffle#The\_modern\_algorithm\n
*\n@SinceKotlin("1.4")\npublic fun LongArray.shuffle(random: Random): Unit {\n    for (i in lastIndex downTo
1) {\n        val j = random.nextInt(i + 1)\n        val copy = this[i]\n        this[i] = this[j]\n        this[j] = copy\n
    }\n}\n\n**\n * Randomly shuffles elements in this array in-place using the specified [random] instance as the
source of randomness.\n * \n * See:
https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\_shuffle#The\_modern\_algorithm\n
*\n@SinceKotlin("1.4")\npublic fun FloatArray.shuffle(random: Random): Unit {\n    for (i in lastIndex downTo
1) {\n        val j = random.nextInt(i + 1)\n        val copy = this[i]\n        this[i] = this[j]\n        this[j] = copy\n
    }\n}\n\n**\n * Randomly shuffles elements in this array in-place using the specified [random] instance as the
source of randomness.\n * \n * See:
https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\_shuffle#The\_modern\_algorithm\n
*\n@SinceKotlin("1.4")\npublic fun DoubleArray.shuffle(random: Random): Unit {\n    for (i in lastIndex
downTo 1) {\n        val j = random.nextInt(i + 1)\n        val copy = this[i]\n        this[i] = this[j]\n        this[j] = copy\n
    }\n}\n\n**\n * Randomly shuffles elements in this array in-place using the specified [random] instance as the
source of randomness.\n * \n * See:

```

https://en.wikipedia.org/wiki/Fisher%E2%80%93Yates_shuffle#The_modern_algorithm

```
*\n@SinceKotlin("1.4")\npublic fun BooleanArray.shuffle(random: Random): Unit {\n    for (i in lastIndex\n        downTo 1) {\n        val j = random.nextInt(i + 1)\n        val copy = this[i]\n        this[i] = this[j]\n        this[j] = copy\n    }\n}\n\n/**\n * Randomly shuffles elements in this array in-place using the specified [random] instance as the\n * source of randomness.\n * \n * See:
```

https://en.wikipedia.org/wiki/Fisher%E2%80%93Yates_shuffle#The_modern_algorithm

```
*\n@SinceKotlin("1.4")\npublic fun CharArray.shuffle(random: Random): Unit {\n    for (i in lastIndex downTo\n        1) {\n        val j = random.nextInt(i + 1)\n        val copy = this[i]\n        this[i] = this[j]\n        this[j] = copy\n    }\n}\n\n/**\n * Sorts elements in the array in-place according to natural sort order of the value returned by specified\n * [selector] function.\n * \n * The sort is _stable_. It means that equal elements preserve their order relative to each\n * other after sorting.\n *\npublic inline fun <T, R : Comparable<R>> Array<out T>.sortBy(crossinline selector: (T)\n    -> R?): Unit {\n    if (size > 1) sortByWith(compareBy(selector))\n}\n\n/**\n * Sorts elements in the array in-place\n * descending according to natural sort order of the value returned by specified [selector] function.\n * \n * The sort is\n * _stable_. It means that equal elements preserve their order relative to each other after sorting.\n *\npublic inline fun\n    <T, R : Comparable<R>> Array<out T>.sortByDescending(crossinline selector: (T) -> R?): Unit {\n    if (size > 1)\n        sortByDescending(compareByDescending(selector))\n}\n\n/**\n * Sorts elements in the array in-place descending according\n * to their natural sort order.\n * \n * The sort is _stable_. It means that equal elements preserve their order relative to\n * each other after sorting.\n *\npublic fun <T : Comparable<T>> Array<out T>.sortDescending(): Unit {\n    if (size > 1)\n        sort()\n        reverse()\n}\n\n/**\n * Sorts elements in the array in-place descending according to their natural sort order.\n *\npublic fun\n    ByteArray.sortDescending(): Unit {\n    if (size > 1) {\n        sort()\n        reverse()\n    }\n}\n\n/**\n * Sorts elements in the array in-place descending according to their natural sort order.\n *\npublic fun\n    ShortArray.sortDescending(): Unit {\n    if (size > 1) {\n        sort()\n        reverse()\n    }\n}\n\n/**\n * Sorts\n * elements in the array in-place descending according to their natural sort order.\n *\npublic fun\n    IntArray.sortDescending(): Unit {\n    if (size > 1) {\n        sort()\n        reverse()\n    }\n}\n\n/**\n * Sorts elements\n * in the array in-place descending according to their natural sort order.\n *\npublic fun\n    LongArray.sortDescending():\n    Unit {\n    if (size > 1) {\n        sort()\n        reverse()\n    }\n}\n\n/**\n * Sorts elements in the array in-place\n * descending according to their natural sort order.\n *\npublic fun\n    FloatArray.sortDescending(): Unit {\n    if (size >\n        1) {\n        sort()\n        reverse()\n    }\n}\n\n/**\n * Sorts elements in the array in-place descending according to\n * their natural sort order.\n *\npublic fun\n    DoubleArray.sortDescending(): Unit {\n    if (size > 1) {\n        sort()\n        reverse()\n    }\n}\n\n/**\n * Sorts elements in the array in-place descending according to their natural sort order.\n *\npublic fun\n    CharArray.sortDescending(): Unit {\n    if (size > 1) {\n        sort()\n        reverse()\n    }\n}\n\n/**\n * Returns a list of all elements sorted according to their natural sort order.\n * \n * The sort is _stable_. It means that\n * equal elements preserve their order relative to each other after sorting.\n *\npublic fun <T : Comparable<T>>\n    Array<out T>.sorted(): List<T> {\n    return sortedArray().asList()\n}\n\n/**\n * Returns a list of all elements sorted\n * according to their natural sort order.\n *\npublic fun\n    ByteArray.sorted(): List<Byte> {\n    return\n        toTypedArray().apply { sort() }.asList()\n}\n\n/**\n * Returns a list of all elements sorted according to their natural\n * sort order.\n *\npublic fun\n    ShortArray.sorted(): List<Short> {\n    return toTypedArray().apply { sort() }\n        }.asList()\n}\n\n/**\n * Returns a list of all elements sorted according to their natural sort order.\n *\npublic fun\n    IntArray.sorted(): List<Int> {\n    return toTypedArray().apply { sort() }.asList()\n}\n\n/**\n * Returns a list of all\n * elements sorted according to their natural sort order.\n *\npublic fun\n    LongArray.sorted(): List<Long> {\n    return\n        toTypedArray().apply { sort() }.asList()\n}\n\n/**\n * Returns a list of all elements sorted according to their natural\n * sort order.\n *\npublic fun\n    FloatArray.sorted(): List<Float> {\n    return toTypedArray().apply { sort() }\n        }.asList()\n}\n\n/**\n * Returns a list of all elements sorted according to their natural sort order.\n *\npublic fun\n    DoubleArray.sorted(): List<Double> {\n    return toTypedArray().apply { sort() }.asList()\n}\n\n/**\n * Returns a\n * list of all elements sorted according to their natural sort order.\n *\npublic fun\n    CharArray.sorted(): List<Char> {\n    return toTypedArray().apply { sort() }.asList()\n}\n\n/**\n * Returns an array with all elements of this array sorted\n * according to their natural sort order.\n * \n * The sort is _stable_. It means that equal elements preserve their order\n * relative to each other after sorting.\n *\npublic fun <T : Comparable<T>> Array<T>.sortedArray(): Array<T> {\n
```

```

if (isEmpty()) return this\n    return this.copyOf().apply { sort() }\n}\n\n/**\n * Returns an array with all elements of
this array sorted according to their natural sort order.\n */\npublic fun ByteArray.sortedArray(): ByteArray {\n    if
(isEmpty()) return this\n    return this.copyOf().apply { sort() }\n}\n\n/**\n * Returns an array with all elements of
this array sorted according to their natural sort order.\n */\npublic fun ShortArray.sortedArray(): ShortArray {\n    if
(isEmpty()) return this\n    return this.copyOf().apply { sort() }\n}\n\n/**\n * Returns an array with all elements of
this array sorted according to their natural sort order.\n */\npublic fun IntArray.sortedArray(): IntArray {\n    if
(isEmpty()) return this\n    return this.copyOf().apply { sort() }\n}\n\n/**\n * Returns an array with all elements of
this array sorted according to their natural sort order.\n */\npublic fun LongArray.sortedArray(): LongArray {\n    if
(isEmpty()) return this\n    return this.copyOf().apply { sort() }\n}\n\n/**\n * Returns an array with all elements of
this array sorted according to their natural sort order.\n */\npublic fun FloatArray.sortedArray(): FloatArray {\n    if
(isEmpty()) return this\n    return this.copyOf().apply { sort() }\n}\n\n/**\n * Returns an array with all elements of
this array sorted according to their natural sort order.\n */\npublic fun DoubleArray.sortedArray(): DoubleArray {\n    if
(isEmpty()) return this\n    return this.copyOf().apply { sort() }\n}\n\n/**\n * Returns an array with all elements
of this array sorted according to their natural sort order.\n */\npublic fun CharArray.sortedArray(): CharArray {\n    if
(isEmpty()) return this\n    return this.copyOf().apply { sort() }\n}\n\n/**\n * Returns an array with all elements of
this array sorted descending according to their natural sort order.\n * \n * The sort is _stable_. It means that equal
elements preserve their order relative to each other after sorting.\n */\npublic fun <T : Comparable<T>>
Array<T>.sortedArrayDescending(): Array<T> {\n    if (isEmpty()) return this\n    return this.copyOf().apply {
sortWith(reverseOrder()) }\n}\n\n/**\n * Returns an array with all elements of this array sorted descending
according to their natural sort order.\n */\npublic fun ByteArray.sortedArrayDescending(): ByteArray {\n    if
(isEmpty()) return this\n    return this.copyOf().apply { sortDescending() }\n}\n\n/**\n * Returns an array with all
elements of this array sorted descending according to their natural sort order.\n */\npublic fun
ShortArray.sortedArrayDescending(): ShortArray {\n    if (isEmpty()) return this\n    return this.copyOf().apply {
sortDescending() }\n}\n\n/**\n * Returns an array with all elements of this array sorted descending according to
their natural sort order.\n */\npublic fun IntArray.sortedArrayDescending(): IntArray {\n    if (isEmpty()) return
this\n    return this.copyOf().apply { sortDescending() }\n}\n\n/**\n * Returns an array with all elements of this
array sorted descending according to their natural sort order.\n */\npublic fun LongArray.sortedArrayDescending():
LongArray {\n    if (isEmpty()) return this\n    return this.copyOf().apply { sortDescending() }\n}\n\n/**\n * Returns
an array with all elements of this array sorted descending according to their natural sort order.\n */\npublic fun
FloatArray.sortedArrayDescending(): FloatArray {\n    if (isEmpty()) return this\n    return this.copyOf().apply {
sortDescending() }\n}\n\n/**\n * Returns an array with all elements of this array sorted descending according to
their natural sort order.\n */\npublic fun DoubleArray.sortedArrayDescending(): DoubleArray {\n    if (isEmpty())
return this\n    return this.copyOf().apply { sortDescending() }\n}\n\n/**\n * Returns an array with all elements of
this array sorted descending according to their natural sort order.\n */\npublic fun
CharArray.sortedArrayDescending(): CharArray {\n    if (isEmpty()) return this\n    return this.copyOf().apply {
sortDescending() }\n}\n\n/**\n * Returns an array with all elements of this array sorted according the specified
[comparator].\n * \n * The sort is _stable_. It means that equal elements preserve their order relative to each other
after sorting.\n */\npublic fun <T> Array<out T>.sortedArrayWith(comparator: Comparator<in T>): Array<out T>
{\n    if (isEmpty()) return this\n    return this.copyOf().apply { sortWith(comparator) }\n}\n\n/**\n * Returns a list
of all elements sorted according to natural sort order of the value returned by specified [selector] function.\n * \n *
The sort is _stable_. It means that equal elements preserve their order relative to each other after sorting.\n * \n *
@sample samples.collections.Collections.Sorting.sortedBy\n */\npublic inline fun <T, R : Comparable<R>>
Array<out T>.sortedBy(crossinline selector: (T) -> R?): List<T> {\n    return
sortedWith(compareBy(selector))\n}\n\n/**\n * Returns a list of all elements sorted according to natural sort order
of the value returned by specified [selector] function.\n * \n * @sample
samples.collections.Collections.Sorting.sortedBy\n */\npublic inline fun <R : Comparable<R>>
ByteArray.sortedBy(crossinline selector: (Byte) -> R?): List<Byte> {\n    return
sortedWith(compareBy(selector))\n}\n\n/**\n * Returns a list of all elements sorted according to natural sort order

```

of the value returned by specified [selector] function.\n * \n * @sample
samples.collections.Collections.Sorting.sortedBy\n * \n\npublic inline fun <R : Comparable<R>>
ShortArray.sortedBy(crossinline selector: (Short) -> R?): List<Short> {\n return
sortedWith(compareBy(selector))\n}\n\n/**\n * Returns a list of all elements sorted according to natural sort order
of the value returned by specified [selector] function.\n * \n * @sample
samples.collections.Collections.Sorting.sortedBy\n * \n\npublic inline fun <R : Comparable<R>>
IntArray.sortedBy(crossinline selector: (Int) -> R?): List<Int> {\n return
sortedWith(compareBy(selector))\n}\n\n/**\n * Returns a list of all elements sorted according to natural sort order
of the value returned by specified [selector] function.\n * \n * @sample
samples.collections.Collections.Sorting.sortedBy\n * \n\npublic inline fun <R : Comparable<R>>
LongArray.sortedBy(crossinline selector: (Long) -> R?): List<Long> {\n return
sortedWith(compareBy(selector))\n}\n\n/**\n * Returns a list of all elements sorted according to natural sort order
of the value returned by specified [selector] function.\n * \n * @sample
samples.collections.Collections.Sorting.sortedBy\n * \n\npublic inline fun <R : Comparable<R>>
FloatArray.sortedBy(crossinline selector: (Float) -> R?): List<Float> {\n return
sortedWith(compareBy(selector))\n}\n\n/**\n * Returns a list of all elements sorted according to natural sort order
of the value returned by specified [selector] function.\n * \n * @sample
samples.collections.Collections.Sorting.sortedBy\n * \n\npublic inline fun <R : Comparable<R>>
DoubleArray.sortedBy(crossinline selector: (Double) -> R?): List<Double> {\n return
sortedWith(compareBy(selector))\n}\n\n/**\n * Returns a list of all elements sorted according to natural sort order
of the value returned by specified [selector] function.\n * \n * @sample
samples.collections.Collections.Sorting.sortedBy\n * \n\npublic inline fun <R : Comparable<R>>
BooleanArray.sortedBy(crossinline selector: (Boolean) -> R?): List<Boolean> {\n return
sortedWith(compareBy(selector))\n}\n\n/**\n * Returns a list of all elements sorted according to natural sort order
of the value returned by specified [selector] function.\n * \n * @sample
samples.collections.Collections.Sorting.sortedBy\n * \n\npublic inline fun <R : Comparable<R>>
CharArray.sortedBy(crossinline selector: (Char) -> R?): List<Char> {\n return
sortedWith(compareBy(selector))\n}\n\n/**\n * Returns a list of all elements sorted descending according to natural
sort order of the value returned by specified [selector] function.\n * \n * The sort is `_stable_`. It means that equal
elements preserve their order relative to each other after sorting.\n * \n\npublic inline fun <T, R : Comparable<R>>
Array<out T>.sortedByDescending(crossinline selector: (T) -> R?): List<T> {\n return
sortedWith(compareByDescending(selector))\n}\n\n/**\n * Returns a list of all elements sorted descending
according to natural sort order of the value returned by specified [selector] function.\n * \n\npublic inline fun <R :
Comparable<R>> ByteArray.sortedByDescending(crossinline selector: (Byte) -> R?): List<Byte> {\n return
sortedWith(compareByDescending(selector))\n}\n\n/**\n * Returns a list of all elements sorted descending
according to natural sort order of the value returned by specified [selector] function.\n * \n\npublic inline fun <R :
Comparable<R>> ShortArray.sortedByDescending(crossinline selector: (Short) -> R?): List<Short> {\n return
sortedWith(compareByDescending(selector))\n}\n\n/**\n * Returns a list of all elements sorted descending
according to natural sort order of the value returned by specified [selector] function.\n * \n\npublic inline fun <R :
Comparable<R>> IntArray.sortedByDescending(crossinline selector: (Int) -> R?): List<Int> {\n return
sortedWith(compareByDescending(selector))\n}\n\n/**\n * Returns a list of all elements sorted descending
according to natural sort order of the value returned by specified [selector] function.\n * \n\npublic inline fun <R :
Comparable<R>> LongArray.sortedByDescending(crossinline selector: (Long) -> R?): List<Long> {\n return
sortedWith(compareByDescending(selector))\n}\n\n/**\n * Returns a list of all elements sorted descending
according to natural sort order of the value returned by specified [selector] function.\n * \n\npublic inline fun <R :
Comparable<R>> FloatArray.sortedByDescending(crossinline selector: (Float) -> R?): List<Float> {\n return
sortedWith(compareByDescending(selector))\n}\n\n/**\n * Returns a list of all elements sorted descending
according to natural sort order of the value returned by specified [selector] function.\n * \n\npublic inline fun <R :

Comparable<R>> DoubleArray.sortedByDescending(crossinline selector: (Double) -> R?): List<Double> {\n return sortedWith(compareByDescending(selector))\n}\n\n/**\n * Returns a list of all elements sorted descending according to natural sort order of the value returned by specified [selector] function.\n */\npublic inline fun <R : Comparable<R>> BooleanArray.sortedByDescending(crossinline selector: (Boolean) -> R?): List<Boolean> {\n return sortedWith(compareByDescending(selector))\n}\n\n/**\n * Returns a list of all elements sorted descending according to natural sort order of the value returned by specified [selector] function.\n */\npublic inline fun <R : Comparable<R>> CharArray.sortedByDescending(crossinline selector: (Char) -> R?): List<Char> {\n return sortedWith(compareByDescending(selector))\n}\n\n/**\n * Returns a list of all elements sorted descending according to their natural sort order.\n * \n * The sort is `_stable_`. It means that equal elements preserve their order relative to each other after sorting.\n */\npublic fun <T : Comparable<T>> Array<out T>.sortedDescending(): List<T> {\n return sortedWith(reverseOrder())\n}\n\n/**\n * Returns a list of all elements sorted descending according to their natural sort order.\n */\npublic fun ByteArray.sortedDescending(): List<Byte> {\n return copyOf().apply { sort() }.reversed()\n}\n\n/**\n * Returns a list of all elements sorted descending according to their natural sort order.\n */\npublic fun ShortArray.sortedDescending(): List<Short> {\n return copyOf().apply { sort() }.reversed()\n}\n\n/**\n * Returns a list of all elements sorted descending according to their natural sort order.\n */\npublic fun IntArray.sortedDescending(): List<Int> {\n return copyOf().apply { sort() }.reversed()\n}\n\n/**\n * Returns a list of all elements sorted descending according to their natural sort order.\n */\npublic fun LongArray.sortedDescending(): List<Long> {\n return copyOf().apply { sort() }.reversed()\n}\n\n/**\n * Returns a list of all elements sorted descending according to their natural sort order.\n */\npublic fun FloatArray.sortedDescending(): List<Float> {\n return copyOf().apply { sort() }.reversed()\n}\n\n/**\n * Returns a list of all elements sorted descending according to their natural sort order.\n */\npublic fun DoubleArray.sortedDescending(): List<Double> {\n return copyOf().apply { sort() }.reversed()\n}\n\n/**\n * Returns a list of all elements sorted descending according to their natural sort order.\n */\npublic fun CharArray.sortedDescending(): List<Char> {\n return copyOf().apply { sort() }.reversed()\n}\n\n/**\n * Returns a list of all elements sorted according to the specified [comparator].\n * \n * The sort is `_stable_`. It means that equal elements preserve their order relative to each other after sorting.\n */\npublic fun <T> Array<out T>.sortedWith(comparator: Comparator<in T>): List<T> {\n return sortedArrayWith(comparator).asList()\n}\n\n/**\n * Returns a list of all elements sorted according to the specified [comparator].\n */\npublic fun ByteArray.sortedWith(comparator: Comparator<in Byte>): List<Byte> {\n return toTypedArray().apply { sortWith(comparator) }.asList()\n}\n\n/**\n * Returns a list of all elements sorted according to the specified [comparator].\n */\npublic fun ShortArray.sortedWith(comparator: Comparator<in Short>): List<Short> {\n return toTypedArray().apply { sortWith(comparator) }.asList()\n}\n\n/**\n * Returns a list of all elements sorted according to the specified [comparator].\n */\npublic fun IntArray.sortedWith(comparator: Comparator<in Int>): List<Int> {\n return toTypedArray().apply { sortWith(comparator) }.asList()\n}\n\n/**\n * Returns a list of all elements sorted according to the specified [comparator].\n */\npublic fun LongArray.sortedWith(comparator: Comparator<in Long>): List<Long> {\n return toTypedArray().apply { sortWith(comparator) }.asList()\n}\n\n/**\n * Returns a list of all elements sorted according to the specified [comparator].\n */\npublic fun FloatArray.sortedWith(comparator: Comparator<in Float>): List<Float> {\n return toTypedArray().apply { sortWith(comparator) }.asList()\n}\n\n/**\n * Returns a list of all elements sorted according to the specified [comparator].\n */\npublic fun DoubleArray.sortedWith(comparator: Comparator<in Double>): List<Double> {\n return toTypedArray().apply { sortWith(comparator) }.asList()\n}\n\n/**\n * Returns a list of all elements sorted according to the specified [comparator].\n */\npublic fun BooleanArray.sortedWith(comparator: Comparator<in Boolean>): List<Boolean> {\n return toTypedArray().apply { sortWith(comparator) }.asList()\n}\n\n/**\n * Returns a list of all elements sorted according to the specified [comparator].\n */\npublic fun CharArray.sortedWith(comparator: Comparator<in Char>): List<Char> {\n return toTypedArray().apply { sortWith(comparator) }.asList()\n}\n\n/**\n * Returns a [List] that wraps the original array.\n */\npublic expect fun <T> Array<out T>.asList(): List<T>\n\n/**\n * Returns a [List] that wraps the original array.\n */\npublic expect fun ByteArray.asList(): List<Byte>\n\n/**\n * Returns a [List] that wraps the original array.\n */\npublic expect fun

`ShortArray.asList(): List<Short>`
 Returns a [List] that wraps the original array.
`IntArray.asList(): List<Int>`
 Returns a [List] that wraps the original array.
`LongArray.asList(): List<Long>`
 Returns a [List] that wraps the original array.
`FloatArray.asList(): List<Float>`
 Returns a [List] that wraps the original array.
`DoubleArray.asList(): List<Double>`
 Returns a [List] that wraps the original array.
`BooleanArray.asList(): List<Boolean>`
 Returns a [List] that wraps the original array.
`CharArray.asList(): List<Char>`
 Returns `true` if the two specified arrays are *deeply* equal to one another, i.e. contain the same number of the same elements in the same order. If two corresponding elements are nested arrays, they are also compared deeply. If any of arrays contains itself on any nesting level the behavior is undefined. The elements of other types are compared for equality with the [equals][Any.equals] function. For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.

`contentDeepEquals(other: Array<out T>): Boolean`
 Returns `true` if the two specified arrays are *deeply* equal to one another, i.e. contain the same number of the same elements in the same order. The specified arrays are also considered deeply equal if both are `null`. If two corresponding elements are nested arrays, they are also compared deeply. If any of arrays contains itself on any nesting level the behavior is undefined. The elements of other types are compared for equality with the [equals][Any.equals] function. For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.

`contentDeepHashCode(): Int`
 Returns a hash code based on the contents of this array as if it is [List]. Nested arrays are treated as lists too. If any of arrays contains itself on any nesting level the behavior is undefined.

`contentDeepToString(): String`
 Returns a string representation of the contents of this array as if it is a [List]. Nested arrays are treated as lists too. If any of arrays contains itself on any nesting level that reference is rendered as `[...]` to prevent recursion.

`contentDeepToString(): String`
 Returns a string representation of the contents of this array as if it is a [List]. Nested arrays are treated as lists too. If any of arrays contains itself on any nesting level that reference is rendered as `[...]` to prevent recursion.

`contentDeepToString(): String`
 Returns `true` if the two specified arrays are *structurally* equal to one another, i.e. contain the same number of the same elements in the same order. The elements are compared for equality with the [equals][Any.equals] function. For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.

`contentEquals(other: Array<out T>): Boolean`
 Returns `true` if the two specified arrays are *structurally* equal to one another, i.e. contain the same number of the same elements in the same order. The elements are compared for equality with the [equals][Any.equals] function. For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.

`contentEquals(other: ByteArray): Boolean`
 Returns `true` if the two specified arrays are *structurally* equal to one another, i.e. contain the same number of the same elements in the same order. The elements are compared for equality with the [equals][Any.equals] function. For floating point numbers it

means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.

```

@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")
@SinceKotlin("1.1")
@DeprecatedSinceKotlin(hiddenSince = "1.4")
public expect infix fun ShortArray.contentEquals(other: ShortArray): Boolean
    * Returns `true` if the two specified arrays are *structurally* equal to one another,
    * i.e. contain the same number of the same elements in the same order.
    * The elements are compared for equality with the [equals][Any.equals] function.
    * For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.
@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")
@SinceKotlin("1.1")
@DeprecatedSinceKotlin(hiddenSince = "1.4")
public expect infix fun IntArray.contentEquals(other: IntArray): Boolean
    * Returns `true` if the two specified arrays are *structurally* equal to one another,
    * i.e. contain the same number of the same elements in the same order.
    * The elements are compared for equality with the [equals][Any.equals] function.
    * For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.
@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")
@SinceKotlin("1.1")
@DeprecatedSinceKotlin(hiddenSince = "1.4")
public expect infix fun LongArray.contentEquals(other: LongArray): Boolean
    * Returns `true` if the two specified arrays are *structurally* equal to one another,
    * i.e. contain the same number of the same elements in the same order.
    * The elements are compared for equality with the [equals][Any.equals] function.
    * For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.
@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")
@SinceKotlin("1.1")
@DeprecatedSinceKotlin(hiddenSince = "1.4")
public expect infix fun FloatArray.contentEquals(other: FloatArray): Boolean
    * Returns `true` if the two specified arrays are *structurally* equal to one another,
    * i.e. contain the same number of the same elements in the same order.
    * The elements are compared for equality with the [equals][Any.equals] function.
    * For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.
@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")
@SinceKotlin("1.1")
@DeprecatedSinceKotlin(hiddenSince = "1.4")
public expect infix fun DoubleArray.contentEquals(other: DoubleArray): Boolean
    * Returns `true` if the two specified arrays are *structurally* equal to one another,
    * i.e. contain the same number of the same elements in the same order.
    * The elements are compared for equality with the [equals][Any.equals] function.
    * For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.
@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")
@SinceKotlin("1.1")
@DeprecatedSinceKotlin(hiddenSince = "1.4")
public expect infix fun BooleanArray.contentEquals(other: BooleanArray): Boolean
    * Returns `true` if the two specified arrays are *structurally* equal to one another,
    * i.e. contain the same number of the same elements in the same order.
    * The elements are compared for equality with the [equals][Any.equals] function.
    * For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.
@SinceKotlin("1.4")
public expect infix fun <T> Array<out T>?.contentEquals(other: Array<out T>?): Boolean
    * Returns `true` if the two specified arrays are *structurally* equal to one another,
    * i.e. contain the same number of the same elements in the same order.
    * The elements are compared for equality with the [equals][Any.equals] function.
    * For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.
@SinceKotlin("1.4")
public expect infix fun ByteArray?.contentEquals(other: ByteArray?): Boolean
    * Returns `true` if the two specified arrays are *structurally* equal to one another,
    * i.e. contain the same number of the same elements in the same order.
    * The elements are compared for equality with the [equals][Any.equals] function.
    * For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.
@SinceKotlin("1.4")
public expect infix fun ShortArray?.contentEquals(other: ShortArray?): Boolean
    * Returns `true` if the two specified arrays are *structurally* equal to one another,
    * i.e. contain

```


[List].\n *\n @Deprecated(\n "Use Kotlin compiler 1.4 to avoid deprecation warning.\n")\n @SinceKotlin(\n "1.1")\n @DeprecatedSinceKotlin(hiddenSince = \n "1.4")\n)\n public expect fun CharArray.contentHashCode(): Int\n\n **\n * Returns a hash code based on the contents of this array as if it is [List].\n *\n @SinceKotlin(\n "1.4")\n)\n public expect fun <T> Array<out T>?.contentHashCode(): Int\n\n **\n * Returns a hash code based on the contents of this array as if it is [List].\n *\n @SinceKotlin(\n "1.4")\n)\n public expect fun ByteArray?.contentHashCode(): Int\n\n **\n * Returns a hash code based on the contents of this array as if it is [List].\n *\n @SinceKotlin(\n "1.4")\n)\n public expect fun ShortArray?.contentHashCode(): Int\n\n **\n * Returns a hash code based on the contents of this array as if it is [List].\n *\n @SinceKotlin(\n "1.4")\n)\n public expect fun IntArray?.contentHashCode(): Int\n\n **\n * Returns a hash code based on the contents of this array as if it is [List].\n *\n @SinceKotlin(\n "1.4")\n)\n public expect fun LongArray?.contentHashCode(): Int\n\n **\n * Returns a hash code based on the contents of this array as if it is [List].\n *\n @SinceKotlin(\n "1.4")\n)\n public expect fun FloatArray?.contentHashCode(): Int\n\n **\n * Returns a hash code based on the contents of this array as if it is [List].\n *\n @SinceKotlin(\n "1.4")\n)\n public expect fun DoubleArray?.contentHashCode(): Int\n\n **\n * Returns a hash code based on the contents of this array as if it is [List].\n *\n @SinceKotlin(\n "1.4")\n)\n public expect fun BooleanArray?.contentHashCode(): Int\n\n **\n * Returns a hash code based on the contents of this array as if it is [List].\n *\n \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n\n *\n @Deprecated(\n "Use Kotlin compiler 1.4 to avoid deprecation warning.\n")\n @SinceKotlin(\n "1.1")\n @DeprecatedSinceKotlin(hiddenSince = \n "1.4")\n)\n public expect fun <T> Array<out T>.contentToString(): String\n\n **\n * Returns a string representation of the contents of the specified array as if it is [List].\n *\n \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n\n *\n @Deprecated(\n "Use Kotlin compiler 1.4 to avoid deprecation warning.\n")\n @SinceKotlin(\n "1.1")\n @DeprecatedSinceKotlin(hiddenSince = \n "1.4")\n)\n public expect fun ByteArray.contentToString(): String\n\n **\n * Returns a string representation of the contents of the specified array as if it is [List].\n *\n \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n\n *\n @Deprecated(\n "Use Kotlin compiler 1.4 to avoid deprecation warning.\n")\n @SinceKotlin(\n "1.1")\n @DeprecatedSinceKotlin(hiddenSince = \n "1.4")\n)\n public expect fun ShortArray.contentToString(): String\n\n **\n * Returns a string representation of the contents of the specified array as if it is [List].\n *\n \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n\n *\n @Deprecated(\n "Use Kotlin compiler 1.4 to avoid deprecation warning.\n")\n @SinceKotlin(\n "1.1")\n @DeprecatedSinceKotlin(hiddenSince = \n "1.4")\n)\n public expect fun IntArray.contentToString(): String\n\n **\n * Returns a string representation of the contents of the specified array as if it is [List].\n *\n \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n\n *\n @Deprecated(\n "Use Kotlin compiler 1.4 to avoid deprecation warning.\n")\n @SinceKotlin(\n "1.1")\n @DeprecatedSinceKotlin(hiddenSince = \n "1.4")\n)\n public expect fun LongArray.contentToString(): String\n\n **\n * Returns a string representation of the contents of the specified array as if it is [List].\n *\n \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n\n *\n @Deprecated(\n "Use Kotlin compiler 1.4 to avoid deprecation warning.\n")\n @SinceKotlin(\n "1.1")\n @DeprecatedSinceKotlin(hiddenSince = \n "1.4")\n)\n public expect fun FloatArray.contentToString(): String\n\n **\n * Returns a string representation of the contents of the specified array as if it is [List].\n *\n \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n\n *\n @Deprecated(\n "Use Kotlin compiler 1.4 to avoid deprecation warning.\n")\n @SinceKotlin(\n "1.1")\n @DeprecatedSinceKotlin(hiddenSince = \n "1.4")\n)\n public expect fun DoubleArray.contentToString(): String\n\n **\n * Returns a string representation of the contents of the specified array as if it is [List].\n *\n \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n\n *\n @Deprecated(\n "Use Kotlin compiler 1.4 to avoid deprecation warning.\n")\n @SinceKotlin(\n "1.1")\n @DeprecatedSinceKotlin(hiddenSince = \n "1.4")\n)\n public expect fun BooleanArray.contentToString(): String\n\n **\n * Returns a string representation of the contents of the specified

array as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic expect fun CharArray.contentToString(): String\n\n/**\n * Returns a string representation of the contents of the specified array as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n */\n@SinceKotlin("1.4")\npublic expect fun <T> Array<out T>?.contentToString(): String\n\n/**\n * Returns a string representation of the contents of the specified array as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n */\n@SinceKotlin("1.4")\npublic expect fun ByteArray?.contentToString(): String\n\n/**\n * Returns a string representation of the contents of the specified array as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n */\n@SinceKotlin("1.4")\npublic expect fun ShortArray?.contentToString(): String\n\n/**\n * Returns a string representation of the contents of the specified array as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n */\n@SinceKotlin("1.4")\npublic expect fun IntArray?.contentToString(): String\n\n/**\n * Returns a string representation of the contents of the specified array as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n */\n@SinceKotlin("1.4")\npublic expect fun LongArray?.contentToString(): String\n\n/**\n * Returns a string representation of the contents of the specified array as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n */\n@SinceKotlin("1.4")\npublic expect fun FloatArray?.contentToString(): String\n\n/**\n * Returns a string representation of the contents of the specified array as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n */\n@SinceKotlin("1.4")\npublic expect fun DoubleArray?.contentToString(): String\n\n/**\n * Returns a string representation of the contents of the specified array as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n */\n@SinceKotlin("1.4")\npublic expect fun BooleanArray?.contentToString(): String\n\n/**\n * Returns a string representation of the contents of the specified array as if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n */\n@SinceKotlin("1.4")\npublic expect fun CharArray?.contentToString(): String\n\n/**\n * Copies this array or its subrange into the [destination] array and returns that array.\n * \n * It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.\n * \n * @param destination the array to copy to.\n * @param destinationOffset the position in the [destination] array to copy to, 0 by default.\n * @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n * @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n * or when that index is out of the [destination] array indices range.\n * \n * @return the [destination] array.\n */\n@SinceKotlin("1.3")\npublic expect fun <T> Array<out T>.copyInto(destination: Array<T>, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): Array<T>\n\n/**\n * Copies this array or its subrange into the [destination] array and returns that array.\n * \n * It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.\n * \n * @param destination the array to copy to.\n * @param destinationOffset the position in the [destination] array to copy to, 0 by default.\n * @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n * @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n * or when that index is out of the [destination] array indices range.\n * \n * @return the [destination] array.\n */\n@SinceKotlin("1.3")\npublic expect fun ByteArray.copyInto(destination: ByteArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): ByteArray\n\n/**\n * Copies this array or its subrange into the [destination] array and returns that array.\n * \n * It's allowed to pass the same array in the

[destination] and even specify the subrange so that it overlaps with the destination range.

`@param destination` the array to copy to.

`@param destinationOffset` the position in the [destination] array to copy to, 0 by default.

`@param startIndex` the beginning (inclusive) of the subrange to copy, 0 by default.

`@param endIndex` the end (exclusive) of the subrange to copy, size of this array by default.

`@throws IndexOutOfBoundsException` or `[IllegalArgumentException]` when [startIndex] or [endIndex] is out of range of this array indices or when ``startIndex > endIndex``.

`@throws IndexOutOfBoundsException` when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],

or when that index is out of the [destination] array indices range.

`@return` the [destination] array.

```

*\/n@SinceKotlin("1.3")npublic expect fun ShortArray.copyInto(destination: ShortArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): ShortArrayn/n/**n * Copies this array or its subrange into the [destination] array and returns that array.n * It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.n * @param destination the array to copy to.n * @param destinationOffset the position in the [destination] array to copy to, 0 by default.n * @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.n * @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.n * n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],n * or when that index is out of the [destination] array indices range.n * n * @return the [destination] array.n *\/n@SinceKotlin("1.3")npublic expect fun IntArray.copyInto(destination: IntArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): IntArrayn/n/**n * Copies this array or its subrange into the [destination] array and returns that array.n * It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.n * @param destination the array to copy to.n * @param destinationOffset the position in the [destination] array to copy to, 0 by default.n * @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.n * @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.n * n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],n * or when that index is out of the [destination] array indices range.n * n * @return the [destination] array.n *\/n@SinceKotlin("1.3")npublic expect fun LongArray.copyInto(destination: LongArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): LongArrayn/n/**n * Copies this array or its subrange into the [destination] array and returns that array.n * It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.n * @param destination the array to copy to.n * @param destinationOffset the position in the [destination] array to copy to, 0 by default.n * @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.n * @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.n * n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],n * or when that index is out of the [destination] array indices range.n * n * @return the [destination] array.n *\/n@SinceKotlin("1.3")npublic expect fun FloatArray.copyInto(destination: FloatArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): FloatArrayn/n/**n * Copies this array or its subrange into the [destination] array and returns that array.n * It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.n * @param destination the array to copy to.n * @param destinationOffset the position in the [destination] array to copy to, 0 by default.n * @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.n * @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.n * n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array

```

starting at the specified [destinationOffset],\n * or when that index is out of the [destination] array indices range.\n *
 \n * @return the [destination] array.\n *
 @SinceKotlin("1.3")\npublic expect fun
 DoubleArray.copyInto(destination: DoubleArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): DoubleArray\n\n/**\n * Copies this array or its subrange into the [destination] array and returns that array.\n *
 \n * It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.\n * \n * @param destination the array to copy to.\n * @param destinationOffset the position in the [destination] array to copy to, 0 by default.\n * @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n * @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n * \n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n * or when that index is out of the [destination] array indices range.\n * \n * @return the [destination] array.\n *
 *
 @SinceKotlin("1.3")\npublic expect fun BooleanArray.copyInto(destination: BooleanArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): BooleanArray\n\n/**\n * Copies this array or its subrange into the [destination] array and returns that array.\n * \n * It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.\n * \n * @param destination the array to copy to.\n * @param destinationOffset the position in the [destination] array to copy to, 0 by default.\n * @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n * @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n * \n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n * or when that index is out of the [destination] array indices range.\n * \n * @return the [destination] array.\n *
 *
 @SinceKotlin("1.3")\npublic expect fun
 CharArray.copyInto(destination: CharArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): CharArray\n\n/**\n * Returns new array which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n *
 *
 @Suppress("NO_ACTUAL_FOR_EXPECT")\npublic expect fun <T> Array<T>.copyOf(): Array<T>\n\n/**\n * Returns new array which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n *
 *
 @public expect fun ByteArray.copyOf(): ByteArray\n\n/**\n * Returns new array which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n *
 *
 @public expect fun ShortArray.copyOf(): ShortArray\n\n/**\n * Returns new array which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n *
 *
 @public expect fun IntArray.copyOf(): IntArray\n\n/**\n * Returns new array which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n *
 *
 @public expect fun LongArray.copyOf(): LongArray\n\n/**\n * Returns new array which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n *
 *
 @public expect fun FloatArray.copyOf(): FloatArray\n\n/**\n * Returns new array which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n *
 *
 @public expect fun DoubleArray.copyOf(): DoubleArray\n\n/**\n * Returns new array which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n *
 *
 @public expect fun BooleanArray.copyOf(): BooleanArray\n\n/**\n * Returns new array which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n *
 *
 @public expect fun CharArray.copyOf(): CharArray\n\n/**\n * Returns new array which is a copy of the original array, resized to the given [newSize].\n *
 The copy is either truncated or padded at the end with zero values if necessary.\n * \n * - If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].\n * - If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with zero values.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n *
 *
 @public expect fun

ByteArray.copyOf(newSize: Int): ByteArray\n\n/**\n * Returns new array which is a copy of the original array, resized to the given [newSize].\n * The copy is either truncated or padded at the end with zero values if necessary.\n * \n * - If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].\n * - If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with zero values.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n */\npublic expect fun ShortArray.copyOf(newSize: Int): ShortArray\n\n/**\n * Returns new array which is a copy of the original array, resized to the given [newSize].\n * The copy is either truncated or padded at the end with zero values if necessary.\n * \n * - If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].\n * - If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with zero values.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n */\npublic expect fun IntArray.copyOf(newSize: Int): IntArray\n\n/**\n * Returns new array which is a copy of the original array, resized to the given [newSize].\n * The copy is either truncated or padded at the end with zero values if necessary.\n * \n * - If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].\n * - If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with zero values.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n */\npublic expect fun LongArray.copyOf(newSize: Int): LongArray\n\n/**\n * Returns new array which is a copy of the original array, resized to the given [newSize].\n * The copy is either truncated or padded at the end with zero values if necessary.\n * \n * - If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].\n * - If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with zero values.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n */\npublic expect fun FloatArray.copyOf(newSize: Int): FloatArray\n\n/**\n * Returns new array which is a copy of the original array, resized to the given [newSize].\n * The copy is either truncated or padded at the end with zero values if necessary.\n * \n * - If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].\n * - If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with zero values.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n */\npublic expect fun DoubleArray.copyOf(newSize: Int): DoubleArray\n\n/**\n * Returns new array which is a copy of the original array, resized to the given [newSize].\n * The copy is either truncated or padded at the end with `false` values if necessary.\n * \n * - If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].\n * - If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with `false` values.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n */\npublic expect fun BooleanArray.copyOf(newSize: Int): BooleanArray\n\n/**\n * Returns new array which is a copy of the original array, resized to the given [newSize].\n * The copy is either truncated or padded at the end with null char (`\u0000`) values if necessary.\n * \n * - If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].\n * - If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with null char (`\u0000`) values.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf\n */\npublic expect fun CharArray.copyOf(newSize: Int): CharArray\n\n/**\n * Returns new array which is a copy of the original array, resized to the given [newSize].\n * The copy is either truncated or padded at the end with `null` values if necessary.\n * \n * - If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].\n * - If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with `null` values.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.resizingCopyOf\n */\n@Suppress("NO_ACTUAL_FOR_EXPECT")\npublic expect fun <T> Array<T>.copyOf(newSize: Int): Array<T?>\n\n/**\n * Returns a new array which is a copy of the specified range of the original array.\n * \n * @param fromIndex the start of the range (inclusive) to copy.\n * @param toIndex the end of the range (exclusive) to copy.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n@Suppress("NO_ACTUAL_FOR_EXPECT")\npublic expect fun <T> Array<T>.copyOfRange(fromIndex:

Int, toIndex: Int): Array<T>\n\n/**\n * Returns a new array which is a copy of the specified range of the original array.\n * \n * @param fromIndex the start of the range (inclusive) to copy.\n * @param toIndex the end of the range (exclusive) to copy.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\npublic expect fun ByteArray.copyOfRange(fromIndex: Int, toIndex: Int): ByteArray\n\n/**\n * Returns a new array which is a copy of the specified range of the original array.\n * \n * @param fromIndex the start of the range (inclusive) to copy.\n * @param toIndex the end of the range (exclusive) to copy.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\npublic expect fun ShortArray.copyOfRange(fromIndex: Int, toIndex: Int): ShortArray\n\n/**\n * Returns a new array which is a copy of the specified range of the original array.\n * \n * @param fromIndex the start of the range (inclusive) to copy.\n * @param toIndex the end of the range (exclusive) to copy.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\npublic expect fun IntArray.copyOfRange(fromIndex: Int, toIndex: Int): IntArray\n\n/**\n * Returns a new array which is a copy of the specified range of the original array.\n * \n * @param fromIndex the start of the range (inclusive) to copy.\n * @param toIndex the end of the range (exclusive) to copy.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\npublic expect fun LongArray.copyOfRange(fromIndex: Int, toIndex: Int): LongArray\n\n/**\n * Returns a new array which is a copy of the specified range of the original array.\n * \n * @param fromIndex the start of the range (inclusive) to copy.\n * @param toIndex the end of the range (exclusive) to copy.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\npublic expect fun FloatArray.copyOfRange(fromIndex: Int, toIndex: Int): FloatArray\n\n/**\n * Returns a new array which is a copy of the specified range of the original array.\n * \n * @param fromIndex the start of the range (inclusive) to copy.\n * @param toIndex the end of the range (exclusive) to copy.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\npublic expect fun DoubleArray.copyOfRange(fromIndex: Int, toIndex: Int): DoubleArray\n\n/**\n * Returns a new array which is a copy of the specified range of the original array.\n * \n * @param fromIndex the start of the range (inclusive) to copy.\n * @param toIndex the end of the range (exclusive) to copy.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\npublic expect fun BooleanArray.copyOfRange(fromIndex: Int, toIndex: Int): BooleanArray\n\n/**\n * Returns a new array which is a copy of the specified range of the original array.\n * \n * @param fromIndex the start of the range (inclusive) to copy.\n * @param toIndex the end of the range (exclusive) to copy.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\npublic expect fun CharArray.copyOfRange(fromIndex: Int, toIndex: Int): CharArray\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n@SinceKotlin("1.3")\npublic expect fun <T> Array<T>.fill(element: T, fromIndex: Int = 0, toIndex: Int = size): Unit\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this

array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n

```

*\n@SinceKotlin("1.3")\npublic expect fun ByteArray.fill(element: Byte, fromIndex: Int = 0, toIndex: Int = size): Unit\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n@SinceKotlin("1.3")\npublic expect fun ShortArray.fill(element: Short, fromIndex: Int = 0, toIndex: Int = size): Unit\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n@SinceKotlin("1.3")\npublic expect fun IntArray.fill(element: Int, fromIndex: Int = 0, toIndex: Int = size): Unit\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n@SinceKotlin("1.3")\npublic expect fun LongArray.fill(element: Long, fromIndex: Int = 0, toIndex: Int = size): Unit\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n@SinceKotlin("1.3")\npublic expect fun FloatArray.fill(element: Float, fromIndex: Int = 0, toIndex: Int = size): Unit\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n@SinceKotlin("1.3")\npublic expect fun DoubleArray.fill(element: Double, fromIndex: Int = 0, toIndex: Int = size): Unit\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n@SinceKotlin("1.3")\npublic expect fun BooleanArray.fill(element: Boolean, fromIndex: Int = 0, toIndex: Int = size): Unit\n\n/**\n * Returns the range of valid indices for the array.\n */\n@public val <T> Array<out T>.indices: IntRange\n    get() = IntRange(0, lastIndex)\n\n/**\n * Returns the range of valid indices for the array.\n */\n@public val ByteArray.indices: IntRange\n    get() = IntRange(0, lastIndex)\n\n/**\n * Returns the range of valid indices for the array.\n */\n@public val ShortArray.indices: IntRange\n    get() = IntRange(0, lastIndex)\n\n/**\n * Returns the range of valid indices for the array.\n */\n@public val IntArray.indices: IntRange\n    get() = IntRange(0, lastIndex)\n\n/**\n * Returns the range of valid indices for the array.\n */\n@public val LongArray.indices: IntRange\n    get() = IntRange(0, lastIndex)\n\n/**\n * Returns the range of valid indices for the array.\n */\n@public val FloatArray.indices: IntRange\n    get() = IntRange(0, lastIndex)\n\n/**\n * Returns the range of valid indices for the array.\n */\n@public val DoubleArray.indices: IntRange\n    get() = IntRange(0, lastIndex)\n\n/**\n * Returns the range of valid indices for the array.\n */\n@public val BooleanArray.indices: IntRange\n    get() = IntRange(0,

```

```

lastIndex)\n\n/**\n * Returns the range of valid indices for the array.\n */\npublic val CharArray.indices: IntRange\n    get() = IntRange(0, lastIndex)\n\n/**\n * Returns `true` if the array is empty.\n */\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.isEmpty(): Boolean {\n    return size == 0\n}\n\n/**\n * Returns `true` if the array is empty.\n */\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.isEmpty(): Boolean {\n    return size == 0\n}\n\n/**\n * Returns `true` if the array is empty.\n */\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.isEmpty(): Boolean {\n    return size == 0\n}\n\n/**\n * Returns `true` if the array is empty.\n */\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.isEmpty(): Boolean {\n    return size == 0\n}\n\n/**\n * Returns `true` if the array is empty.\n */\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.isEmpty(): Boolean {\n    return size == 0\n}\n\n/**\n * Returns `true` if the array is empty.\n */\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.isEmpty(): Boolean {\n    return size == 0\n}\n\n/**\n * Returns `true` if the array is empty.\n */\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.isEmpty(): Boolean {\n    return size == 0\n}\n\n/**\n * Returns `true` if the array is empty.\n */\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.isEmpty(): Boolean {\n    return size == 0\n}\n\n/**\n * Returns `true` if the array is empty.\n */\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.isEmpty(): Boolean {\n    return size == 0\n}\n\n/**\n * Returns `true` if the array is not empty.\n */\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.isNotEmpty(): Boolean {\n    return !isEmpty()\n}\n\n/**\n * Returns `true` if the array is not empty.\n */\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.isNotEmpty(): Boolean {\n    return !isEmpty()\n}\n\n/**\n * Returns `true` if the array is not empty.\n */\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.isNotEmpty(): Boolean {\n    return !isEmpty()\n}\n\n/**\n * Returns `true` if the array is not empty.\n */\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.isNotEmpty(): Boolean {\n    return !isEmpty()\n}\n\n/**\n * Returns `true` if the array is not empty.\n */\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.isNotEmpty(): Boolean {\n    return !isEmpty()\n}\n\n/**\n * Returns `true` if the array is not empty.\n */\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.isNotEmpty(): Boolean {\n    return !isEmpty()\n}\n\n/**\n * Returns `true` if the array is not empty.\n */\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.isNotEmpty(): Boolean {\n    return !isEmpty()\n}\n\n/**\n * Returns `true` if the array is not empty.\n */\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.isNotEmpty(): Boolean {\n    return !isEmpty()\n}\n\n/**\n * Returns the last valid index for the array.\n */\npublic val <T> Array<out T>.lastIndex: Int\n    get() = size - 1\n\n/**\n * Returns the last valid index for the array.\n */\npublic val ByteArray.lastIndex: Int\n    get() = size - 1\n\n/**\n * Returns the last valid index for the array.\n */\npublic val ShortArray.lastIndex: Int\n    get() = size - 1\n\n/**\n * Returns the last valid index for the array.\n */\npublic val IntArray.lastIndex: Int\n    get() = size - 1\n\n/**\n * Returns the last valid index for the array.\n */\npublic val LongArray.lastIndex: Int\n    get() = size - 1\n\n/**\n * Returns the last valid index for the array.\n */\npublic val FloatArray.lastIndex: Int\n    get() = size - 1\n\n/**\n * Returns the last valid index for the array.\n */\npublic val DoubleArray.lastIndex: Int\n    get() = size - 1\n\n/**\n * Returns the last valid index for the array.\n */\npublic val BooleanArray.lastIndex: Int\n    get() = size - 1\n\n/**\n * Returns an array containing all elements of the original array and then the given [element].\n */\n@Suppress("NO_ACTUAL_FOR_EXPECT")\npublic expect operator fun <T> Array<T>.plus(element: T): Array<T>\n\n/**\n * Returns an array containing all elements of the original array and then the given [element].\n */\npublic expect operator fun ByteArray.plus(element: Byte): ByteArray\n\n/**\n * Returns an array containing all elements of the original array and then the given [element].\n */\npublic expect operator fun ShortArray.plus(element: Short): ShortArray\n\n/**\n * Returns an array containing all elements of the original array and then the given [element].\n */\npublic expect operator fun IntArray.plus(element: Int): IntArray\n\n/**\n * Returns an array containing all elements of the original array and then the given [element].\n */\npublic expect operator fun LongArray.plus(element: Long): LongArray\n\n/**\n * Returns an array containing all elements of the original array and then the given [element].\n */\npublic expect operator fun FloatArray.plus(element: Float):

```

FloatArray\n\n/**\n * Returns an array containing all elements of the original array and then the given [element].\n\n */\n\npublic expect operator fun DoubleArray.plus(element: Double): DoubleArray\n\n/**\n * Returns an array containing all elements of the original array and then the given [element].\n\n */\n\npublic expect operator fun BooleanArray.plus(element: Boolean): BooleanArray\n\n/**\n * Returns an array containing all elements of the original array and then the given [element].\n\n */\n\npublic expect operator fun CharArray.plus(element: Char): CharArray\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] collection.\n\n */\n\n@Suppress("NO_ACTUAL_FOR_EXPECT")\n\npublic expect operator fun <T> Array<T>.plus(elements: Collection<T>): Array<T>\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] collection.\n\n */\n\npublic expect operator fun ByteArray.plus(elements: Collection<Byte>): ByteArray\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] collection.\n\n */\n\npublic expect operator fun ShortArray.plus(elements: Collection<Short>): ShortArray\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] collection.\n\n */\n\npublic expect operator fun IntArray.plus(elements: Collection<Int>): IntArray\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] collection.\n\n */\n\npublic expect operator fun LongArray.plus(elements: Collection<Long>): LongArray\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] collection.\n\n */\n\npublic expect operator fun FloatArray.plus(elements: Collection<Float>): FloatArray\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] collection.\n\n */\n\npublic expect operator fun DoubleArray.plus(elements: Collection<Double>): DoubleArray\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] collection.\n\n */\n\npublic expect operator fun BooleanArray.plus(elements: Collection<Boolean>): BooleanArray\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] collection.\n\n */\n\npublic expect operator fun CharArray.plus(elements: Collection<Char>): CharArray\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n\n */\n\n@Suppress("NO_ACTUAL_FOR_EXPECT")\n\npublic expect operator fun <T> Array<T>.plus(elements: Array<out T>): Array<T>\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n\n */\n\npublic expect operator fun ByteArray.plus(elements: ByteArray): ByteArray\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n\n */\n\npublic expect operator fun ShortArray.plus(elements: ShortArray): ShortArray\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n\n */\n\npublic expect operator fun IntArray.plus(elements: IntArray): IntArray\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n\n */\n\npublic expect operator fun LongArray.plus(elements: LongArray): LongArray\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n\n */\n\npublic expect operator fun FloatArray.plus(elements: FloatArray): FloatArray\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n\n */\n\npublic expect operator fun DoubleArray.plus(elements: DoubleArray): DoubleArray\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n\n */\n\npublic expect operator fun BooleanArray.plus(elements: BooleanArray): BooleanArray\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n\n */\n\npublic expect operator fun CharArray.plus(elements: CharArray): CharArray\n\n/**\n * Returns an array containing all elements of the original array and then the given [element].\n\n */\n\n@Suppress("NO_ACTUAL_FOR_EXPECT")\n\npublic expect fun <T> Array<T>.plusElement(element: T): Array<T>\n\n/**\n * \n * \n * @sample samples.collections.Arrays.Sorting.sortArray\n\n */\n\npublic expect fun IntArray.sort(): Unit\n\n/**\n * \n * \n * @sample samples.collections.Arrays.Sorting.sortArray\n\n */\n\npublic expect fun LongArray.sort(): Unit\n\n/**\n * \n * \n * @sample samples.collections.Arrays.Sorting.sortArray\n\n */\n\npublic expect fun ByteArray.sort(): Unit\n\n/**\n * \n * \n * @sample

`samples.collections.Arrays.Sorting.sortArray` `Unit` `Sorts the array in-place.` `@sample`

`samples.collections.Arrays.Sorting.sortArray` `Unit` `Sorts the array in-place.` `@sample`

`samples.collections.Arrays.Sorting.sortArray` `Unit` `Sorts the array in-place.` `@sample`

`samples.collections.Arrays.Sorting.sortArray` `Unit` `Sorts the array in-place according to the natural order of its elements.` `The sort is _stable_. It means that equal elements preserve their order relative to each other after sorting.` `@sample`

`samples.collections.Arrays.Sorting.sortArrayOfComparable` `<T>` `Comparable` `Array` `sort` `Unit` `Sorts a range in the array in-place.` `The sort is _stable_. It means that equal elements preserve their order relative to each other after sorting.` `@param fromIndex` `the start of the range (inclusive) to sort, 0 by default.` `@param toIndex` `the end of the range (exclusive) to sort, size of this array by default.` `@throws` `IndexOutOfBoundsException` `if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.` `@throws` `IllegalArgumentException` `if [fromIndex] is greater than [toIndex].` `@sample`

`samples.collections.Arrays.Sorting.sortRangeOfArrayOfComparable` `<T>` `Comparable` `Array` `sort` `fromIndex` `Int` `= 0` `toIndex` `Int` `= size` `Unit` `Sorts a range in the array in-place.` `@param fromIndex` `the start of the range (inclusive) to sort, 0 by default.` `@param toIndex` `the end of the range (exclusive) to sort, size of this array by default.` `@throws` `IndexOutOfBoundsException` `if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.` `@throws` `IllegalArgumentException` `if [fromIndex] is greater than [toIndex].` `@sample`

`samples.collections.Arrays.Sorting.sortRangeOfArray` `Byte` `Array` `sort` `fromIndex` `Int` `= 0` `toIndex` `Int` `= size` `Unit` `Sorts a range in the array in-place.` `@param fromIndex` `the start of the range (inclusive) to sort, 0 by default.` `@param toIndex` `the end of the range (exclusive) to sort, size of this array by default.` `@throws` `IndexOutOfBoundsException` `if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.` `@throws` `IllegalArgumentException` `if [fromIndex] is greater than [toIndex].` `@sample`

`samples.collections.Arrays.Sorting.sortRangeOfArray` `Short` `Array` `sort` `fromIndex` `Int` `= 0` `toIndex` `Int` `= size` `Unit` `Sorts a range in the array in-place.` `@param fromIndex` `the start of the range (inclusive) to sort, 0 by default.` `@param toIndex` `the end of the range (exclusive) to sort, size of this array by default.` `@throws` `IndexOutOfBoundsException` `if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.` `@throws` `IllegalArgumentException` `if [fromIndex] is greater than [toIndex].` `@sample`

`samples.collections.Arrays.Sorting.sortRangeOfArray` `Int` `Array` `sort` `fromIndex` `Int` `= 0` `toIndex` `Int` `= size` `Unit` `Sorts a range in the array in-place.` `@param fromIndex` `the start of the range (inclusive) to sort, 0 by default.` `@param toIndex` `the end of the range (exclusive) to sort, size of this array by default.` `@throws` `IndexOutOfBoundsException` `if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.` `@throws` `IllegalArgumentException` `if [fromIndex] is greater than [toIndex].` `@sample`

`samples.collections.Arrays.Sorting.sortRangeOfArray` `Long` `Array` `sort` `fromIndex` `Int` `= 0` `toIndex` `Int` `= size` `Unit` `Sorts a range in the array in-place.` `@param fromIndex` `the start of the range (inclusive) to sort, 0 by default.` `@param toIndex` `the end of the range (exclusive) to sort, size of this array by default.` `@throws` `IndexOutOfBoundsException` `if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.` `@throws` `IllegalArgumentException` `if [fromIndex] is greater than [toIndex].` `@sample`

`samples.collections.Arrays.Sorting.sortRangeOfArray` `Float` `Array` `sort` `fromIndex` `Int` `= 0` `toIndex` `Int` `= size` `Unit` `Sorts a range in the array in-place.` `@param fromIndex` `the start of the range (inclusive) to sort, 0 by default.` `@param toIndex` `the end of the range (exclusive) to sort, size of this array by default.` `@throws` `IndexOutOfBoundsException` `if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.` `@throws` `IllegalArgumentException` `if [fromIndex] is greater than [toIndex].` `@sample`

```

*\n@SinceKotlin("1.4")\npublic expect fun DoubleArray.sort(fromIndex: Int = 0, toIndex: Int = size):
Unit\n\n/**\n * Sorts a range in the array in-place.\n * \n * @param fromIndex the start of the range (inclusive) to
sort, 0 by default.\n * @param toIndex the end of the range (exclusive) to sort, size of this array by default.\n * \n *
@throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this
array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n * \n * @sample
samples.collections.Arrays.Sorting.sortRangeOfArray\n *\n@SinceKotlin("1.4")\npublic expect fun
CharArray.sort(fromIndex: Int = 0, toIndex: Int = size): Unit\n\n/**\n * Sorts elements of the array in the specified
range in-place.\n * The elements are sorted descending according to their natural sort order.\n * \n * The sort is
_stable_. It means that equal elements preserve their order relative to each other after sorting.\n * \n * @param
fromIndex the start of the range (inclusive) to sort.\n * @param toIndex the end of the range (exclusive) to sort.\n *
\n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of
this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n
\n*\n@SinceKotlin("1.4")\npublic fun <T : Comparable<T>> Array<out T>.sortDescending(fromIndex: Int,
toIndex: Int): Unit {\n    sortWith(reverseOrder(), fromIndex, toIndex)\n}\n\n/**\n * Sorts elements of the array in
the specified range in-place.\n * The elements are sorted descending according to their natural sort order.\n * \n *
@param fromIndex the start of the range (inclusive) to sort.\n * @param toIndex the end of the range (exclusive) to
sort.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the
size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n
\n*\n@SinceKotlin("1.4")\npublic fun ByteArray.sortDescending(fromIndex: Int, toIndex: Int): Unit {\n    sort(fromIndex, toIndex)\n    reverse(fromIndex, toIndex)\n}\n\n/**\n * Sorts elements of the array in the specified
range in-place.\n * The elements are sorted descending according to their natural sort order.\n * \n * @param
fromIndex the start of the range (inclusive) to sort.\n * @param toIndex the end of the range (exclusive) to sort.\n *
\n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of
this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n
\n*\n@SinceKotlin("1.4")\npublic fun ShortArray.sortDescending(fromIndex: Int, toIndex: Int): Unit {\n    sort(fromIndex, toIndex)\n    reverse(fromIndex, toIndex)\n}\n\n/**\n * Sorts elements of the array in the specified
range in-place.\n * The elements are sorted descending according to their natural sort order.\n * \n * @param
fromIndex the start of the range (inclusive) to sort.\n * @param toIndex the end of the range (exclusive) to sort.\n *
\n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of
this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n
\n*\n@SinceKotlin("1.4")\npublic fun IntArray.sortDescending(fromIndex: Int, toIndex: Int): Unit {\n    sort(fromIndex, toIndex)\n    reverse(fromIndex, toIndex)\n}\n\n/**\n * Sorts elements of the array in the specified
range in-place.\n * The elements are sorted descending according to their natural sort order.\n * \n * @param
fromIndex the start of the range (inclusive) to sort.\n * @param toIndex the end of the range (exclusive) to sort.\n *
\n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of
this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n
\n*\n@SinceKotlin("1.4")\npublic fun LongArray.sortDescending(fromIndex: Int, toIndex: Int): Unit {\n    sort(fromIndex, toIndex)\n    reverse(fromIndex, toIndex)\n}\n\n/**\n * Sorts elements of the array in the specified
range in-place.\n * The elements are sorted descending according to their natural sort order.\n * \n * @param
fromIndex the start of the range (inclusive) to sort.\n * @param toIndex the end of the range (exclusive) to sort.\n *
\n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of
this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n
\n*\n@SinceKotlin("1.4")\npublic fun FloatArray.sortDescending(fromIndex: Int, toIndex: Int): Unit {\n    sort(fromIndex, toIndex)\n    reverse(fromIndex, toIndex)\n}\n\n/**\n * Sorts elements of the array in the specified
range in-place.\n * The elements are sorted descending according to their natural sort order.\n * \n * @param
fromIndex the start of the range (inclusive) to sort.\n * @param toIndex the end of the range (exclusive) to sort.\n *
\n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of
this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n

```

```

*^@SinceKotlin("1.4")\npublic fun DoubleArray.sortDescending(fromIndex: Int, toIndex: Int): Unit {\n
sort(fromIndex, toIndex)\n  reverse(fromIndex, toIndex)\n}\n\n/**\n * Sorts elements of the array in the specified
range in-place.\n * The elements are sorted descending according to their natural sort order.\n * \n * @param
fromIndex the start of the range (inclusive) to sort.\n * @param toIndex the end of the range (exclusive) to sort.\n *
\n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of
this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n
\n*^@SinceKotlin("1.4")\npublic fun CharArray.sortDescending(fromIndex: Int, toIndex: Int): Unit {\n
sort(fromIndex, toIndex)\n  reverse(fromIndex, toIndex)\n}\n\n/**\n * Sorts the array in-place according to the
order specified by the given [comparator].\n * \n * The sort is _stable_. It means that equal elements preserve their
order relative to each other after sorting.\n *^npublic expect fun <T> Array<out T>.sortWith(comparator:
Comparator<in T>): Unit\n\n/**\n * Sorts a range in the array in-place with the given [comparator].\n * \n * The
sort is _stable_. It means that equal elements preserve their order relative to each other after sorting.\n * \n *
@param fromIndex the start of the range (inclusive) to sort, 0 by default.\n * @param toIndex the end of the range
(exclusive) to sort, size of this array by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is
less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if
[fromIndex] is greater than [toIndex].\n *^npublic expect fun <T> Array<out T>.sortWith(comparator:
Comparator<in T>, fromIndex: Int = 0, toIndex: Int = size): Unit\n\n/**\n * Returns an array of Boolean containing
all of the elements of this generic array.\n *^npublic fun Array<out Boolean>.toBooleanArray(): BooleanArray {\n
return BooleanArray(size) { index -> this[index] }\n}\n\n/**\n * Returns an array of Byte containing all of the
elements of this generic array.\n *^npublic fun Array<out Byte>.toByteArray(): ByteArray {\n  return
ByteArray(size) { index -> this[index] }\n}\n\n/**\n * Returns an array of Char containing all of the elements of this
generic array.\n *^npublic fun Array<out Char>.toCharArray(): CharArray {\n  return CharArray(size) { index ->
this[index] }\n}\n\n/**\n * Returns an array of Double containing all of the elements of this generic array.\n
\n*^npublic fun Array<out Double>.toDoubleArray(): DoubleArray {\n  return DoubleArray(size) { index ->
this[index] }\n}\n\n/**\n * Returns an array of Float containing all of the elements of this generic array.\n
\n*^npublic fun Array<out Float>.toFloatArray(): FloatArray {\n  return FloatArray(size) { index -> this[index] }\n}\n\n/**\n *
Returns an array of Int containing all of the elements of this generic array.\n *^npublic fun Array<out
Int>.toIntArray(): IntArray {\n  return IntArray(size) { index -> this[index] }\n}\n\n/**\n * Returns an array of
Long containing all of the elements of this generic array.\n *^npublic fun Array<out Long>.toLongArray():
LongArray {\n  return LongArray(size) { index -> this[index] }\n}\n\n/**\n * Returns an array of Short containing
all of the elements of this generic array.\n *^npublic fun Array<out Short>.toShortArray(): ShortArray {\n
return ShortArray(size) { index -> this[index] }\n}\n\n/**\n * Returns a *typed* object array containing all of the
elements of this primitive array.\n *^npublic expect fun ByteArray.toTypedArray(): Array<Byte>\n\n/**\n * Returns a
*typed* object array containing all of the elements of this primitive array.\n *^npublic expect fun
ShortArray.toTypedArray(): Array<Short>\n\n/**\n * Returns a *typed* object array containing all of the
elements of this primitive array.\n *^npublic expect fun IntArray.toTypedArray(): Array<Int>\n\n/**\n * Returns a
*typed* object array containing all of the elements of this primitive array.\n *^npublic expect fun
LongArray.toTypedArray(): Array<Long>\n\n/**\n * Returns a *typed* object array containing all of the
elements of this primitive array.\n *^npublic expect fun FloatArray.toTypedArray(): Array<Float>\n\n/**\n * Returns a
*typed* object array containing all of the elements of this primitive array.\n *^npublic expect fun
DoubleArray.toTypedArray(): Array<Double>\n\n/**\n * Returns a *typed* object array containing all of the
elements of this primitive array.\n *^npublic expect fun BooleanArray.toTypedArray(): Array<Boolean>\n\n/**\n *
Returns a *typed* object array containing all of the elements of this primitive array.\n *^npublic expect fun
CharArray.toTypedArray(): Array<Char>\n\n/**\n * Returns a [Map] containing key-value pairs provided by
[transform] function\n * applied to elements of the given array.\n * \n * If any of two pairs would have the same key
the last one gets added to the map.\n * \n * The returned map preserves the entry iteration order of the original
array.\n * \n * @sample samples.collections.Arrays.Transformations.associateArrayOfPrimitives\n *^npublic inline
fun <T, K, V> Array<out T>.associate(transform: (T) -> Pair<K, V>): Map<K, V> {\n  val capacity =

```

```

mapCapacity(size).coerceAtLeast(16)\n  return associateTo(LinkedHashMap<K, V>(capacity),
transform)\n}\n\n/**\n * Returns a [Map] containing key-value pairs provided by [transform] function\n * applied to
elements of the given array.\n * \n * If any of two pairs would have the same key the last one gets added to the
map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitives\n *\npublic inline fun <K, V>
ByteArray.associate(transform: (Byte) -> Pair<K, V>): Map<K, V> {\n  val capacity =
mapCapacity(size).coerceAtLeast(16)\n  return associateTo(LinkedHashMap<K, V>(capacity),
transform)\n}\n\n/**\n * Returns a [Map] containing key-value pairs provided by [transform] function\n * applied to
elements of the given array.\n * \n * If any of two pairs would have the same key the last one gets added to the
map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitives\n *\npublic inline fun <K, V>
ShortArray.associate(transform: (Short) -> Pair<K, V>): Map<K, V> {\n  val capacity =
mapCapacity(size).coerceAtLeast(16)\n  return associateTo(LinkedHashMap<K, V>(capacity),
transform)\n}\n\n/**\n * Returns a [Map] containing key-value pairs provided by [transform] function\n * applied to
elements of the given array.\n * \n * If any of two pairs would have the same key the last one gets added to the
map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitives\n *\npublic inline fun <K, V>
IntArray.associate(transform: (Int) -> Pair<K, V>): Map<K, V> {\n  val capacity =
mapCapacity(size).coerceAtLeast(16)\n  return associateTo(LinkedHashMap<K, V>(capacity),
transform)\n}\n\n/**\n * Returns a [Map] containing key-value pairs provided by [transform] function\n * applied to
elements of the given array.\n * \n * If any of two pairs would have the same key the last one gets added to the
map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitives\n *\npublic inline fun <K, V>
LongArray.associate(transform: (Long) -> Pair<K, V>): Map<K, V> {\n  val capacity =
mapCapacity(size).coerceAtLeast(16)\n  return associateTo(LinkedHashMap<K, V>(capacity),
transform)\n}\n\n/**\n * Returns a [Map] containing key-value pairs provided by [transform] function\n * applied to
elements of the given array.\n * \n * If any of two pairs would have the same key the last one gets added to the
map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitives\n *\npublic inline fun <K, V>
FloatArray.associate(transform: (Float) -> Pair<K, V>): Map<K, V> {\n  val capacity =
mapCapacity(size).coerceAtLeast(16)\n  return associateTo(LinkedHashMap<K, V>(capacity),
transform)\n}\n\n/**\n * Returns a [Map] containing key-value pairs provided by [transform] function\n * applied to
elements of the given array.\n * \n * If any of two pairs would have the same key the last one gets added to the
map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitives\n *\npublic inline fun <K, V>
DoubleArray.associate(transform: (Double) -> Pair<K, V>): Map<K, V> {\n  val capacity =
mapCapacity(size).coerceAtLeast(16)\n  return associateTo(LinkedHashMap<K, V>(capacity),
transform)\n}\n\n/**\n * Returns a [Map] containing key-value pairs provided by [transform] function\n * applied to
elements of the given array.\n * \n * If any of two pairs would have the same key the last one gets added to the
map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitives\n *\npublic inline fun <K, V>
BooleanArray.associate(transform: (Boolean) -> Pair<K, V>): Map<K, V> {\n  val capacity =
mapCapacity(size).coerceAtLeast(16)\n  return associateTo(LinkedHashMap<K, V>(capacity),
transform)\n}\n\n/**\n * Returns a [Map] containing key-value pairs provided by [transform] function\n * applied to
elements of the given array.\n * \n * If any of two pairs would have the same key the last one gets added to the
map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitives\n *\npublic inline fun <K, V>
CharArray.associate(transform: (Char) -> Pair<K, V>): Map<K, V> {\n  val capacity =

```

```

mapCapacity(size).coerceAtLeast(16)\n    return associateTo(LinkedHashMap<K, V>(capacity),
transform)\n}\n\n/**\n * Returns a [Map] containing the elements from the given array indexed by the key\n *
returned from [keySelector] function applied to each element.\n * \n * If any two elements would have the same key
returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the entry iteration
order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesBy\n */\npublic inline fun <T, K>
Array<out T>.associateBy(keySelector: (T) -> K): Map<K, T> {\n    val capacity =
mapCapacity(size).coerceAtLeast(16)\n    return associateByTo(LinkedHashMap<K, T>(capacity),
keySelector)\n}\n\n/**\n * Returns a [Map] containing the elements from the given array indexed by the key\n *
returned from [keySelector] function applied to each element.\n * \n * If any two elements would have the same key
returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the entry iteration
order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesBy\n */\npublic inline fun <K>
ByteArray.associateBy(keySelector: (Byte) -> K): Map<K, Byte> {\n    val capacity =
mapCapacity(size).coerceAtLeast(16)\n    return associateByTo(LinkedHashMap<K, Byte>(capacity),
keySelector)\n}\n\n/**\n * Returns a [Map] containing the elements from the given array indexed by the key\n *
returned from [keySelector] function applied to each element.\n * \n * If any two elements would have the same key
returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the entry iteration
order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesBy\n */\npublic inline fun <K>
ShortArray.associateBy(keySelector: (Short) -> K): Map<K, Short> {\n    val capacity =
mapCapacity(size).coerceAtLeast(16)\n    return associateByTo(LinkedHashMap<K, Short>(capacity),
keySelector)\n}\n\n/**\n * Returns a [Map] containing the elements from the given array indexed by the key\n *
returned from [keySelector] function applied to each element.\n * \n * If any two elements would have the same key
returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the entry iteration
order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesBy\n */\npublic inline fun <K>
IntArray.associateBy(keySelector: (Int) -> K): Map<K, Int> {\n    val capacity =
mapCapacity(size).coerceAtLeast(16)\n    return associateByTo(LinkedHashMap<K, Int>(capacity),
keySelector)\n}\n\n/**\n * Returns a [Map] containing the elements from the given array indexed by the key\n *
returned from [keySelector] function applied to each element.\n * \n * If any two elements would have the same key
returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the entry iteration
order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesBy\n */\npublic inline fun <K>
LongArray.associateBy(keySelector: (Long) -> K): Map<K, Long> {\n    val capacity =
mapCapacity(size).coerceAtLeast(16)\n    return associateByTo(LinkedHashMap<K, Long>(capacity),
keySelector)\n}\n\n/**\n * Returns a [Map] containing the elements from the given array indexed by the key\n *
returned from [keySelector] function applied to each element.\n * \n * If any two elements would have the same key
returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the entry iteration
order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesBy\n */\npublic inline fun <K>
FloatArray.associateBy(keySelector: (Float) -> K): Map<K, Float> {\n    val capacity =
mapCapacity(size).coerceAtLeast(16)\n    return associateByTo(LinkedHashMap<K, Float>(capacity),
keySelector)\n}\n\n/**\n * Returns a [Map] containing the elements from the given array indexed by the key\n *
returned from [keySelector] function applied to each element.\n * \n * If any two elements would have the same key
returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the entry iteration
order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesBy\n */\npublic inline fun <K>

```



```

DoubleArray.associateBy(keySelector: (Double) -> K): Map<K, Double> {\n  val capacity =
mapCapacity(size).coerceAtLeast(16)\n  return associateByTo(LinkedHashMap<K, Double>(capacity),
keySelector)\n}\n\n/**\n * Returns a [Map] containing the elements from the given array indexed by the key\n *
returned from [keySelector] function applied to each element.\n * \n * If any two elements would have the same key
returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the entry iteration
order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesBy\n */\npublic inline fun <K>
BooleanArray.associateBy(keySelector: (Boolean) -> K): Map<K, Boolean> {\n  val capacity =
mapCapacity(size).coerceAtLeast(16)\n  return associateByTo(LinkedHashMap<K, Boolean>(capacity),
keySelector)\n}\n\n/**\n * Returns a [Map] containing the elements from the given array indexed by the key\n *
returned from [keySelector] function applied to each element.\n * \n * If any two elements would have the same key
returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the entry iteration
order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesBy\n */\npublic inline fun <K>
CharArray.associateBy(keySelector: (Char) -> K): Map<K, Char> {\n  val capacity =
mapCapacity(size).coerceAtLeast(16)\n  return associateByTo(LinkedHashMap<K, Char>(capacity),
keySelector)\n}\n\n/**\n * Returns a [Map] containing the values provided by [valueTransform] and indexed by
[keySelector] functions applied to elements of the given array.\n * \n * If any two elements would have the same key
returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the entry iteration
order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByWithValueTransform\n */\npublic inline
fun <T, K, V> Array<out T>.associateBy(keySelector: (T) -> K, valueTransform: (T) -> V): Map<K, V> {\n  val
capacity = mapCapacity(size).coerceAtLeast(16)\n  return associateByTo(LinkedHashMap<K, V>(capacity),
keySelector, valueTransform)\n}\n\n/**\n * Returns a [Map] containing the values provided by [valueTransform]
and indexed by [keySelector] functions applied to elements of the given array.\n * \n * If any two elements would
have the same key returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves
the entry iteration order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByWithValueTransform\n */\npublic inline
fun <K, V> ByteArray.associateBy(keySelector: (Byte) -> K, valueTransform: (Byte) -> V): Map<K, V> {\n  val
capacity = mapCapacity(size).coerceAtLeast(16)\n  return associateByTo(LinkedHashMap<K, V>(capacity),
keySelector, valueTransform)\n}\n\n/**\n * Returns a [Map] containing the values provided by [valueTransform]
and indexed by [keySelector] functions applied to elements of the given array.\n * \n * If any two elements would
have the same key returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves
the entry iteration order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByWithValueTransform\n */\npublic inline
fun <K, V> ShortArray.associateBy(keySelector: (Short) -> K, valueTransform: (Short) -> V): Map<K, V> {\n
val capacity = mapCapacity(size).coerceAtLeast(16)\n  return associateByTo(LinkedHashMap<K, V>(capacity),
keySelector, valueTransform)\n}\n\n/**\n * Returns a [Map] containing the values provided by [valueTransform]
and indexed by [keySelector] functions applied to elements of the given array.\n * \n * If any two elements would
have the same key returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves
the entry iteration order of the original array.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByWithValueTransform\n */\npublic inline
fun <K, V> IntArray.associateBy(keySelector: (Int) -> K, valueTransform: (Int) -> V): Map<K, V> {\n  val
capacity = mapCapacity(size).coerceAtLeast(16)\n  return associateByTo(LinkedHashMap<K, V>(capacity),
keySelector, valueTransform)\n}\n\n/**\n * Returns a [Map] containing the values provided by [valueTransform]
and indexed by [keySelector] functions applied to elements of the given array.\n * \n * If any two elements would
have the same key returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves
the entry iteration order of the original array.\n * \n * @sample

```

```
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByWithValueTransform\n *\npublic inline fun <K, V> LongArray.associateBy(keySelector: (Long) -> K, valueTransform: (Long) -> V): Map<K, V> {\n    val capacity = mapCapacity(size).coerceAtLeast(16)\n    return associateByTo(LinkedHashMap<K, V>(capacity), keySelector, valueTransform)\n}\n\n/**\n * Returns a [Map] containing the values provided by [valueTransform] and indexed by [keySelector] functions applied to elements of the given array.\n * \n * If any two elements would have the same key returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n * @sample
```

```
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByWithValueTransform\n *\npublic inline fun <K, V> FloatArray.associateBy(keySelector: (Float) -> K, valueTransform: (Float) -> V): Map<K, V> {\n    val capacity = mapCapacity(size).coerceAtLeast(16)\n    return associateByTo(LinkedHashMap<K, V>(capacity), keySelector, valueTransform)\n}\n\n/**\n * Returns a [Map] containing the values provided by [valueTransform] and indexed by [keySelector] functions applied to elements of the given array.\n * \n * If any two elements would have the same key returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n * @sample
```

```
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByWithValueTransform\n *\npublic inline fun <K, V> DoubleArray.associateBy(keySelector: (Double) -> K, valueTransform: (Double) -> V): Map<K, V> {\n    val capacity = mapCapacity(size).coerceAtLeast(16)\n    return associateByTo(LinkedHashMap<K, V>(capacity), keySelector, valueTransform)\n}\n\n/**\n * Returns a [Map] containing the values provided by [valueTransform] and indexed by [keySelector] functions applied to elements of the given array.\n * \n * If any two elements would have the same key returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n * @sample
```

```
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByWithValueTransform\n *\npublic inline fun <K, V> BooleanArray.associateBy(keySelector: (Boolean) -> K, valueTransform: (Boolean) -> V): Map<K, V> {\n    val capacity = mapCapacity(size).coerceAtLeast(16)\n    return associateByTo(LinkedHashMap<K, V>(capacity), keySelector, valueTransform)\n}\n\n/**\n * Returns a [Map] containing the values provided by [valueTransform] and indexed by [keySelector] functions applied to elements of the given array.\n * \n * If any two elements would have the same key returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n * @sample
```

```
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByWithValueTransform\n *\npublic inline fun <K, V> CharArray.associateBy(keySelector: (Char) -> K, valueTransform: (Char) -> V): Map<K, V> {\n    val capacity = mapCapacity(size).coerceAtLeast(16)\n    return associateByTo(LinkedHashMap<K, V>(capacity), keySelector, valueTransform)\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs,\n * where key is provided by the [keySelector] function applied to each element of the given array\n * and value is the element itself.\n * \n * If any two elements would have the same key returned by [keySelector] the last one gets added to the map.\n * \n * @sample
```

```
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByTo\n *\npublic inline fun <T, K, M : MutableMap<in K, in T>> Array<out T>.associateByTo(destination: M, keySelector: (T) -> K): M {\n    for (element in this) {\n        destination.put(keySelector(element), element)\n    }\n    return destination\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs,\n * where key is provided by the [keySelector] function applied to each element of the given array\n * and value is the element itself.\n * \n * If any two elements would have the same key returned by [keySelector] the last one gets added to the map.\n * \n * @sample
```

```
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByTo\n *\npublic inline fun <K, M : MutableMap<in K, in Byte>> ByteArray.associateByTo(destination: M, keySelector: (Byte) -> K): M {\n    for (element in this) {\n        destination.put(keySelector(element), element)\n    }\n    return destination\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs,\n * where key is provided by the [keySelector] function applied to each element of the given array\n * and value is the element itself.\n * \n * If any two elements would have the same key returned by [keySelector] the last one gets added to the map.\n * \n * @sample
```

```
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByTo\n *\npublic inline fun <K,
```

```

M : MutableMap<in K, in Short>> ShortArray.associateByTo(destination: M, keySelector: (Short) -> K): M {\n
for (element in this) {\n    destination.put(keySelector(element), element)\n } \n return destination\n}\n\n/**\n
* Populates and returns the [destination] mutable map with key-value pairs,\n * where key is provided by the
[keySelector] function applied to each element of the given array\n * and value is the element itself.\n * \n * If any
two elements would have the same key returned by [keySelector] the last one gets added to the map.\n * \n *
@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByTo\n */\npublic inline fun <K,
M : MutableMap<in K, in Int>> IntArray.associateByTo(destination: M, keySelector: (Int) -> K): M {\n for
(element in this) {\n    destination.put(keySelector(element), element)\n } \n return destination\n}\n\n/**\n
* Populates and returns the [destination] mutable map with key-value pairs,\n * where key is provided by the
[keySelector] function applied to each element of the given array\n * and value is the element itself.\n * \n * If any
two elements would have the same key returned by [keySelector] the last one gets added to the map.\n * \n *
@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByTo\n */\npublic inline fun <K,
M : MutableMap<in K, in Long>> LongArray.associateByTo(destination: M, keySelector: (Long) -> K): M {\n
for (element in this) {\n    destination.put(keySelector(element), element)\n } \n return destination\n}\n\n/**\n
* Populates and returns the [destination] mutable map with key-value pairs,\n * where key is provided by the
[keySelector] function applied to each element of the given array\n * and value is the element itself.\n * \n * If any
two elements would have the same key returned by [keySelector] the last one gets added to the map.\n * \n *
@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByTo\n */\npublic inline fun <K,
M : MutableMap<in K, in Float>> FloatArray.associateByTo(destination: M, keySelector: (Float) -> K): M {\n for
(element in this) {\n    destination.put(keySelector(element), element)\n } \n return destination\n}\n\n/**\n
* Populates and returns the [destination] mutable map with key-value pairs,\n * where key is provided by the
[keySelector] function applied to each element of the given array\n * and value is the element itself.\n * \n * If any
two elements would have the same key returned by [keySelector] the last one gets added to the map.\n * \n *
@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByTo\n */\npublic inline fun <K,
M : MutableMap<in K, in Double>> DoubleArray.associateByTo(destination: M, keySelector: (Double) -> K): M
{\n for (element in this) {\n    destination.put(keySelector(element), element)\n } \n return
destination\n}\n\n/**\n
* Populates and returns the [destination] mutable map with key-value pairs,\n * where key is
provided by the [keySelector] function applied to each element of the given array\n * and value is the element
itself.\n * \n * If any two elements would have the same key returned by [keySelector] the last one gets added to the
map.\n * \n * @sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByTo\n */\npublic
inline fun <K, M : MutableMap<in K, in Boolean>> BooleanArray.associateByTo(destination: M, keySelector:
(Boolean) -> K): M {\n for (element in this) {\n    destination.put(keySelector(element), element)\n } \n
return destination\n}\n\n/**\n
* Populates and returns the [destination] mutable map with key-value pairs,\n * where
key is provided by the [keySelector] function applied to each element of the given array\n * and value is the element
itself.\n * \n * If any two elements would have the same key returned by [keySelector] the last one gets added to the
map.\n * \n * @sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByTo\n */\npublic
inline fun <K, M : MutableMap<in K, in Char>> CharArray.associateByTo(destination: M, keySelector: (Char) ->
K): M {\n for (element in this) {\n    destination.put(keySelector(element), element)\n } \n return
destination\n}\n\n/**\n
* Populates and returns the [destination] mutable map with key-value pairs,\n * where key is
provided by the [keySelector] function and\n * and value is provided by the [valueTransform] function applied to
elements of the given array.\n * \n * If any two elements would have the same key returned by [keySelector] the last
one gets added to the map.\n * \n * @sample
samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByToWithValueTransform\n */\npublic
inline fun <T, K, V, M : MutableMap<in K, in V>> Array<out T>.associateByTo(destination: M, keySelector: (T) -
> K, valueTransform: (T) -> V): M {\n for (element in this) {\n    destination.put(keySelector(element),
valueTransform(element))\n } \n return destination\n}\n\n/**\n
* Populates and returns the [destination] mutable
map with key-value pairs,\n * where key is provided by the [keySelector] function and\n * and value is provided by
the [valueTransform] function applied to elements of the given array.\n * \n * If any two elements would have the

```

same key returned by [keySelector] the last one gets added to the map.

```

samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByToWithValueTransform
public inline fun <K, V, M : MutableMap<in K, in V>> ByteArray.associateByTo(destination: M, keySelector: (Byte) -> K, valueTransform: (Byte) -> V): M {
    for (element in this) {
        destination.put(keySelector(element), valueTransform(element))
    }
    return destination
}

```

Populates and returns the [destination] mutable map with key-value pairs, where key is provided by the [keySelector] function and value is provided by the [valueTransform] function applied to elements of the given array. If any two elements would have the same key returned by [keySelector] the last one gets added to the map.

```

samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByToWithValueTransform
public inline fun <K, V, M : MutableMap<in K, in V>> ShortArray.associateByTo(destination: M, keySelector: (Short) -> K, valueTransform: (Short) -> V): M {
    for (element in this) {
        destination.put(keySelector(element), valueTransform(element))
    }
    return destination
}

```

Populates and returns the [destination] mutable map with key-value pairs, where key is provided by the [keySelector] function and value is provided by the [valueTransform] function applied to elements of the given array. If any two elements would have the same key returned by [keySelector] the last one gets added to the map.

```

samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByToWithValueTransform
public inline fun <K, V, M : MutableMap<in K, in V>> IntArray.associateByTo(destination: M, keySelector: (Int) -> K, valueTransform: (Int) -> V): M {
    for (element in this) {
        destination.put(keySelector(element), valueTransform(element))
    }
    return destination
}

```

Populates and returns the [destination] mutable map with key-value pairs, where key is provided by the [keySelector] function and value is provided by the [valueTransform] function applied to elements of the given array. If any two elements would have the same key returned by [keySelector] the last one gets added to the map.

```

samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByToWithValueTransform
public inline fun <K, V, M : MutableMap<in K, in V>> LongArray.associateByTo(destination: M, keySelector: (Long) -> K, valueTransform: (Long) -> V): M {
    for (element in this) {
        destination.put(keySelector(element), valueTransform(element))
    }
    return destination
}

```

Populates and returns the [destination] mutable map with key-value pairs, where key is provided by the [keySelector] function and value is provided by the [valueTransform] function applied to elements of the given array. If any two elements would have the same key returned by [keySelector] the last one gets added to the map.

```

samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByToWithValueTransform
public inline fun <K, V, M : MutableMap<in K, in V>> FloatArray.associateByTo(destination: M, keySelector: (Float) -> K, valueTransform: (Float) -> V): M {
    for (element in this) {
        destination.put(keySelector(element), valueTransform(element))
    }
    return destination
}

```

Populates and returns the [destination] mutable map with key-value pairs, where key is provided by the [keySelector] function and value is provided by the [valueTransform] function applied to elements of the given array. If any two elements would have the same key returned by [keySelector] the last one gets added to the map.

```

samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByToWithValueTransform
public inline fun <K, V, M : MutableMap<in K, in V>> DoubleArray.associateByTo(destination: M, keySelector: (Double) -> K, valueTransform: (Double) -> V): M {
    for (element in this) {
        destination.put(keySelector(element), valueTransform(element))
    }
    return destination
}

```

Populates and returns the [destination] mutable map with key-value pairs, where key is provided by the [keySelector] function and value is provided by the [valueTransform] function applied to elements of the given array. If any two elements would have the same key returned by [keySelector] the last one gets added to the map.

```

samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByToWithValueTransform
public inline fun <K, V, M : MutableMap<in K, in V>> BooleanArray.associateByTo(destination: M, keySelector: (Boolean) -> K, valueTransform: (Boolean) -> V): M {
    for (element in this) {
        destination.put(keySelector(element), valueTransform(element))
    }
    return destination
}

```

Populates and returns the [destination] mutable map with key-value pairs, where key is provided by the [keySelector]

function and value is provided by the [valueTransform] function applied to elements of the given array.

If any two elements would have the same key returned by [keySelector] the last one gets added to the map.

@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesByToWithValueTransform

```

public inline fun <K, V, M : MutableMap<in K, in V>> CharArray.associateByTo(destination: M, keySelector:
(Char) -> K, valueTransform: (Char) -> V): M {
    for (element in this) {
        destination.put(keySelector(element), valueTransform(element))
    }
    return destination
}

```

Populates and returns the [destination] mutable map with key-value pairs provided by [transform] function applied to each element of the given array.

If any of two pairs would have the same key the last one gets added to the map.

@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesTo

```

public inline fun <T, K, V, M : MutableMap<in K, in V>> Array<out T>.associateTo(destination: M, transform: (T) ->
Pair<K, V>): M {
    for (element in this) {
        destination += transform(element)
    }
    return destination
}

```

Populates and returns the [destination] mutable map with key-value pairs provided by [transform] function applied to each element of the given array.

If any of two pairs would have the same key the last one gets added to the map.

@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesTo

```

public inline fun <K, V, M : MutableMap<in K, in V>> ByteArray.associateTo(destination: M, transform: (Byte) -> Pair<K, V>): M {
    for (element in this) {
        destination += transform(element)
    }
    return destination
}

```

Populates and returns the [destination] mutable map with key-value pairs provided by [transform] function applied to each element of the given array.

If any of two pairs would have the same key the last one gets added to the map.

@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesTo

```

public inline fun <K, V, M : MutableMap<in K, in V>> ShortArray.associateTo(destination: M, transform: (Short) ->
Pair<K, V>): M {
    for (element in this) {
        destination += transform(element)
    }
    return destination
}

```

Populates and returns the [destination] mutable map with key-value pairs provided by [transform] function applied to each element of the given array.

If any of two pairs would have the same key the last one gets added to the map.

@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesTo

```

public inline fun <K, V, M : MutableMap<in K, in V>> IntArray.associateTo(destination: M, transform: (Int) -> Pair<K, V>): M {
    for (element in this) {
        destination += transform(element)
    }
    return destination
}

```

Populates and returns the [destination] mutable map with key-value pairs provided by [transform] function applied to each element of the given array.

If any of two pairs would have the same key the last one gets added to the map.

@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesTo

```

public inline fun <K, V, M : MutableMap<in K, in V>> LongArray.associateTo(destination: M, transform: (Long) ->
Pair<K, V>): M {
    for (element in this) {
        destination += transform(element)
    }
    return destination
}

```

Populates and returns the [destination] mutable map with key-value pairs provided by [transform] function applied to each element of the given array.

If any of two pairs would have the same key the last one gets added to the map.

@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesTo

```

public inline fun <K, V, M : MutableMap<in K, in V>> FloatArray.associateTo(destination: M, transform: (Float) -> Pair<K, V>): M {
    for (element in this) {
        destination += transform(element)
    }
    return destination
}

```

Populates and returns the [destination] mutable map with key-value pairs provided by [transform] function applied to each element of the given array.

If any of two pairs would have the same key the last one gets added to the map.

@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesTo

```

public inline fun <K, V, M : MutableMap<in K, in V>> DoubleArray.associateTo(destination: M, transform: (Double) ->
Pair<K, V>): M {
    for (element in this) {
        destination += transform(element)
    }
    return destination
}

```

Populates and returns the [destination] mutable map with key-value pairs provided by [transform] function applied to each element of the given array.

If any of two pairs would have the same key the last one gets added to the map.

@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesTo

```

public inline fun <K, V, M :

```

```

MutableMap<in K, in V>> BooleanArray.associateTo(destination: M, transform: (Boolean) -> Pair<K, V>): M {
for (element in this) {
    destination += transform(element)
}
return destination
}
Populates
and returns the [destination] mutable map with key-value pairs
provided by [transform] function applied to each
element of the given array.
If any of two pairs would have the same key the last one gets added to the
map.
@sample samples.collections.Arrays.Transformations.associateArrayOfPrimitivesTo
public
inline fun <K, V, M : MutableMap<in K, in V>> CharArray.associateTo(destination: M, transform: (Char) ->
Pair<K, V>): M {
for (element in this) {
    destination += transform(element)
}
return
destination
}
Returns a [Map] where keys are elements from the given array and values are
produced
by the [valueSelector] function applied to each element.
If any two elements are equal, the last one gets
added to the map.
The returned map preserves the entry iteration order of the original array.
@sample samples.collections.Collections.Transformations.associateWith
@SinceKotlin("1.4")
public inline
fun <K, V> Array<out K>.associateWith(valueSelector: (K) -> V): Map<K, V> {
val result =
LinkedHashMap<K, V>(mapCapacity(size).coerceAtLeast(16))
return associateWithTo(result,
valueSelector)
}
Returns a [Map] where keys are elements from the given array and values are
produced
by the [valueSelector] function applied to each element.
If any two elements are equal, the last one gets
added to the map.
The returned map preserves the entry iteration order of the original array.
@sample samples.collections.Collections.Transformations.associateWith
@SinceKotlin("1.4")
@kotlin.internal.InlineOnly
public inline fun <V>
ByteArray.associateWith(valueSelector: (Byte) -> V): Map<Byte, V> {
val result = LinkedHashMap<Byte,
V>(mapCapacity(size).coerceAtLeast(16))
return associateWithTo(result, valueSelector)
}
Returns a
[Map] where keys are elements from the given array and values are
produced by the [valueSelector] function
applied to each element.
If any two elements are equal, the last one gets added to the map.
The
returned map preserves the entry iteration order of the original array.
@sample
samples.collections.Collections.Transformations.associateWith
@SinceKotlin("1.4")
@kotlin.internal.InlineOnly
public inline fun <V>
ShortArray.associateWith(valueSelector: (Short) -> V): Map<Short, V> {
val result = LinkedHashMap<Short,
V>(mapCapacity(size).coerceAtLeast(16))
return associateWithTo(result, valueSelector)
}
Returns a
[Map] where keys are elements from the given array and values are
produced by the [valueSelector] function
applied to each element.
If any two elements are equal, the last one gets added to the map.
The
returned map preserves the entry iteration order of the original array.
@sample
samples.collections.Collections.Transformations.associateWith
@SinceKotlin("1.4")
@kotlin.internal.InlineOnly
public inline fun <V>
IntArray.associateWith(valueSelector: (Int) -> V): Map<Int, V> {
val result = LinkedHashMap<Int,
V>(mapCapacity(size).coerceAtLeast(16))
return associateWithTo(result, valueSelector)
}
Returns a
[Map] where keys are elements from the given array and values are
produced by the [valueSelector] function
applied to each element.
If any two elements are equal, the last one gets added to the map.
The
returned map preserves the entry iteration order of the original array.
@sample
samples.collections.Collections.Transformations.associateWith
@SinceKotlin("1.4")
@kotlin.internal.InlineOnly
public inline fun <V>
LongArray.associateWith(valueSelector: (Long) -> V): Map<Long, V> {
val result = LinkedHashMap<Long,
V>(mapCapacity(size).coerceAtLeast(16))
return associateWithTo(result, valueSelector)
}
Returns a
[Map] where keys are elements from the given array and values are
produced by the [valueSelector] function
applied to each element.
If any two elements are equal, the last one gets added to the map.
The
returned map preserves the entry iteration order of the original array.
@sample
samples.collections.Collections.Transformations.associateWith
@SinceKotlin("1.4")
@kotlin.internal.InlineOnly
public inline fun <V>
FloatArray.associateWith(valueSelector: (Float) -> V): Map<Float, V> {
val result = LinkedHashMap<Float,
V>(mapCapacity(size).coerceAtLeast(16))
return associateWithTo(result, valueSelector)
}
Returns a

```

[Map] where keys are elements from the given array and values are produced by the [valueSelector] function applied to each element. If any two elements are equal, the last one gets added to the map. The returned map preserves the entry iteration order of the original array.

```

@sample samples.collections.Collections.Transformations.associateWith
*/\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <V>
DoubleArray.associateWith(valueSelector: (Double) -> V): Map<Double, V> {\n    val result =
LinkedHashMap<Double, V>(mapCapacity(size).coerceAtLeast(16))\n    return associateWithTo(result,
valueSelector)\n}\n\n/**\n * Returns a [Map] where keys are elements from the given array and values are
produced by the [valueSelector] function applied to each element. If any two elements are equal, the last one
gets added to the map. The returned map preserves the entry iteration order of the original array.
@sample samples.collections.Collections.Transformations.associateWith
*/\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <V>
BooleanArray.associateWith(valueSelector: (Boolean) -> V): Map<Boolean, V> {\n    val result =
LinkedHashMap<Boolean, V>(mapCapacity(size).coerceAtLeast(16))\n    return associateWithTo(result,
valueSelector)\n}\n\n/**\n * Returns a [Map] where keys are elements from the given array and values are
produced by the [valueSelector] function applied to each element. If any two elements are equal, the last one
gets added to the map. The returned map preserves the entry iteration order of the original array.
@sample samples.collections.Collections.Transformations.associateWith
*/\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <V>
CharArray.associateWith(valueSelector: (Char) -> V): Map<Char, V> {\n    val result = LinkedHashMap<Char,
V>(mapCapacity(size.coerceAtMost(128)).coerceAtLeast(16))\n    return associateWithTo(result,
valueSelector)\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs for each
element of the given array, where key is the element itself and value is provided by the [valueSelector] function
applied to that key. If any two elements are equal, the last one overwrites the former value in the map.
@sample samples.collections.Collections.Transformations.associateWithTo
*/\n@SinceKotlin("1.4")\npublic
inline fun <K, V, M : MutableMap<in K, in V>> Array<out K>.associateWithTo(destination: M, valueSelector: (K)
-> V): M {\n    for (element in this) {\n        destination.put(element, valueSelector(element))\n    }\n    return
destination\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs for each element
of the given array, where key is the element itself and value is provided by the [valueSelector] function applied
to that key. If any two elements are equal, the last one overwrites the former value in the map.
@sample samples.collections.Collections.Transformations.associateWithTo
*/\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <V, M : MutableMap<in Byte, in V>>
ByteArray.associateWithTo(destination: M, valueSelector: (Byte) -> V): M {\n    for (element in this) {\n
destination.put(element, valueSelector(element))\n    }\n    return destination\n}\n\n/**\n * Populates and returns the
[destination] mutable map with key-value pairs for each element of the given array, where key is the element
itself and value is provided by the [valueSelector] function applied to that key. If any two elements are
equal, the last one overwrites the former value in the map.
@sample
samples.collections.Collections.Transformations.associateWithTo
*/\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <V, M : MutableMap<in Short, in V>>
ShortArray.associateWithTo(destination: M, valueSelector: (Short) -> V): M {\n    for (element in this) {\n
destination.put(element, valueSelector(element))\n    }\n    return destination\n}\n\n/**\n * Populates and returns the
[destination] mutable map with key-value pairs for each element of the given array, where key is the element
itself and value is provided by the [valueSelector] function applied to that key. If any two elements are
equal, the last one overwrites the former value in the map.
@sample
samples.collections.Collections.Transformations.associateWithTo
*/\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <V, M : MutableMap<in Int, in V>>
IntArray.associateWithTo(destination: M, valueSelector: (Int) -> V): M {\n    for (element in this) {\n
destination.put(element, valueSelector(element))\n    }\n    return destination\n}\n\n/**\n * Populates and returns the

```

[destination] mutable map with key-value pairs for each element of the given array,\n * where key is the element itself and value is provided by the [valueSelector] function applied to that key.\n * \n * If any two elements are equal, the last one overwrites the former value in the map.\n * \n * @sample samples.collections.Collections.Transformations.associateWithTo

```

*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <V, M : MutableMap<in Long, in V>>
LongArray.associateWithTo(destination: M, valueSelector: (Long) -> V): M {\n  for (element in this) {\n
destination.put(element, valueSelector(element))\n  }\n  return destination\n}\n\n/**\n * Populates and returns the
[destination] mutable map with key-value pairs for each element of the given array,\n * where key is the element
itself and value is provided by the [valueSelector] function applied to that key.\n * \n * If any two elements are
equal, the last one overwrites the former value in the map.\n * \n * @sample
samples.collections.Collections.Transformations.associateWithTo
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <V, M : MutableMap<in Float, in V>>
FloatArray.associateWithTo(destination: M, valueSelector: (Float) -> V): M {\n  for (element in this) {\n
destination.put(element, valueSelector(element))\n  }\n  return destination\n}\n\n/**\n * Populates and returns the
[destination] mutable map with key-value pairs for each element of the given array,\n * where key is the element
itself and value is provided by the [valueSelector] function applied to that key.\n * \n * If any two elements are
equal, the last one overwrites the former value in the map.\n * \n * @sample
samples.collections.Collections.Transformations.associateWithTo
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <V, M : MutableMap<in Double, in V>>
DoubleArray.associateWithTo(destination: M, valueSelector: (Double) -> V): M {\n  for (element in this) {\n
destination.put(element, valueSelector(element))\n  }\n  return destination\n}\n\n/**\n * Populates and returns the
[destination] mutable map with key-value pairs for each element of the given array,\n * where key is the element
itself and value is provided by the [valueSelector] function applied to that key.\n * \n * If any two elements are
equal, the last one overwrites the former value in the map.\n * \n * @sample
samples.collections.Collections.Transformations.associateWithTo
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <V, M : MutableMap<in Boolean, in
V>> BooleanArray.associateWithTo(destination: M, valueSelector: (Boolean) -> V): M {\n  for (element in this)
{\n  destination.put(element, valueSelector(element))\n  }\n  return destination\n}\n\n/**\n * Populates and
returns the [destination] mutable map with key-value pairs for each element of the given array,\n * where key is the
element itself and value is provided by the [valueSelector] function applied to that key.\n * \n * If any two elements
are equal, the last one overwrites the former value in the map.\n * \n * @sample
samples.collections.Collections.Transformations.associateWithTo
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <V, M : MutableMap<in Char, in V>>
CharArray.associateWithTo(destination: M, valueSelector: (Char) -> V): M {\n  for (element in this) {\n
destination.put(element, valueSelector(element))\n  }\n  return destination\n}\n\n/**\n * Appends all elements to
the given [destination] collection.\n * \n * @public fun <T, C : MutableCollection<in T>> Array<out
T>.toCollection(destination: C): C {\n  for (item in this) {\n  destination.add(item)\n  }\n  return
destination\n}\n\n/**\n * Appends all elements to the given [destination] collection.\n * \n * @public fun <C :
MutableCollection<in Byte>> ByteArray.toCollection(destination: C): C {\n  for (item in this) {\n
destination.add(item)\n  }\n  return destination\n}\n\n/**\n * Appends all elements to the given [destination]
collection.\n * \n * @public fun <C : MutableCollection<in Short>> ShortArray.toCollection(destination: C): C {\n
for (item in this) {\n  destination.add(item)\n  }\n  return destination\n}\n\n/**\n * Appends all elements to the
given [destination] collection.\n * \n * @public fun <C : MutableCollection<in Int>> IntArray.toCollection(destination:
C): C {\n  for (item in this) {\n  destination.add(item)\n  }\n  return destination\n}\n\n/**\n * Appends all
elements to the given [destination] collection.\n * \n * @public fun <C : MutableCollection<in Long>>
LongArray.toCollection(destination: C): C {\n  for (item in this) {\n  destination.add(item)\n  }\n  return
destination\n}\n\n/**\n * Appends all elements to the given [destination] collection.\n * \n * @public fun <C :
MutableCollection<in Float>> FloatArray.toCollection(destination: C): C {\n  for (item in this) {\n

```



```

destination.add(item)\n } \n return destination\n}\n\n/**\n * Appends all elements to the given [destination]
collection.\n */\npublic fun <C : MutableCollection<in Double>> DoubleArray.toCollection(destination: C): C {\n
for (item in this) {\n destination.add(item)\n } \n return destination\n}\n\n/**\n * Appends all elements to the
given [destination] collection.\n */\npublic fun <C : MutableCollection<in Boolean>>
BooleanArray.toCollection(destination: C): C {\n for (item in this) {\n destination.add(item)\n } \n return
destination\n}\n\n/**\n * Appends all elements to the given [destination] collection.\n */\npublic fun <C :
MutableCollection<in Char>> CharArray.toCollection(destination: C): C {\n for (item in this) {\n
destination.add(item)\n } \n return destination\n}\n\n/**\n * Returns a new [HashSet] of all elements.\n
*/\npublic fun <T> Array<out T>.toHashSet(): HashSet<T> {\n return
toCollection(HashSet<T>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [HashSet] of all elements.\n
*/\npublic fun ByteArray.toHashSet(): HashSet<Byte> {\n return
toCollection(HashSet<Byte>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [HashSet] of all elements.\n
*/\npublic fun ShortArray.toHashSet(): HashSet<Short> {\n return
toCollection(HashSet<Short>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [HashSet] of all elements.\n
*/\npublic fun IntArray.toHashSet(): HashSet<Int> {\n return
toCollection(HashSet<Int>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [HashSet] of all elements.\n
*/\npublic fun LongArray.toHashSet(): HashSet<Long> {\n return
toCollection(HashSet<Long>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [HashSet] of all elements.\n
*/\npublic fun FloatArray.toHashSet(): HashSet<Float> {\n return
toCollection(HashSet<Float>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [HashSet] of all elements.\n
*/\npublic fun DoubleArray.toHashSet(): HashSet<Double> {\n return
toCollection(HashSet<Double>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [HashSet] of all elements.\n
*/\npublic fun BooleanArray.toHashSet(): HashSet<Boolean> {\n return
toCollection(HashSet<Boolean>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [HashSet] of all elements.\n
*/\npublic fun CharArray.toHashSet(): HashSet<Char> {\n return
toCollection(HashSet<Char>(mapCapacity(size.coerceAtMost(128))))\n}\n\n/**\n * Returns a [List] containing all
elements.\n */\npublic fun <T> Array<out T>.toList(): List<T> {\n return when (size) {\n 0 -> emptyList()\n
1 -> listOf(this[0])\n else -> this.toMutableList()\n } \n}\n\n/**\n * Returns a [List] containing all
elements.\n */\npublic fun ByteArray.toList(): List<Byte> {\n return when (size) {\n 0 -> emptyList()\n
1 -> listOf(this[0])\n else -> this.toMutableList()\n } \n}\n\n/**\n * Returns a [List] containing all elements.\n
*/\npublic fun ShortArray.toList(): List<Short> {\n return when (size) {\n 0 -> emptyList()\n
1 -> listOf(this[0])\n else -> this.toMutableList()\n } \n}\n\n/**\n * Returns a [List] containing all elements.\n
*/\npublic fun IntArray.toList(): List<Int> {\n return when (size) {\n 0 -> emptyList()\n
1 -> listOf(this[0])\n else -> this.toMutableList()\n } \n}\n\n/**\n * Returns a [List] containing all elements.\n
*/\npublic fun LongArray.toList(): List<Long> {\n return when (size) {\n 0 -> emptyList()\n
1 -> listOf(this[0])\n else -> this.toMutableList()\n } \n}\n\n/**\n * Returns a [List] containing all elements.\n
*/\npublic fun FloatArray.toList(): List<Float> {\n return when (size) {\n 0 -> emptyList()\n
1 -> listOf(this[0])\n else -> this.toMutableList()\n } \n}\n\n/**\n * Returns a [List] containing all elements.\n
*/\npublic fun DoubleArray.toList(): List<Double> {\n return when (size) {\n 0 -> emptyList()\n
1 -> listOf(this[0])\n else -> this.toMutableList()\n } \n}\n\n/**\n * Returns a [List] containing all elements.\n
*/\npublic fun BooleanArray.toList(): List<Boolean> {\n return when (size) {\n 0 -> emptyList()\n
1 -> listOf(this[0])\n else -> this.toMutableList()\n } \n}\n\n/**\n * Returns a [List] containing all elements.\n
*/\npublic fun CharArray.toList(): List<Char> {\n return when (size) {\n 0 -> emptyList()\n
1 -> listOf(this[0])\n else -> this.toMutableList()\n } \n}\n\n/**\n * Returns a new [MutableList] filled with all
elements of this array.\n */\npublic fun <T> Array<out T>.toMutableList(): MutableList<T> {\n return
ArrayList(this.asCollection())\n}\n\n/**\n * Returns a new [MutableList] filled with all elements of this array.\n
*/\npublic fun ByteArray.toMutableList(): MutableList<Byte> {\n val list = ArrayList<Byte>(size)\n for (item
in this) list.add(item)\n return list\n}\n\n/**\n * Returns a new [MutableList] filled with all elements of this

```

```

array.\n */\npublic fun ShortArray.toMutableList(): MutableList<Short> {\n    val list = ArrayList<Short>(size)\n    for (item in this) list.add(item)\n    return list\n}\n\n/**\n * Returns a new [MutableList] filled with all elements of\n this array.\n */\npublic fun IntArray.toMutableList(): MutableList<Int> {\n    val list = ArrayList<Int>(size)\n    for (item in this) list.add(item)\n    return list\n}\n\n/**\n * Returns a new [MutableList] filled with all elements of this\n array.\n */\npublic fun LongArray.toMutableList(): MutableList<Long> {\n    val list = ArrayList<Long>(size)\n    for (item in this) list.add(item)\n    return list\n}\n\n/**\n * Returns a new [MutableList] filled with all elements of\n this array.\n */\npublic fun FloatArray.toMutableList(): MutableList<Float> {\n    val list =\n    ArrayList<Float>(size)\n    for (item in this) list.add(item)\n    return list\n}\n\n/**\n * Returns a new [MutableList]\n filled with all elements of this array.\n */\npublic fun DoubleArray.toMutableList(): MutableList<Double> {\n    val\n    list = ArrayList<Double>(size)\n    for (item in this) list.add(item)\n    return list\n}\n\n/**\n * Returns a new\n [MutableList] filled with all elements of this array.\n */\npublic fun BooleanArray.toMutableList():\n    MutableList<Boolean> {\n    val list = ArrayList<Boolean>(size)\n    for (item in this) list.add(item)\n    return\n    list\n}\n\n/**\n * Returns a new [MutableList] filled with all elements of this array.\n */\npublic fun\n    CharArray.toMutableList(): MutableList<Char> {\n    val list = ArrayList<Char>(size)\n    for (item in this)\n    list.add(item)\n    return list\n}\n\n/**\n * Returns a [Set] of all elements.\n * \n * The returned set preserves the\n element iteration order of the original array.\n */\npublic fun <T> Array<out T>.toSet(): Set<T> {\n    return when\n    (size) {\n        0 -> emptySet()\n        1 -> setOf(this[0])\n        else ->\n        toCollection(LinkedHashSet<T>(mapCapacity(size)))\n    }\n}\n\n/**\n * Returns a [Set] of all elements.\n * \n * The returned set preserves the element iteration order of the original array.\n */\npublic fun ByteArray.toSet():\n    Set<Byte> {\n    return when (size) {\n        0 -> emptySet()\n        1 -> setOf(this[0])\n        else ->\n        toCollection(LinkedHashSet<Byte>(mapCapacity(size)))\n    }\n}\n\n/**\n * Returns a [Set] of all elements.\n * \n * The returned set preserves the element iteration order of the original array.\n */\npublic fun ShortArray.toSet():\n    Set<Short> {\n    return when (size) {\n        0 -> emptySet()\n        1 -> setOf(this[0])\n        else ->\n        toCollection(LinkedHashSet<Short>(mapCapacity(size)))\n    }\n}\n\n/**\n * Returns a [Set] of all elements.\n * \n * The returned set preserves the element iteration order of the original array.\n */\npublic fun IntArray.toSet():\n    Set<Int> {\n    return when (size) {\n        0 -> emptySet()\n        1 -> setOf(this[0])\n        else ->\n        toCollection(LinkedHashSet<Int>(mapCapacity(size)))\n    }\n}\n\n/**\n * Returns a [Set] of all elements.\n * \n * The returned set preserves the element iteration order of the original array.\n */\npublic fun LongArray.toSet():\n    Set<Long> {\n    return when (size) {\n        0 -> emptySet()\n        1 -> setOf(this[0])\n        else ->\n        toCollection(LinkedHashSet<Long>(mapCapacity(size)))\n    }\n}\n\n/**\n * Returns a [Set] of all elements.\n * \n * The returned set preserves the element iteration order of the original array.\n */\npublic fun FloatArray.toSet():\n    Set<Float> {\n    return when (size) {\n        0 -> emptySet()\n        1 -> setOf(this[0])\n        else ->\n        toCollection(LinkedHashSet<Float>(mapCapacity(size)))\n    }\n}\n\n/**\n * Returns a [Set] of all elements.\n * \n * The returned set preserves the element iteration order of the original array.\n */\npublic fun DoubleArray.toSet():\n    Set<Double> {\n    return when (size) {\n        0 -> emptySet()\n        1 -> setOf(this[0])\n        else ->\n        toCollection(LinkedHashSet<Double>(mapCapacity(size)))\n    }\n}\n\n/**\n * Returns a [Set] of all elements.\n * \n * The returned set preserves the element iteration order of the original array.\n */\npublic fun\n    BooleanArray.toSet(): Set<Boolean> {\n    return when (size) {\n        0 -> emptySet()\n        1 -> setOf(this[0])\n        else -> toCollection(LinkedHashSet<Boolean>(mapCapacity(size)))\n    }\n}\n\n/**\n * Returns a [Set] of all\n elements.\n * \n * The returned set preserves the element iteration order of the original array.\n */\npublic fun\n    CharArray.toSet(): Set<Char> {\n    return when (size) {\n        0 -> emptySet()\n        1 -> setOf(this[0])\n        else -\n        > toCollection(LinkedHashSet<Char>(mapCapacity(size.coerceAtMost(128))))\n    }\n}\n\n/**\n * Returns a single\n list of all elements yielded from results of [transform] function being invoked on each element of original array.\n * \n * @sample samples.collections.Collections.Transformations.flatMap\n */\npublic inline fun <T, R> Array<out\n    T>.flatMap(transform: (T) -> Iterable<R>): List<R> {\n    return flatMapTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being invoked on each element of\n original array.\n * \n * @sample samples.collections.Collections.Transformations.flatMap\n */\npublic inline fun\n    <R> ByteArray.flatMap(transform: (Byte) -> Iterable<R>): List<R> {\n    return flatMapTo(ArrayList<R>(),

```

```

transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being
invoked on each element of original array.\n * \n * @sample
samples.collections.Collections.Transformations.flatMap\n *\npublic inline fun <R> ShortArray.flatMap(transform:
(Short) -> Iterable<R>): List<R> {\n    return flatMapTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single
list of all elements yielded from results of [transform] function being invoked on each element of original array.\n *
\n * @sample samples.collections.Collections.Transformations.flatMap\n *\npublic inline fun <R>
IntArray.flatMap(transform: (Int) -> Iterable<R>): List<R> {\n    return flatMapTo(ArrayList<R>(),
transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being
invoked on each element of original array.\n * \n * @sample
samples.collections.Collections.Transformations.flatMap\n *\npublic inline fun <R> LongArray.flatMap(transform:
(Long) -> Iterable<R>): List<R> {\n    return flatMapTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single
list of all elements yielded from results of [transform] function being invoked on each element of original array.\n *
\n * @sample samples.collections.Collections.Transformations.flatMap\n *\npublic inline fun <R>
FloatArray.flatMap(transform: (Float) -> Iterable<R>): List<R> {\n    return flatMapTo(ArrayList<R>(),
transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being
invoked on each element of original array.\n * \n * @sample
samples.collections.Collections.Transformations.flatMap\n *\npublic inline fun <R>
DoubleArray.flatMap(transform: (Double) -> Iterable<R>): List<R> {\n    return flatMapTo(ArrayList<R>(),
transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being
invoked on each element of original array.\n * \n * @sample
samples.collections.Collections.Transformations.flatMap\n *\npublic inline fun <R>
BooleanArray.flatMap(transform: (Boolean) -> Iterable<R>): List<R> {\n    return flatMapTo(ArrayList<R>(),
transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being
invoked on each element of original array.\n * \n * @sample
samples.collections.Collections.Transformations.flatMap\n *\npublic inline fun <R> CharArray.flatMap(transform:
(Char) -> Iterable<R>): List<R> {\n    return flatMapTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single
list of all elements yielded from results of [transform] function being invoked on each element of original array.\n *
\n * @sample samples.collections.Collections.Transformations.flatMap\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapSequence")\npublic inline fun <T, R> Array<out
T>.flatMap(transform: (T) -> Sequence<R>): List<R> {\n    return flatMapTo(ArrayList<R>(),
transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being
invoked on each element\n * and its index in the original array.\n * \n * @sample
samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterable")\n@kotlin.internal.InlineOnly\npublic
inline fun <T, R> Array<out T>.flatMapIndexed(transform: (index: Int, T) -> Iterable<R>): List<R> {\n    return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n *
\n * @sample samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterable")\n@kotlin.internal.InlineOnly\npublic
inline fun <R> ByteArray.flatMapIndexed(transform: (index: Int, Byte) -> Iterable<R>): List<R> {\n    return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n *
\n * @sample samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterable")\n@kotlin.internal.InlineOnly\npublic

```

```

inline fun <R> ShortArray.flatMapIndexed(transform: (index: Int, Short) -> Iterable<R>): List<R> {\n  return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n *
@sample samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterable")\n@kotlin.internal.InlineOnly\npublic
inline fun <R> IntArray.flatMapIndexed(transform: (index: Int, Int) -> Iterable<R>): List<R> {\n  return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n *
@sample samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterable")\n@kotlin.internal.InlineOnly\npublic
inline fun <R> LongArray.flatMapIndexed(transform: (index: Int, Long) -> Iterable<R>): List<R> {\n  return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n *
@sample samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterable")\n@kotlin.internal.InlineOnly\npublic
inline fun <R> FloatArray.flatMapIndexed(transform: (index: Int, Float) -> Iterable<R>): List<R> {\n  return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n *
@sample samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterable")\n@kotlin.internal.InlineOnly\npublic
inline fun <R> DoubleArray.flatMapIndexed(transform: (index: Int, Double) -> Iterable<R>): List<R> {\n  return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n *
@sample samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterable")\n@kotlin.internal.InlineOnly\npublic
inline fun <R> BooleanArray.flatMapIndexed(transform: (index: Int, Boolean) -> Iterable<R>): List<R> {\n
return flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded
from results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n *
@sample samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterable")\n@kotlin.internal.InlineOnly\npublic
inline fun <R> CharArray.flatMapIndexed(transform: (index: Int, Char) -> Iterable<R>): List<R> {\n  return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n *
@sample samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedSequence")\n@kotlin.internal.InlineOnly\npubli
c inline fun <T, R> Array<out T>.flatMapIndexed(transform: (index: Int, T) -> Sequence<R>): List<R> {\n  return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Appends all elements yielded from results of
[transform] function being invoked on each element\n * and its index in the original array, to the given
[destination].\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterableTo")\n@kotlin.internal.InlineOnly\npubli

```

```

c inline fun <T, R, C : MutableCollection<in R>> Array<out T>.flatMapIndexedTo(destination: C, transform:
(index: Int, T) -> Iterable<R>): C { \n  var index = 0\n  for (element in this) {\n    val list = transform(index++,
element)\n    destination.addAll(list)\n  }\n  return destination\n}\n\n/**\n * Appends all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array, to the given
[destination].\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterableTo")\n@kotlin.internal.InlineOnly\npublic
c inline fun <R, C : MutableCollection<in R>> ByteArray.flatMapIndexedTo(destination: C, transform: (index: Int,
Byte) -> Iterable<R>): C { \n  var index = 0\n  for (element in this) {\n    val list = transform(index++,
element)\n    destination.addAll(list)\n  }\n  return destination\n}\n\n/**\n * Appends all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array, to the given
[destination].\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterableTo")\n@kotlin.internal.InlineOnly\npublic
c inline fun <R, C : MutableCollection<in R>> ShortArray.flatMapIndexedTo(destination: C, transform: (index: Int,
Short) -> Iterable<R>): C { \n  var index = 0\n  for (element in this) {\n    val list = transform(index++,
element)\n    destination.addAll(list)\n  }\n  return destination\n}\n\n/**\n * Appends all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array, to the given
[destination].\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterableTo")\n@kotlin.internal.InlineOnly\npublic
c inline fun <R, C : MutableCollection<in R>> IntArray.flatMapIndexedTo(destination: C, transform: (index: Int,
Int) -> Iterable<R>): C { \n  var index = 0\n  for (element in this) {\n    val list = transform(index++, element)\n
    destination.addAll(list)\n  }\n  return destination\n}\n\n/**\n * Appends all elements yielded from results of
[transform] function being invoked on each element\n * and its index in the original array, to the given
[destination].\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterableTo")\n@kotlin.internal.InlineOnly\npublic
c inline fun <R, C : MutableCollection<in R>> LongArray.flatMapIndexedTo(destination: C, transform: (index: Int,
Long) -> Iterable<R>): C { \n  var index = 0\n  for (element in this) {\n    val list = transform(index++,
element)\n    destination.addAll(list)\n  }\n  return destination\n}\n\n/**\n * Appends all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array, to the given
[destination].\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterableTo")\n@kotlin.internal.InlineOnly\npublic
c inline fun <R, C : MutableCollection<in R>> FloatArray.flatMapIndexedTo(destination: C, transform: (index: Int,
Float) -> Iterable<R>): C { \n  var index = 0\n  for (element in this) {\n    val list = transform(index++,
element)\n    destination.addAll(list)\n  }\n  return destination\n}\n\n/**\n * Appends all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array, to the given
[destination].\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterableTo")\n@kotlin.internal.InlineOnly\npublic
c inline fun <R, C : MutableCollection<in R>> DoubleArray.flatMapIndexedTo(destination: C, transform: (index:
Int, Double) -> Iterable<R>): C { \n  var index = 0\n  for (element in this) {\n    val list = transform(index++,
element)\n    destination.addAll(list)\n  }\n  return destination\n}\n\n/**\n * Appends all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array, to the given
[destination].\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution

```

```

ByLambdaReturnType\n@kotlin.jvm.JvmName("\flatMapIndexedIterableTo")\n@kotlin.internal.InlineOnly\npublic inline fun <R, C : MutableCollection<in R>> BooleanArray.flatMapIndexedTo(destination: C, transform: (index: Int, Boolean) -> Iterable<R>): C {\n    var index = 0\n    for (element in this) {\n        val list = transform(index++, element)\n        destination.addAll(list)\n    }\n    return destination\n}\n\n/* Appends all elements yielded from results of [transform] function being invoked on each element\n * and its index in the original array, to the given [destination].\n */\n\n*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.jvm.JvmName("\flatMapIndexedIterableTo")\n@kotlin.internal.InlineOnly\npublic inline fun <R, C : MutableCollection<in R>> CharArray.flatMapIndexedTo(destination: C, transform: (index: Int, Char) -> Iterable<R>): C {\n    var index = 0\n    for (element in this) {\n        val list = transform(index++, element)\n        destination.addAll(list)\n    }\n    return destination\n}\n\n/* Appends all elements yielded from results of [transform] function being invoked on each element\n * and its index in the original array, to the given [destination].\n */\n\n*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.jvm.JvmName("\flatMapIndexedSequenceTo")\n@kotlin.internal.InlineOnly\npublic inline fun <T, R, C : MutableCollection<in R>> Array<out T>.flatMapIndexedTo(destination: C, transform: (index: Int, T) -> Sequence<R>): C {\n    var index = 0\n    for (element in this) {\n        val list = transform(index++, element)\n        destination.addAll(list)\n    }\n    return destination\n}\n\n/* Appends all elements yielded from results of [transform] function being invoked on each element of original array, to the given [destination].\n */\n\n*\npublic inline fun <T, R, C : MutableCollection<in R>> Array<out T>.flatMapTo(destination: C, transform: (T) -> Iterable<R>): C {\n    for (element in this) {\n        val list = transform(element)\n        destination.addAll(list)\n    }\n    return destination\n}\n\n/* Appends all elements yielded from results of [transform] function being invoked on each element of original array, to the given [destination].\n */\n\n*\npublic inline fun <R, C : MutableCollection<in R>> ByteArray.flatMapTo(destination: C, transform: (Byte) -> Iterable<R>): C {\n    for (element in this) {\n        val list = transform(element)\n        destination.addAll(list)\n    }\n    return destination\n}\n\n/* Appends all elements yielded from results of [transform] function being invoked on each element of original array, to the given [destination].\n */\n\n*\npublic inline fun <R, C : MutableCollection<in R>> ShortArray.flatMapTo(destination: C, transform: (Short) -> Iterable<R>): C {\n    for (element in this) {\n        val list = transform(element)\n        destination.addAll(list)\n    }\n    return destination\n}\n\n/* Appends all elements yielded from results of [transform] function being invoked on each element of original array, to the given [destination].\n */\n\n*\npublic inline fun <R, C : MutableCollection<in R>> IntArray.flatMapTo(destination: C, transform: (Int) -> Iterable<R>): C {\n    for (element in this) {\n        val list = transform(element)\n        destination.addAll(list)\n    }\n    return destination\n}\n\n/* Appends all elements yielded from results of [transform] function being invoked on each element of original array, to the given [destination].\n */\n\n*\npublic inline fun <R, C : MutableCollection<in R>> LongArray.flatMapTo(destination: C, transform: (Long) -> Iterable<R>): C {\n    for (element in this) {\n        val list = transform(element)\n        destination.addAll(list)\n    }\n    return destination\n}\n\n/* Appends all elements yielded from results of [transform] function being invoked on each element of original array, to the given [destination].\n */\n\n*\npublic inline fun <R, C : MutableCollection<in R>> FloatArray.flatMapTo(destination: C, transform: (Float) -> Iterable<R>): C {\n    for (element in this) {\n        val list = transform(element)\n        destination.addAll(list)\n    }\n    return destination\n}\n\n/* Appends all elements yielded from results of [transform] function being invoked on each element of original array, to the given [destination].\n */\n\n*\npublic inline fun <R, C : MutableCollection<in R>> DoubleArray.flatMapTo(destination: C, transform: (Double) -> Iterable<R>): C {\n    for (element in this) {\n        val list = transform(element)\n        destination.addAll(list)\n    }\n    return destination\n}\n\n/* Appends all elements yielded from results of [transform] function being invoked on each element of original array, to the given [destination].\n */\n\n*\npublic inline fun <R, C : MutableCollection<in R>> BooleanArray.flatMapTo(destination: C, transform: (Boolean) -> Iterable<R>): C {\n    for (element in this) {\n        val list = transform(element)\n        destination.addAll(list)\n    }\n    return destination\n}\n\n/* Appends all elements yielded from results of [transform] function being

```

invoked on each element of original array, to the given [destination].

```

*\n\npublic inline fun <R, C :
MutableCollection<in R>> CharArray.flatMapTo(destination: C, transform: (Char) -> Iterable<R>): C {\n for
(element in this) {\n val list = transform(element)\n destination.addAll(list)\n }\n return
destination}\n}\n\n/**\n * Appends all elements yielded from results of [transform] function being invoked on each
element of original array, to the given [destination].\n
*\n\n@SinceKotlin("1.4")\n\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n\n@OverloadResolution
ByLambdaReturnType\n\n@kotlin.jvm.JvmName("flatMapSequenceTo")\n\npublic inline fun <T, R, C :
MutableCollection<in R>> Array<out T>.flatMapTo(destination: C, transform: (T) -> Sequence<R>): C {\n for
(element in this) {\n val list = transform(element)\n destination.addAll(list)\n }\n return
destination}\n}\n\n/**\n * Groups elements of the original array by the key returned by the given [keySelector]
function\n * applied to each element and returns a map where each group key is associated with a list of
corresponding elements.\n * \n * The returned map preserves the entry iteration order of the keys produced from the
original array.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n *\n\npublic inline fun
<T, K> Array<out T>.groupBy(keySelector: (T) -> K): Map<K, List<T>> {\n return
groupByTo(LinkedHashMap<K, MutableList<T>>(), keySelector)\n}\n}\n\n/**\n * Groups elements of the original
array by the key returned by the given [keySelector] function\n * applied to each element and returns a map where
each group key is associated with a list of corresponding elements.\n * \n * The returned map preserves the entry
iteration order of the keys produced from the original array.\n * \n * @sample
samples.collections.Collections.Transformations.groupBy\n *\n\npublic inline fun <K>
ByteArray.groupBy(keySelector: (Byte) -> K): Map<K, List<Byte>> {\n return groupByTo(LinkedHashMap<K,
MutableList<Byte>>(), keySelector)\n}\n}\n\n/**\n * Groups elements of the original array by the key returned by the
given [keySelector] function\n * applied to each element and returns a map where each group key is associated with
a list of corresponding elements.\n * \n * The returned map preserves the entry iteration order of the keys produced
from the original array.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n *\n\npublic
inline fun <K> ShortArray.groupBy(keySelector: (Short) -> K): Map<K, List<Short>> {\n return
groupByTo(LinkedHashMap<K, MutableList<Short>>(), keySelector)\n}\n}\n\n/**\n * Groups elements of the
original array by the key returned by the given [keySelector] function\n * applied to each element and returns a map
where each group key is associated with a list of corresponding elements.\n * \n * The returned map preserves the
entry iteration order of the keys produced from the original array.\n * \n * @sample
samples.collections.Collections.Transformations.groupBy\n *\n\npublic inline fun <K>
IntArray.groupBy(keySelector: (Int) -> K): Map<K, List<Int>> {\n return groupByTo(LinkedHashMap<K,
MutableList<Int>>(), keySelector)\n}\n}\n\n/**\n * Groups elements of the original array by the key returned by the
given [keySelector] function\n * applied to each element and returns a map where each group key is associated with
a list of corresponding elements.\n * \n * The returned map preserves the entry iteration order of the keys produced
from the original array.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n *\n\npublic
inline fun <K> LongArray.groupBy(keySelector: (Long) -> K): Map<K, List<Long>> {\n return
groupByTo(LinkedHashMap<K, MutableList<Long>>(), keySelector)\n}\n}\n\n/**\n * Groups elements of the
original array by the key returned by the given [keySelector] function\n * applied to each element and returns a map
where each group key is associated with a list of corresponding elements.\n * \n * The returned map preserves the
entry iteration order of the keys produced from the original array.\n * \n * @sample
samples.collections.Collections.Transformations.groupBy\n *\n\npublic inline fun <K>
FloatArray.groupBy(keySelector: (Float) -> K): Map<K, List<Float>> {\n return groupByTo(LinkedHashMap<K,
MutableList<Float>>(), keySelector)\n}\n}\n\n/**\n * Groups elements of the original array by the key returned by the
given [keySelector] function\n * applied to each element and returns a map where each group key is associated with
a list of corresponding elements.\n * \n * The returned map preserves the entry iteration order of the keys produced
from the original array.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n *\n\npublic
inline fun <K> DoubleArray.groupBy(keySelector: (Double) -> K): Map<K, List<Double>> {\n return
groupByTo(LinkedHashMap<K, MutableList<Double>>(), keySelector)\n}\n}\n\n/**\n * Groups elements of the

```

original array by the key returned by the given [keySelector] function\n * applied to each element and returns a map where each group key is associated with a list of corresponding elements.\n * \n * The returned map preserves the entry iteration order of the keys produced from the original array.\n * \n * @sample

```
samples.collections.Collections.Transformations.groupBy\n */\npublic inline fun <K>
```

BooleanArray.groupBy(keySelector: (Boolean) -> K): Map<K, List<Boolean>> {\n return groupByTo(LinkedHashMap<K, MutableList<Boolean>>(), keySelector)\n}\n\n/**\n * Groups elements of the original array by the key returned by the given [keySelector] function\n * applied to each element and returns a map where each group key is associated with a list of corresponding elements.\n * \n * The returned map preserves the entry iteration order of the keys produced from the original array.\n * \n * @sample

```
samples.collections.Collections.Transformations.groupBy\n */\npublic inline fun <K>
```

CharArray.groupBy(keySelector: (Char) -> K): Map<K, List<Char>> {\n return groupByTo(LinkedHashMap<K, MutableList<Char>>(), keySelector)\n}\n\n/**\n * Groups values returned by the [valueTransform] function applied to each element of the original array\n * by the key returned by the given [keySelector] function applied to the element\n * and returns a map where each group key is associated with a list of corresponding values.\n * \n * The returned map preserves the entry iteration order of the keys produced from the original array.\n * \n * @sample

```
samples.collections.Collections.Transformations.groupByKeysAndValues\n */\npublic inline fun <T, K, V>
```

Array<out T>.groupBy(keySelector: (T) -> K, valueTransform: (T) -> V): Map<K, List<V>> {\n return groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n}\n\n/**\n * Groups values returned by the [valueTransform] function applied to each element of the original array\n * by the key returned by the given [keySelector] function applied to the element\n * and returns a map where each group key is associated with a list of corresponding values.\n * \n * The returned map preserves the entry iteration order of the keys produced from the original array.\n * \n * @sample

```
samples.collections.Collections.Transformations.groupByKeysAndValues\n */\npublic inline fun <K, V>
```

ByteArray.groupBy(keySelector: (Byte) -> K, valueTransform: (Byte) -> V): Map<K, List<V>> {\n return groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n}\n\n/**\n * Groups values returned by the [valueTransform] function applied to each element of the original array\n * by the key returned by the given [keySelector] function applied to the element\n * and returns a map where each group key is associated with a list of corresponding values.\n * \n * The returned map preserves the entry iteration order of the keys produced from the original array.\n * \n * @sample

```
samples.collections.Collections.Transformations.groupByKeysAndValues\n */\npublic inline fun <K, V>
```

ShortArray.groupBy(keySelector: (Short) -> K, valueTransform: (Short) -> V): Map<K, List<V>> {\n return groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n}\n\n/**\n * Groups values returned by the [valueTransform] function applied to each element of the original array\n * by the key returned by the given [keySelector] function applied to the element\n * and returns a map where each group key is associated with a list of corresponding values.\n * \n * The returned map preserves the entry iteration order of the keys produced from the original array.\n * \n * @sample

```
samples.collections.Collections.Transformations.groupByKeysAndValues\n */\npublic inline fun <K, V>
```

IntArray.groupBy(keySelector: (Int) -> K, valueTransform: (Int) -> V): Map<K, List<V>> {\n return groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n}\n\n/**\n * Groups values returned by the [valueTransform] function applied to each element of the original array\n * by the key returned by the given [keySelector] function applied to the element\n * and returns a map where each group key is associated with a list of corresponding values.\n * \n * The returned map preserves the entry iteration order of the keys produced from the original array.\n * \n * @sample

```
samples.collections.Collections.Transformations.groupByKeysAndValues\n */\npublic inline fun <K, V>
```

LongArray.groupBy(keySelector: (Long) -> K, valueTransform: (Long) -> V): Map<K, List<V>> {\n return groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n}\n\n/**\n * Groups values returned by the [valueTransform] function applied to each element of the original array\n * by the key returned by the given [keySelector] function applied to the element\n * and returns a map where each group key is associated

with a list of corresponding values.\n * \n * The returned map preserves the entry iteration order of the keys produced from the original array.\n * \n * @sample

```

samples.collections.Collections.Transformations.groupByKeyAndValues\n * \n public inline fun <K, V>
FloatArray.groupBy(keySelector: (Float) -> K, valueTransform: (Float) -> V): Map<K, List<V>> {\n
return
groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n }\n\n\n\n * Groups values
returned by the [valueTransform] function applied to each element of the original array\n *
by the key returned by the given [keySelector] function applied to the element\n * and returns a map where each group key is associated
with a list of corresponding values.\n * \n * The returned map preserves the entry iteration order of the keys
produced from the original array.\n * \n * @sample
samples.collections.Collections.Transformations.groupByKeyAndValues\n * \n public inline fun <K, V>
DoubleArray.groupBy(keySelector: (Double) -> K, valueTransform: (Double) -> V): Map<K, List<V>> {\n
return
groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n }\n\n\n\n * Groups
values returned by the [valueTransform] function applied to each element of the original array\n *
by the key returned by the given [keySelector] function applied to the element\n * and returns a map where each group key is
associated with a list of corresponding values.\n * \n * The returned map preserves the entry iteration order of the
keys produced from the original array.\n * \n * @sample
samples.collections.Collections.Transformations.groupByKeyAndValues\n * \n public inline fun <K, V>
BooleanArray.groupBy(keySelector: (Boolean) -> K, valueTransform: (Boolean) -> V): Map<K, List<V>> {\n
return
groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n }\n\n\n\n * Groups
values returned by the [valueTransform] function applied to each element of the original array\n *
by the key returned by the given [keySelector] function applied to the element\n * and returns a map where each group key is
associated with a list of corresponding values.\n * \n * The returned map preserves the entry iteration order of the
keys produced from the original array.\n * \n * @sample
samples.collections.Collections.Transformations.groupByKeyAndValues\n * \n public inline fun <K, V>
CharArray.groupBy(keySelector: (Char) -> K, valueTransform: (Char) -> V): Map<K, List<V>> {\n
return
groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n }\n\n\n\n\n * Groups elements
of the original array by the key returned by the given [keySelector] function\n * applied to each element and puts to
the [destination] map each group key associated with a list of corresponding elements.\n * \n * @return The
[destination] map.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n * \n public inline
fun <T, K, M : MutableMap<in K, MutableList<T>>> Array<out T>.groupByTo(destination: M, keySelector: (T) -
> K): M {\n
for (element in this) {\n
val key = keySelector(element)\n
val list = destination.getOrPut(key)
{ ArrayList<T>() }\n
list.add(element)\n
}\n
return destination\n }\n\n\n\n\n * Groups elements of the
original array by the key returned by the given [keySelector] function\n * applied to each element and puts to the
[destination] map each group key associated with a list of corresponding elements.\n * \n * @return The
[destination] map.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n * \n public inline
fun <K, M : MutableMap<in K, MutableList<Byte>>> ByteArray.groupByTo(destination: M, keySelector: (Byte) -
> K): M {\n
for (element in this) {\n
val key = keySelector(element)\n
val list = destination.getOrPut(key)
{ ArrayList<Byte>() }\n
list.add(element)\n
}\n
return destination\n }\n\n\n\n\n * Groups elements of the
original array by the key returned by the given [keySelector] function\n * applied to each element and puts to the
[destination] map each group key associated with a list of corresponding elements.\n * \n * @return The
[destination] map.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n * \n public inline
fun <K, M : MutableMap<in K, MutableList<Short>>> ShortArray.groupByTo(destination: M, keySelector: (Short) -
> K): M {\n
for (element in this) {\n
val key = keySelector(element)\n
val list =
destination.getOrPut(key) { ArrayList<Short>() }\n
list.add(element)\n
}\n
return destination\n }\n\n\n\n\n * Groups elements of the original array by the key returned by the given [keySelector] function\n *
applied to each element and puts to the [destination] map each group key associated with a list of corresponding elements.\n * \n *
@return The [destination] map.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n * \n public inline
fun <K, M : MutableMap<in K, MutableList<Int>>> IntArray.groupByTo(destination: M,

```

```

keySelector: (Int) -> K): M {\n  for (element in this) {\n    val key = keySelector(element)\n    val list =
destination.getOrPut(key) { ArrayList<Int>() }\n    list.add(element)\n  }\n  return destination\n}\n\n/**\n *
Groups elements of the original array by the key returned by the given [keySelector] function\n * applied to each
element and puts to the [destination] map each group key associated with a list of corresponding elements.\n * \n *
@return The [destination] map.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n
*/\n\npublic inline fun <K, M : MutableMap<in K, MutableList<Long>>>> LongArray.groupByTo(destination: M,
keySelector: (Long) -> K): M {\n  for (element in this) {\n    val key = keySelector(element)\n    val list =
destination.getOrPut(key) { ArrayList<Long>() }\n    list.add(element)\n  }\n  return destination\n}\n\n/**\n *
Groups elements of the original array by the key returned by the given [keySelector] function\n * applied to each
element and puts to the [destination] map each group key associated with a list of corresponding elements.\n * \n *
@return The [destination] map.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n
*/\n\npublic inline fun <K, M : MutableMap<in K, MutableList<Float>>>> FloatArray.groupByTo(destination: M,
keySelector: (Float) -> K): M {\n  for (element in this) {\n    val key = keySelector(element)\n    val list =
destination.getOrPut(key) { ArrayList<Float>() }\n    list.add(element)\n  }\n  return destination\n}\n\n/**\n *
Groups elements of the original array by the key returned by the given [keySelector] function\n * applied to each
element and puts to the [destination] map each group key associated with a list of corresponding elements.\n * \n *
@return The [destination] map.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n
*/\n\npublic inline fun <K, M : MutableMap<in K, MutableList<Double>>>> DoubleArray.groupByTo(destination: M,
keySelector: (Double) -> K): M {\n  for (element in this) {\n    val key = keySelector(element)\n    val list =
destination.getOrPut(key) { ArrayList<Double>() }\n    list.add(element)\n  }\n  return destination\n}\n\n/**\n *
Groups elements of the original array by the key returned by the given [keySelector] function\n * applied to each
element and puts to the [destination] map each group key associated with a list of corresponding elements.\n * \n *
@return The [destination] map.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n
*/\n\npublic inline fun <K, M : MutableMap<in K, MutableList<Boolean>>>> BooleanArray.groupByTo(destination:
M, keySelector: (Boolean) -> K): M {\n  for (element in this) {\n    val key = keySelector(element)\n    val list =
destination.getOrPut(key) { ArrayList<Boolean>() }\n    list.add(element)\n  }\n  return
destination\n}\n\n/**\n * Groups elements of the original array by the key returned by the given [keySelector]
function\n * applied to each element and puts to the [destination] map each group key associated with a list of
corresponding elements.\n * \n * @return The [destination] map.\n * \n * @sample
samples.collections.Collections.Transformations.groupBy\n
*/\n\npublic inline fun <K, M : MutableMap<in K,
MutableList<Char>>>> CharArray.groupByTo(destination: M, keySelector: (Char) -> K): M {\n  for (element in
this) {\n    val key = keySelector(element)\n    val list = destination.getOrPut(key) { ArrayList<Char>() }\n
list.add(element)\n  }\n  return destination\n}\n\n/**\n * Groups values returned by the [valueTransform] function
applied to each element of the original array\n * by the key returned by the given [keySelector] function applied to
the element\n * and puts to the [destination] map each group key associated with a list of corresponding values.\n *
\n * @return The [destination] map.\n * \n * @sample
samples.collections.Collections.Transformations.groupByKeysAndValues\n
*/\n\npublic inline fun <T, K, V, M :
MutableMap<in K, MutableList<V>>>> Array<out T>.groupByTo(destination: M, keySelector: (T) -> K,
valueTransform: (T) -> V): M {\n  for (element in this) {\n    val key = keySelector(element)\n    val list =
destination.getOrPut(key) { ArrayList<V>() }\n    list.add(valueTransform(element))\n  }\n  return
destination\n}\n\n/**\n * Groups values returned by the [valueTransform] function applied to each element of the
original array\n * by the key returned by the given [keySelector] function applied to the element\n * and puts to the
[destination] map each group key associated with a list of corresponding values.\n * \n * @return The [destination]
map.\n * \n * @sample samples.collections.Collections.Transformations.groupByKeysAndValues\n
*/\n\npublic inline fun <K, V, M : MutableMap<in K, MutableList<V>>>> ByteArray.groupByTo(destination: M, keySelector:
(Byte) -> K, valueTransform: (Byte) -> V): M {\n  for (element in this) {\n    val key = keySelector(element)\n
val list = destination.getOrPut(key) { ArrayList<V>() }\n    list.add(valueTransform(element))\n  }\n  return
destination\n}\n\n/**\n * Groups values returned by the [valueTransform] function applied to each element of the

```

```

original array\n * by the key returned by the given [keySelector] function applied to the element\n * and puts to the
[destination] map each group key associated with a list of corresponding values.\n * \n * @return The [destination]
map.\n * \n * @sample samples.collections.Collections.Transformations.groupByKeyAndValues\n *^\npublic
inline fun <K, V, M : MutableMap<in K, MutableList<V>>> ShortArray.groupByTo(destination: M, keySelector:
(Short) -> K, valueTransform: (Short) -> V): M {\n for (element in this) {\n val key = keySelector(element)\n
val list = destination.getOrPut(key) { ArrayList<V>() }\n list.add(valueTransform(element))\n }\n return
destination}\n}\n\n/**\n * Groups values returned by the [valueTransform] function applied to each element of the
original array\n * by the key returned by the given [keySelector] function applied to the element\n * and puts to the
[destination] map each group key associated with a list of corresponding values.\n * \n * @return The [destination]
map.\n * \n * @sample samples.collections.Collections.Transformations.groupByKeyAndValues\n *^\npublic
inline fun <K, V, M : MutableMap<in K, MutableList<V>>> IntArray.groupByTo(destination: M, keySelector:
(Int) -> K, valueTransform: (Int) -> V): M {\n for (element in this) {\n val key = keySelector(element)\n
val list = destination.getOrPut(key) { ArrayList<V>() }\n list.add(valueTransform(element))\n }\n return
destination}\n}\n\n/**\n * Groups values returned by the [valueTransform] function applied to each element of the
original array\n * by the key returned by the given [keySelector] function applied to the element\n * and puts to the
[destination] map each group key associated with a list of corresponding values.\n * \n * @return The [destination]
map.\n * \n * @sample samples.collections.Collections.Transformations.groupByKeyAndValues\n *^\npublic
inline fun <K, V, M : MutableMap<in K, MutableList<V>>> LongArray.groupByTo(destination: M, keySelector:
(Long) -> K, valueTransform: (Long) -> V): M {\n for (element in this) {\n val key = keySelector(element)\n
val list = destination.getOrPut(key) { ArrayList<V>() }\n list.add(valueTransform(element))\n }\n return
destination}\n}\n\n/**\n * Groups values returned by the [valueTransform] function applied to each element of the
original array\n * by the key returned by the given [keySelector] function applied to the element\n * and puts to the
[destination] map each group key associated with a list of corresponding values.\n * \n * @return The [destination]
map.\n * \n * @sample samples.collections.Collections.Transformations.groupByKeyAndValues\n *^\npublic
inline fun <K, V, M : MutableMap<in K, MutableList<V>>> FloatArray.groupByTo(destination: M, keySelector:
(Float) -> K, valueTransform: (Float) -> V): M {\n for (element in this) {\n val key = keySelector(element)\n
val list = destination.getOrPut(key) { ArrayList<V>() }\n list.add(valueTransform(element))\n }\n return
destination}\n}\n\n/**\n * Groups values returned by the [valueTransform] function applied to each element of the
original array\n * by the key returned by the given [keySelector] function applied to the element\n * and puts to the
[destination] map each group key associated with a list of corresponding values.\n * \n * @return The [destination]
map.\n * \n * @sample samples.collections.Collections.Transformations.groupByKeyAndValues\n *^\npublic
inline fun <K, V, M : MutableMap<in K, MutableList<V>>> DoubleArray.groupByTo(destination: M, keySelector:
(Double) -> K, valueTransform: (Double) -> V): M {\n for (element in this) {\n val key =
keySelector(element)\n val list = destination.getOrPut(key) { ArrayList<V>() }\n
list.add(valueTransform(element))\n }\n return destination}\n}\n\n/**\n * Groups values returned by the
[valueTransform] function applied to each element of the original array\n * by the key returned by the given
[keySelector] function applied to the element\n * and puts to the [destination] map each group key associated with a
list of corresponding values.\n * \n * @return The [destination] map.\n * \n * @sample
samples.collections.Collections.Transformations.groupByKeyAndValues\n *^\npublic inline fun <K, V, M :
MutableMap<in K, MutableList<V>>> BooleanArray.groupByTo(destination: M, keySelector: (Boolean) -> K,
valueTransform: (Boolean) -> V): M {\n for (element in this) {\n val key = keySelector(element)\n val list
= destination.getOrPut(key) { ArrayList<V>() }\n list.add(valueTransform(element))\n }\n return
destination}\n}\n\n/**\n * Groups values returned by the [valueTransform] function applied to each element of the
original array\n * by the key returned by the given [keySelector] function applied to the element\n * and puts to the
[destination] map each group key associated with a list of corresponding values.\n * \n * @return The [destination]
map.\n * \n * @sample samples.collections.Collections.Transformations.groupByKeyAndValues\n *^\npublic
inline fun <K, V, M : MutableMap<in K, MutableList<V>>> CharArray.groupByTo(destination: M, keySelector:
(Char) -> K, valueTransform: (Char) -> V): M {\n for (element in this) {\n val key = keySelector(element)\n

```

```

    val list = destination.getOrPut(key) { ArrayList<V>() } list.add(valueTransform(element)) }
return destination }

/** Creates a [Grouping] source from an array to be used later with one of group-and-fold
operations using the specified [keySelector] function to extract a key from each element.
 */
@sample
samples.collections.Grouping.groupingByEachCount { }
@SinceKotlin("1.1")
public inline fun <T, K>
Array<out T>.groupingBy(crossinline keySelector: (T) -> K): Grouping<T, K> {
return object : Grouping<T, K> {
override fun sourceIterator(): Iterator<T> = this@groupingBy.iterator()
override fun
keyOf(element: T): K = keySelector(element) } }

/** Returns a list containing the results of applying
the given [transform] function to each element in the original array.
 */
@sample
samples.collections.Collections.Transformations.map { }
public inline fun <T, R> Array<out T>.map(transform:
(T) -> R): List<R> {
return mapTo(ArrayList<R>(size), transform) }

/** Returns a list containing the
results of applying the given [transform] function to each element in the original array.
 */
@sample
samples.collections.Collections.Transformations.map { }
public inline fun <R> ByteArray.map(transform: (Byte)
-> R): List<R> {
return mapTo(ArrayList<R>(size), transform) }

/** Returns a list containing the
results of applying the given [transform] function to each element in the original array.
 */
@sample
samples.collections.Collections.Transformations.map { }
public inline fun <R> ShortArray.map(transform:
(Short) -> R): List<R> {
return mapTo(ArrayList<R>(size), transform) }

/** Returns a list containing
the results of applying the given [transform] function to each element in the original array.
 */
@sample
samples.collections.Collections.Transformations.map { }
public inline fun <R> IntArray.map(transform: (Int) ->
R): List<R> {
return mapTo(ArrayList<R>(size), transform) }

/** Returns a list containing the results
of applying the given [transform] function to each element in the original array.
 */
@sample
samples.collections.Collections.Transformations.map { }
public inline fun <R> LongArray.map(transform:
(Long) -> R): List<R> {
return mapTo(ArrayList<R>(size), transform) }

/** Returns a list containing
the results of applying the given [transform] function to each element in the original array.
 */
@sample
samples.collections.Collections.Transformations.map { }
public inline fun <R> FloatArray.map(transform: (Float)
-> R): List<R> {
return mapTo(ArrayList<R>(size), transform) }

/** Returns a list containing the
results of applying the given [transform] function to each element in the original array.
 */
@sample
samples.collections.Collections.Transformations.map { }
public inline fun <R> DoubleArray.map(transform:
(Double) -> R): List<R> {
return mapTo(ArrayList<R>(size), transform) }

/** Returns a list containing
the results of applying the given [transform] function to each element in the original array.
 */
@sample
samples.collections.Collections.Transformations.map { }
public inline fun <R> BooleanArray.map(transform:
(Boolean) -> R): List<R> {
return mapTo(ArrayList<R>(size), transform) }

/** Returns a list
containing the results of applying the given [transform] function to each element in the original array.
 */
@sample
samples.collections.Collections.Transformations.map { }
public inline fun <R>
CharArray.map(transform: (Char) -> R): List<R> {
return mapTo(ArrayList<R>(size), transform) }

/** Returns a list containing the results of applying the given [transform] function
to each element and its index in the original array.
 */
@param [transform] function that takes the index of an element and the element itself
and returns the result of the transform applied to the element.
 */
public inline fun <T, R> Array<out
T>.mapIndexed(transform: (index: Int, T) -> R): List<R> {
return mapIndexedTo(ArrayList<R>(size),
transform) }

/** Returns a list containing the results of applying the given [transform] function
to each element and its index in the original array.
 */
@param [transform] function that takes the index of an element and
the element itself
and returns the result of the transform applied to the element.
 */
public inline fun <R>
ByteArray.mapIndexed(transform: (index: Int, Byte) -> R): List<R> {
return
mapIndexedTo(ArrayList<R>(size), transform) }

/** Returns a list containing the results of applying the
given [transform] function to each element and its index in the original array.
 */
@param [transform] function
that takes the index of an element and the element itself
and returns the result of the transform applied to the
element.
 */
public inline fun <R> ShortArray.mapIndexed(transform: (index: Int, Short) -> R): List<R> {
return
mapIndexedTo(ArrayList<R>(size), transform) }

/** Returns a list containing the results of applying
the given [transform] function to each element and its index in the original array.
 */
@param [transform]

```

function that takes the index of an element and the element itself and returns the result of the transform applied to the element.

```

public inline fun <R> IntArray.mapIndexed(transform: (index: Int, Int) -> R): List<R> {
    return mapIndexedTo(ArrayList<R>(size), transform)
}

```

Returns a list containing the results of applying the given [transform] function to each element and its index in the original array.

@param [transform] function that takes the index of an element and the element itself and returns the result of the transform applied to the element.

```

public inline fun <R> LongArray.mapIndexed(transform: (index: Int, Long) -> R): List<R> {
    return mapIndexedTo(ArrayList<R>(size), transform)
}

```

Returns a list containing the results of applying the given [transform] function to each element and its index in the original array.

@param [transform] function that takes the index of an element and the element itself and returns the result of the transform applied to the element.

```

public inline fun <R> FloatArray.mapIndexed(transform: (index: Int, Float) -> R): List<R> {
    return mapIndexedTo(ArrayList<R>(size), transform)
}

```

Returns a list containing the results of applying the given [transform] function to each element and its index in the original array.

@param [transform] function that takes the index of an element and the element itself and returns the result of the transform applied to the element.

```

public inline fun <R> DoubleArray.mapIndexed(transform: (index: Int, Double) -> R): List<R> {
    return mapIndexedTo(ArrayList<R>(size), transform)
}

```

Returns a list containing the results of applying the given [transform] function to each element and its index in the original array.

@param [transform] function that takes the index of an element and the element itself and returns the result of the transform applied to the element.

```

public inline fun <R> BooleanArray.mapIndexed(transform: (index: Int, Boolean) -> R): List<R> {
    return mapIndexedTo(ArrayList<R>(size), transform)
}

```

Returns a list containing the results of applying the given [transform] function to each element and its index in the original array.

@param [transform] function that takes the index of an element and the element itself and returns the result of the transform applied to the element.

```

public inline fun <R> CharArray.mapIndexed(transform: (index: Int, Char) -> R): List<R> {
    return mapIndexedTo(ArrayList<R>(size), transform)
}

```

Returns a list containing only the non-null results of applying the given [transform] function to each element and its index in the original array.

@param [transform] function that takes the index of an element and the element itself and returns the result of the transform applied to the element.

```

public inline fun <T, R : Any> Array<out T>.mapIndexedNotNull(transform: (index: Int, T) -> R?): List<R> {
    return mapIndexedNotNullTo(ArrayList<R>(), transform)
}

```

Applies the given [transform] function to each element and its index in the original array and appends only the non-null results to the given [destination].

@param [transform] function that takes the index of an element and the element itself and returns the result of the transform applied to the element.

```

public inline fun <T, R : Any, C : MutableCollection<in R>> Array<out T>.mapIndexedNotNullTo(destination: C, transform: (index: Int, T) -> R?): C {
    forEachIndexed { index, element -> transform(index, element)?.let { destination.add(it) } }
    return destination
}

```

Applies the given [transform] function to each element and its index in the original array and appends the results to the given [destination].

@param [transform] function that takes the index of an element and the element itself and returns the result of the transform applied to the element.

```

public inline fun <T, R, C : MutableCollection<in R>> Array<out T>.mapIndexedTo(destination: C, transform: (index: Int, T) -> R): C {
    var index = 0
    for (item in this)
        destination.add(transform(index++, item))
    return destination
}

```

Applies the given [transform] function to each element and its index in the original array and appends the results to the given [destination].

@param [transform] function that takes the index of an element and the element itself and returns the result of the transform applied to the element.

```

public inline fun <R, C : MutableCollection<in R>> ByteArray.mapIndexedTo(destination: C, transform: (index: Int, Byte) -> R): C {
    var index = 0
    for (item in this)
        destination.add(transform(index++, item))
    return destination
}

```

Applies the given [transform] function to each element and its index in the original array and appends the results to the given [destination].

@param [transform] function that takes the index of an element and the element itself and returns the result of the transform applied to the element.

```

public inline fun <R, C : MutableCollection<in R>> ShortArray.mapIndexedTo(destination: C, transform: (index: Int, Short) -> R): C {
    var index = 0
    for (item in

```

```

this)\n    destination.add(transform(index++, item))\n    return destination\n}\n\n/**\n * Applies the given
[transform] function to each element and its index in the original array\n * and appends the results to the given
[destination].\n * @param [transform] function that takes the index of an element and the element itself\n * and
returns the result of the transform applied to the element.\n */\npublic inline fun <R, C : MutableCollection<in R>>
IntArray.mapIndexedTo(destination: C, transform: (index: Int, Int) -> R): C {\n    var index = 0\n    for (item in
this)\n        destination.add(transform(index++, item))\n    return destination\n}\n\n/**\n * Applies the given
[transform] function to each element and its index in the original array\n * and appends the results to the given
[destination].\n * @param [transform] function that takes the index of an element and the element itself\n * and
returns the result of the transform applied to the element.\n */\npublic inline fun <R, C : MutableCollection<in R>>
LongArray.mapIndexedTo(destination: C, transform: (index: Int, Long) -> R): C {\n    var index = 0\n    for (item in
this)\n        destination.add(transform(index++, item))\n    return destination\n}\n\n/**\n * Applies the given
[transform] function to each element and its index in the original array\n * and appends the results to the given
[destination].\n * @param [transform] function that takes the index of an element and the element itself\n * and
returns the result of the transform applied to the element.\n */\npublic inline fun <R, C : MutableCollection<in R>>
FloatArray.mapIndexedTo(destination: C, transform: (index: Int, Float) -> R): C {\n    var index = 0\n    for (item in
this)\n        destination.add(transform(index++, item))\n    return destination\n}\n\n/**\n * Applies the given
[transform] function to each element and its index in the original array\n * and appends the results to the given
[destination].\n * @param [transform] function that takes the index of an element and the element itself\n * and
returns the result of the transform applied to the element.\n */\npublic inline fun <R, C : MutableCollection<in R>>
DoubleArray.mapIndexedTo(destination: C, transform: (index: Int, Double) -> R): C {\n    var index = 0\n    for
(item in this)\n        destination.add(transform(index++, item))\n    return destination\n}\n\n/**\n * Applies the given
[transform] function to each element and its index in the original array\n * and appends the results to the given
[destination].\n * @param [transform] function that takes the index of an element and the element itself\n * and
returns the result of the transform applied to the element.\n */\npublic inline fun <R, C : MutableCollection<in R>>
BooleanArray.mapIndexedTo(destination: C, transform: (index: Int, Boolean) -> R): C {\n    var index = 0\n    for
(item in this)\n        destination.add(transform(index++, item))\n    return destination\n}\n\n/**\n * Applies the given
[transform] function to each element and its index in the original array\n * and appends the results to the given
[destination].\n * @param [transform] function that takes the index of an element and the element itself\n * and
returns the result of the transform applied to the element.\n */\npublic inline fun <R, C : MutableCollection<in R>>
CharArray.mapIndexedTo(destination: C, transform: (index: Int, Char) -> R): C {\n    var index = 0\n    for (item in
this)\n        destination.add(transform(index++, item))\n    return destination\n}\n\n/**\n * Returns a list containing
only the non-null results of applying the given [transform] function\n * to each element in the original array.\n * \n *
@sample samples.collections.Collections.Transformations.mapNotNull\n */\npublic inline fun <T, R : Any>
Array<out T>.mapNotNull(transform: (T) -> R?): List<R> {\n    return mapNotNullTo(ArrayList<R>(),
transform)\n}\n\n/**\n * Applies the given [transform] function to each element in the original array\n * and
appends only the non-null results to the given [destination].\n */\npublic inline fun <T, R : Any, C :
MutableCollection<in R>> Array<out T>.mapNotNullTo(destination: C, transform: (T) -> R?): C {\n    forEach {
element -> transform(element)?.let { destination.add(it) } }\n    return destination\n}\n\n/**\n * Applies the given
[transform] function to each element of the original array\n * and appends the results to the given [destination].\n
*/\npublic inline fun <T, R, C : MutableCollection<in R>> Array<out T>.mapTo(destination: C, transform: (T) ->
R): C {\n    for (item in this)\n        destination.add(transform(item))\n    return destination\n}\n\n/**\n * Applies the
given [transform] function to each element of the original array\n * and appends the results to the given
[destination].\n */\npublic inline fun <R, C : MutableCollection<in R>> ByteArray.mapTo(destination: C,
transform: (Byte) -> R): C {\n    for (item in this)\n        destination.add(transform(item))\n    return
destination\n}\n\n/**\n * Applies the given [transform] function to each element of the original array\n * and
appends the results to the given [destination].\n */\npublic inline fun <R, C : MutableCollection<in R>>
ShortArray.mapTo(destination: C, transform: (Short) -> R): C {\n    for (item in this)\n
destination.add(transform(item))\n    return destination\n}\n\n/**\n * Applies the given [transform] function to each

```

element of the original array\n * and appends the results to the given [destination].\n */\npublic inline fun <R, C : MutableCollection<in R>> IntArray.mapTo(destination: C, transform: (Int) -> R): C {\n for (item in this)\n destination.add(transform(item))\n return destination\n}\n\n/**\n * Applies the given [transform] function to each element of the original array\n * and appends the results to the given [destination].\n */\npublic inline fun <R, C : MutableCollection<in R>> LongArray.mapTo(destination: C, transform: (Long) -> R): C {\n for (item in this)\n destination.add(transform(item))\n return destination\n}\n\n/**\n * Applies the given [transform] function to each element of the original array\n * and appends the results to the given [destination].\n */\npublic inline fun <R, C : MutableCollection<in R>> FloatArray.mapTo(destination: C, transform: (Float) -> R): C {\n for (item in this)\n destination.add(transform(item))\n return destination\n}\n\n/**\n * Applies the given [transform] function to each element of the original array\n * and appends the results to the given [destination].\n */\npublic inline fun <R, C : MutableCollection<in R>> DoubleArray.mapTo(destination: C, transform: (Double) -> R): C {\n for (item in this)\n destination.add(transform(item))\n return destination\n}\n\n/**\n * Applies the given [transform] function to each element of the original array\n * and appends the results to the given [destination].\n */\npublic inline fun <R, C : MutableCollection<in R>> BooleanArray.mapTo(destination: C, transform: (Boolean) -> R): C {\n for (item in this)\n destination.add(transform(item))\n return destination\n}\n\n/**\n * Applies the given [transform] function to each element of the original array\n * and appends the results to the given [destination].\n */\npublic inline fun <R, C : MutableCollection<in R>> CharArray.mapTo(destination: C, transform: (Char) -> R): C {\n for (item in this)\n destination.add(transform(item))\n return destination\n}\n\n/**\n * Returns a lazy [Iterable] that wraps each element of the original array\n * into an [IndexedValue] containing the index of that element and the element itself.\n */\npublic fun <T> Array<out T>.withIndex(): Iterable<IndexedValue<T>> {\n return IndexingIterable { iterator() }\n}\n\n/**\n * Returns a lazy [Iterable] that wraps each element of the original array\n * into an [IndexedValue] containing the index of that element and the element itself.\n */\npublic fun ByteArray.withIndex(): Iterable<IndexedValue<Byte>> {\n return IndexingIterable { iterator() }\n}\n\n/**\n * Returns a lazy [Iterable] that wraps each element of the original array\n * into an [IndexedValue] containing the index of that element and the element itself.\n */\npublic fun ShortArray.withIndex(): Iterable<IndexedValue<Short>> {\n return IndexingIterable { iterator() }\n}\n\n/**\n * Returns a lazy [Iterable] that wraps each element of the original array\n * into an [IndexedValue] containing the index of that element and the element itself.\n */\npublic fun IntArray.withIndex(): Iterable<IndexedValue<Int>> {\n return IndexingIterable { iterator() }\n}\n\n/**\n * Returns a lazy [Iterable] that wraps each element of the original array\n * into an [IndexedValue] containing the index of that element and the element itself.\n */\npublic fun LongArray.withIndex(): Iterable<IndexedValue<Long>> {\n return IndexingIterable { iterator() }\n}\n\n/**\n * Returns a lazy [Iterable] that wraps each element of the original array\n * into an [IndexedValue] containing the index of that element and the element itself.\n */\npublic fun FloatArray.withIndex(): Iterable<IndexedValue<Float>> {\n return IndexingIterable { iterator() }\n}\n\n/**\n * Returns a lazy [Iterable] that wraps each element of the original array\n * into an [IndexedValue] containing the index of that element and the element itself.\n */\npublic fun DoubleArray.withIndex(): Iterable<IndexedValue<Double>> {\n return IndexingIterable { iterator() }\n}\n\n/**\n * Returns a lazy [Iterable] that wraps each element of the original array\n * into an [IndexedValue] containing the index of that element and the element itself.\n */\npublic fun BooleanArray.withIndex(): Iterable<IndexedValue<Boolean>> {\n return IndexingIterable { iterator() }\n}\n\n/**\n * Returns a lazy [Iterable] that wraps each element of the original array\n * into an [IndexedValue] containing the index of that element and the element itself.\n */\npublic fun CharArray.withIndex(): Iterable<IndexedValue<Char>> {\n return IndexingIterable { iterator() }\n}\n\n/**\n * Returns a list containing only distinct elements from the given array.\n * \n * Among equal elements of the given array, only the first one will be present in the resulting list.\n * \n * The elements in the resulting list are in the same order as they were in the source array.\n * \n * @sample samples.collections.Collections.Transformations.distinctAndDistinctBy\n */\npublic fun <T> Array<out T>.distinct(): List<T> {\n return this.toMutableSet().toList()\n}\n\n/**\n * Returns a list containing only distinct elements from the given array.\n * \n * The elements in the resulting list are in the same order as they were in the source array.\n * \n * @sample

```

samples.collections.Collections.Transformations.distinctAndDistinctBy\n *^\\npublic fun ByteArray.distinct():
List<Byte> {\n    return this.toMutableSet().toList()\n}\n\n/**\n * Returns a list containing only distinct elements
from the given array.\n * \n * The elements in the resulting list are in the same order as they were in the source
array.\n * \n * @sample samples.collections.Collections.Transformations.distinctAndDistinctBy\n *^\\npublic fun
ShortArray.distinct(): List<Short> {\n    return this.toMutableSet().toList()\n}\n\n/**\n * Returns a list containing
only distinct elements from the given array.\n * \n * The elements in the resulting list are in the same order as they
were in the source array.\n * \n * @sample
samples.collections.Collections.Transformations.distinctAndDistinctBy\n *^\\npublic fun IntArray.distinct():
List<Int> {\n    return this.toMutableSet().toList()\n}\n\n/**\n * Returns a list containing only distinct elements from
the given array.\n * \n * The elements in the resulting list are in the same order as they were in the source array.\n *
\n * @sample samples.collections.Collections.Transformations.distinctAndDistinctBy\n *^\\npublic fun
LongArray.distinct(): List<Long> {\n    return this.toMutableSet().toList()\n}\n\n/**\n * Returns a list containing
only distinct elements from the given array.\n * \n * The elements in the resulting list are in the same order as they
were in the source array.\n * \n * @sample
samples.collections.Collections.Transformations.distinctAndDistinctBy\n *^\\npublic fun FloatArray.distinct():
List<Float> {\n    return this.toMutableSet().toList()\n}\n\n/**\n * Returns a list containing only distinct elements
from the given array.\n * \n * The elements in the resulting list are in the same order as they were in the source
array.\n * \n * @sample samples.collections.Collections.Transformations.distinctAndDistinctBy\n *^\\npublic fun
DoubleArray.distinct(): List<Double> {\n    return this.toMutableSet().toList()\n}\n\n/**\n * Returns a list
containing only distinct elements from the given array.\n * \n * The elements in the resulting list are in the same
order as they were in the source array.\n * \n * @sample
samples.collections.Collections.Transformations.distinctAndDistinctBy\n *^\\npublic fun BooleanArray.distinct():
List<Boolean> {\n    return this.toMutableSet().toList()\n}\n\n/**\n * Returns a list containing only distinct
elements from the given array.\n * \n * The elements in the resulting list are in the same order as they were in the
source array.\n * \n * @sample samples.collections.Collections.Transformations.distinctAndDistinctBy\n *^\\npublic
fun CharArray.distinct(): List<Char> {\n    return this.toMutableSet().toList()\n}\n\n/**\n * Returns a list containing
only elements from the given array\n * having distinct keys returned by the given [selector] function.\n * \n *
Among elements of the given array with equal keys, only the first one will be present in the resulting list.\n * The
elements in the resulting list are in the same order as they were in the source array.\n * \n * @sample
samples.collections.Collections.Transformations.distinctAndDistinctBy\n *^\\npublic inline fun <T, K> Array<out
T>.distinctBy(selector: (T) -> K): List<T> {\n    val set = HashSet<K>()\n    val list = ArrayList<T>()\n    for (e in
this) {\n        val key = selector(e)\n        if (set.add(key))\n            list.add(e)\n    }\n    return list\n}\n\n/**\n *
Returns a list containing only elements from the given array\n * having distinct keys returned by the given [selector]
function.\n * \n * The elements in the resulting list are in the same order as they were in the source array.\n * \n *
@sample samples.collections.Collections.Transformations.distinctAndDistinctBy\n *^\\npublic inline fun <K>
ByteArray.distinctBy(selector: (Byte) -> K): List<Byte> {\n    val set = HashSet<K>()\n    val list =
ArrayList<Byte>()\n    for (e in this) {\n        val key = selector(e)\n        if (set.add(key))\n            list.add(e)\n    }\n
return list\n}\n\n/**\n * Returns a list containing only elements from the given array\n * having distinct keys
returned by the given [selector] function.\n * \n * The elements in the resulting list are in the same order as they
were in the source array.\n * \n * @sample
samples.collections.Collections.Transformations.distinctAndDistinctBy\n *^\\npublic inline fun <K>
ShortArray.distinctBy(selector: (Short) -> K): List<Short> {\n    val set = HashSet<K>()\n    val list =
ArrayList<Short>()\n    for (e in this) {\n        val key = selector(e)\n        if (set.add(key))\n            list.add(e)\n    }\n
return list\n}\n\n/**\n * Returns a list containing only elements from the given array\n * having distinct keys
returned by the given [selector] function.\n * \n * The elements in the resulting list are in the same order as they
were in the source array.\n * \n * @sample
samples.collections.Collections.Transformations.distinctAndDistinctBy\n *^\\npublic inline fun <K>
IntArray.distinctBy(selector: (Int) -> K): List<Int> {\n    val set = HashSet<K>()\n    val list = ArrayList<Int>()\n

```



```

for (e in this) {\n    val key = selector(e)\n    if (set.add(key))\n        list.add(e)\n    }\n    return list\n}\n\n/**\n * Returns a list containing only elements from the given array\n * having distinct keys returned by the given\n [selector] function.\n * \n * The elements in the resulting list are in the same order as they were in the source\n array.\n * \n * @sample samples.collections.Collections.Transformations.distinctAndDistinctBy\n */\npublic inline\nfun <K> LongArray.distinctBy(selector: (Long) -> K): List<Long> {\n    val set = HashSet<K>()\n    val list =\n    ArrayList<Long>()\n    for (e in this) {\n        val key = selector(e)\n        if (set.add(key))\n            list.add(e)\n    }\n    return list\n}\n\n/**\n * Returns a list containing only elements from the given array\n * having distinct keys\n returned by the given [selector] function.\n * \n * The elements in the resulting list are in the same order as they\n were in the source array.\n * \n * @sample\n samples.collections.Collections.Transformations.distinctAndDistinctBy\n */\npublic inline fun <K>\nFloatArray.distinctBy(selector: (Float) -> K): List<Float> {\n    val set = HashSet<K>()\n    val list =\n    ArrayList<Float>()\n    for (e in this) {\n        val key = selector(e)\n        if (set.add(key))\n            list.add(e)\n    }\n    return list\n}\n\n/**\n * Returns a list containing only elements from the given array\n * having distinct keys\n returned by the given [selector] function.\n * \n * The elements in the resulting list are in the same order as they\n were in the source array.\n * \n * @sample\n samples.collections.Collections.Transformations.distinctAndDistinctBy\n */\npublic inline fun <K>\nDoubleArray.distinctBy(selector: (Double) -> K): List<Double> {\n    val set = HashSet<K>()\n    val list =\n    ArrayList<Double>()\n    for (e in this) {\n        val key = selector(e)\n        if (set.add(key))\n            list.add(e)\n    }\n    return list\n}\n\n/**\n * Returns a list containing only elements from the given array\n * having distinct keys\n returned by the given [selector] function.\n * \n * The elements in the resulting list are in the same order as they\n were in the source array.\n * \n * @sample\n samples.collections.Collections.Transformations.distinctAndDistinctBy\n */\npublic inline fun <K>\nBooleanArray.distinctBy(selector: (Boolean) -> K): List<Boolean> {\n    val set = HashSet<K>()\n    val list =\n    ArrayList<Boolean>()\n    for (e in this) {\n        val key = selector(e)\n        if (set.add(key))\n            list.add(e)\n    }\n    return list\n}\n\n/**\n * Returns a list containing only elements from the given array\n * having distinct keys\n returned by the given [selector] function.\n * \n * The elements in the resulting list are in the same order as they\n were in the source array.\n * \n * @sample\n samples.collections.Collections.Transformations.distinctAndDistinctBy\n */\npublic inline fun <K>\nCharArray.distinctBy(selector: (Char) -> K): List<Char> {\n    val set = HashSet<K>()\n    val list =\n    ArrayList<Char>()\n    for (e in this) {\n        val key = selector(e)\n        if (set.add(key))\n            list.add(e)\n    }\n    return list\n}\n\n/**\n * Returns a set containing all elements that are contained by both this array and the specified\n collection.\n * \n * The returned set preserves the element iteration order of the original array.\n * \n * To get a set\n containing all elements that are contained at least in one of these collections use [union].\n */\npublic infix fun <T>\nArray<out T>.intersect(other: Iterable<T>): Set<T> {\n    val set = this.toMutableSet()\n    set.retainAll(other)\n    return set\n}\n\n/**\n * Returns a set containing all elements that are contained by both this array and the specified\n collection.\n * \n * The returned set preserves the element iteration order of the original array.\n * \n * To get a set\n containing all elements that are contained at least in one of these collections use [union].\n */\npublic infix fun\nByteArray.intersect(other: Iterable<Byte>): Set<Byte> {\n    val set = this.toMutableSet()\n    set.retainAll(other)\n    return set\n}\n\n/**\n * Returns a set containing all elements that are contained by both this array and the specified\n collection.\n * \n * The returned set preserves the element iteration order of the original array.\n * \n * To get a set\n containing all elements that are contained at least in one of these collections use [union].\n */\npublic infix fun\nShortArray.intersect(other: Iterable<Short>): Set<Short> {\n    val set = this.toMutableSet()\n    set.retainAll(other)\n    return set\n}\n\n/**\n * Returns a set containing all elements that are contained by both this\n array and the specified collection.\n * \n * The returned set preserves the element iteration order of the original\n array.\n * \n * To get a set containing all elements that are contained at least in one of these collections use\n [union].\n */\npublic infix fun\nIntArray.intersect(other: Iterable<Int>): Set<Int> {\n    val set = this.toMutableSet()\n    set.retainAll(other)\n    return set\n}\n\n/**\n * Returns a set containing all elements that are contained by both this\n array and the specified collection.\n * \n * The returned set preserves the element iteration order of the original

```

array.

- * To get a set containing all elements that are contained at least in one of these collections use [union].

```

public infix fun LongArray.intersect(other: Iterable<Long>): Set<Long> {
    val set = this.toMutableSet()
    set.retainAll(other)
    return set
}

```

- * Returns a set containing all elements that are contained by both this array and the specified collection.
- * The returned set preserves the element iteration order of the original array.

- * To get a set containing all elements that are contained at least in one of these collections use [union].

```

public infix fun FloatArray.intersect(other: Iterable<Float>): Set<Float> {
    val set = this.toMutableSet()
    set.retainAll(other)
    return set
}

```

- * Returns a set containing all elements that are contained by both this array and the specified collection.
- * The returned set preserves the element iteration order of the original array.

- * To get a set containing all elements that are contained at least in one of these collections use [union].

```

public infix fun DoubleArray.intersect(other: Iterable<Double>): Set<Double> {
    val set = this.toMutableSet()
    set.retainAll(other)
    return set
}

```

- * Returns a set containing all elements that are contained by both this array and the specified collection.
- * The returned set preserves the element iteration order of the original array.

- * To get a set containing all elements that are contained at least in one of these collections use [union].

```

public infix fun BooleanArray.intersect(other: Iterable<Boolean>): Set<Boolean> {
    val set = this.toMutableSet()
    set.retainAll(other)
    return set
}

```

- * Returns a set containing all elements that are contained by both this array and the specified collection.
- * The returned set preserves the element iteration order of the original array.

- * To get a set containing all elements that are contained at least in one of these collections use [union].

```

public infix fun CharArray.intersect(other: Iterable<Char>): Set<Char> {
    val set = this.toMutableSet()
    set.retainAll(other)
    return set
}

```

- * Returns a set containing all elements that are contained by this array and not contained by the specified collection.
- * The returned set preserves the element iteration order of the original array.

```

public infix fun <T>Array<out T>.subtract(other: Iterable<T>): Set<T> {
    val set = this.toMutableSet()
    set.removeAll(other)
    return set
}

```

- * Returns a set containing all elements that are contained by this array and not contained by the specified collection.
- * The returned set preserves the element iteration order of the original array.

```

public infix fun ByteArray.subtract(other: Iterable<Byte>): Set<Byte> {
    val set = this.toMutableSet()
    set.removeAll(other)
    return set
}

```

- * Returns a set containing all elements that are contained by this array and not contained by the specified collection.
- * The returned set preserves the element iteration order of the original array.

```

public infix fun ShortArray.subtract(other: Iterable<Short>): Set<Short> {
    val set = this.toMutableSet()
    set.removeAll(other)
    return set
}

```

- * Returns a set containing all elements that are contained by this array and not contained by the specified collection.
- * The returned set preserves the element iteration order of the original array.

```

public infix fun IntArray.subtract(other: Iterable<Int>): Set<Int> {
    val set = this.toMutableSet()
    set.removeAll(other)
    return set
}

```

- * Returns a set containing all elements that are contained by this array and not contained by the specified collection.
- * The returned set preserves the element iteration order of the original array.

```

public infix fun LongArray.subtract(other: Iterable<Long>): Set<Long> {
    val set = this.toMutableSet()
    set.removeAll(other)
    return set
}

```

- * Returns a set containing all elements that are contained by this array and not contained by the specified collection.
- * The returned set preserves the element iteration order of the original array.

```

public infix fun FloatArray.subtract(other: Iterable<Float>): Set<Float> {
    val set = this.toMutableSet()
    set.removeAll(other)
    return set
}

```

- * Returns a set containing all elements that are contained by this array and not contained by the specified collection.
- * The returned set preserves the element iteration order of the original array.

```

public infix fun DoubleArray.subtract(other: Iterable<Double>): Set<Double> {
    val set = this.toMutableSet()
    set.removeAll(other)
    return set
}

```

- * Returns a set containing all elements that are contained by this array and not contained by the specified collection.
- * The returned set preserves the element iteration order of the original array.

```

public infix fun BooleanArray.subtract(other: Iterable<Boolean>): Set<Boolean> {
    val set = this.toMutableSet()
    set.removeAll(other)
    return set
}

```

- * Returns a set containing all elements that are contained by this array and not contained by the specified collection.
- * The returned set preserves the element iteration order of the original array.

```

public infix fun CharArray.subtract(other: Iterable<Char>): Set<Char> {
    val set = this.toMutableSet()
    set.removeAll(other)
}

```

return set\n}\n\n/**\n * Returns a new [MutableSet] containing all distinct elements from the given array.\n * \n * The returned set preserves the element iteration order of the original array.\n */\npublic fun <T> Array<out T>.toMutableSet(): MutableSet<T> {\n return toCollection(LinkedHashSet<T>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [MutableSet] containing all distinct elements from the given array.\n * \n * The returned set preserves the element iteration order of the original array.\n */\npublic fun ByteArray.toMutableSet(): MutableSet<Byte> {\n return toCollection(LinkedHashSet<Byte>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [MutableSet] containing all distinct elements from the given array.\n * \n * The returned set preserves the element iteration order of the original array.\n */\npublic fun ShortArray.toMutableSet(): MutableSet<Short> {\n return toCollection(LinkedHashSet<Short>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [MutableSet] containing all distinct elements from the given array.\n * \n * The returned set preserves the element iteration order of the original array.\n */\npublic fun IntArray.toMutableSet(): MutableSet<Int> {\n return toCollection(LinkedHashSet<Int>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [MutableSet] containing all distinct elements from the given array.\n * \n * The returned set preserves the element iteration order of the original array.\n */\npublic fun LongArray.toMutableSet(): MutableSet<Long> {\n return toCollection(LinkedHashSet<Long>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [MutableSet] containing all distinct elements from the given array.\n * \n * The returned set preserves the element iteration order of the original array.\n */\npublic fun FloatArray.toMutableSet(): MutableSet<Float> {\n return toCollection(LinkedHashSet<Float>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [MutableSet] containing all distinct elements from the given array.\n * \n * The returned set preserves the element iteration order of the original array.\n */\npublic fun DoubleArray.toMutableSet(): MutableSet<Double> {\n return toCollection(LinkedHashSet<Double>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [MutableSet] containing all distinct elements from the given array.\n * \n * The returned set preserves the element iteration order of the original array.\n */\npublic fun BooleanArray.toMutableSet(): MutableSet<Boolean> {\n return toCollection(LinkedHashSet<Boolean>(mapCapacity(size)))\n}\n\n/**\n * Returns a new [MutableSet] containing all distinct elements from the given array.\n * \n * The returned set preserves the element iteration order of the original array.\n */\npublic fun CharArray.toMutableSet(): MutableSet<Char> {\n return toCollection(LinkedHashSet<Char>(mapCapacity(size.coerceAtMost(128))))\n}\n\n/**\n * Returns a set containing all distinct elements from both collections.\n * \n * The returned set preserves the element iteration order of the original array.\n * Those elements of the [other] collection that are unique are iterated in the end\n * in the order of the [other] collection.\n * \n * To get a set containing all elements that are contained in both collections use [intersect].\n */\npublic infix fun <T> Array<out T>.union(other: Iterable<T>): Set<T> {\n val set = this.toMutableSet()\n set.addAll(other)\n return set\n}\n\n/**\n * Returns a set containing all distinct elements from both collections.\n * \n * The returned set preserves the element iteration order of the original array.\n * Those elements of the [other] collection that are unique are iterated in the end\n * in the order of the [other] collection.\n * \n * To get a set containing all elements that are contained in both collections use [intersect].\n */\npublic infix fun ByteArray.union(other: Iterable<Byte>): Set<Byte> {\n val set = this.toMutableSet()\n set.addAll(other)\n return set\n}\n\n/**\n * Returns a set containing all distinct elements from both collections.\n * \n * The returned set preserves the element iteration order of the original array.\n * Those elements of the [other] collection that are unique are iterated in the end\n * in the order of the [other] collection.\n * \n * To get a set containing all elements that are contained in both collections use [intersect].\n */\npublic infix fun ShortArray.union(other: Iterable<Short>): Set<Short> {\n val set = this.toMutableSet()\n set.addAll(other)\n return set\n}\n\n/**\n * Returns a set containing all distinct elements from both collections.\n * \n * The returned set preserves the element iteration order of the original array.\n * Those elements of the [other] collection that are unique are iterated in the end\n * in the order of the [other] collection.\n * \n * To get a set containing all elements that are contained in both collections use [intersect].\n */\npublic infix fun IntArray.union(other: Iterable<Int>): Set<Int> {\n val set = this.toMutableSet()\n set.addAll(other)\n return set\n}\n\n/**\n * Returns a set containing all distinct elements from both collections.\n * \n * The returned set preserves the element iteration order of the original array.\n * Those elements of the [other] collection that are unique are iterated in the end\n * in the order of the [other] collection.\n */

```

\n * To get a set containing all elements that are contained in both collections use [intersect].\n *\npublic infix fun
LongArray.union(other: Iterable<Long>): Set<Long> {\n    val set = this.toMutableSet()\n    set.addAll(other)\n
return set\n}\n\n/**\n * Returns a set containing all distinct elements from both collections.\n * \n * The returned set
preserves the element iteration order of the original array.\n * Those elements of the [other] collection that are
unique are iterated in the end\n * in the order of the [other] collection.\n * \n * To get a set containing all elements
that are contained in both collections use [intersect].\n *\npublic infix fun FloatArray.union(other: Iterable<Float>):
Set<Float> {\n    val set = this.toMutableSet()\n    set.addAll(other)\n    return set\n}\n\n/**\n * Returns a set
containing all distinct elements from both collections.\n * \n * The returned set preserves the element iteration order
of the original array.\n * Those elements of the [other] collection that are unique are iterated in the end\n * in the
order of the [other] collection.\n * \n * To get a set containing all elements that are contained in both collections use
[intersect].\n *\npublic infix fun DoubleArray.union(other: Iterable<Double>): Set<Double> {\n    val set =
this.toMutableSet()\n    set.addAll(other)\n    return set\n}\n\n/**\n * Returns a set containing all distinct elements
from both collections.\n * \n * The returned set preserves the element iteration order of the original array.\n * Those
elements of the [other] collection that are unique are iterated in the end\n * in the order of the [other] collection.\n *
\n * To get a set containing all elements that are contained in both collections use [intersect].\n *\npublic infix fun
BooleanArray.union(other: Iterable<Boolean>): Set<Boolean> {\n    val set = this.toMutableSet()\n    set.addAll(other)\n
return set\n}\n\n/**\n * Returns a set containing all distinct elements from both collections.\n * \n * The returned set
preserves the element iteration order of the original array.\n * Those elements of the [other] collection that are unique
are iterated in the end\n * in the order of the [other] collection.\n * \n * To get a set containing all elements that
are contained in both collections use [intersect].\n *\npublic infix fun CharArray.union(other: Iterable<Char>): Set<Char> {\n    val set = this.toMutableSet()\n    set.addAll(other)\n
return set\n}\n\n/**\n * Returns `true` if all elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.all\n *\npublic inline fun <T> Array<out T>.all(predicate: (T) ->
Boolean): Boolean {\n    for (element in this) if (!predicate(element)) return false\n    return true\n}\n\n/**\n *
Returns `true` if all elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.all\n *\npublic inline fun ByteArray.all(predicate: (Byte) -> Boolean):
Boolean {\n    for (element in this) if (!predicate(element)) return false\n    return true\n}\n\n/**\n * Returns `true`
if all elements match the given [predicate].\n * \n * @sample samples.collections.Collections.Aggregates.all\n
*\npublic inline fun ShortArray.all(predicate: (Short) -> Boolean): Boolean {\n    for (element in this) if
(!predicate(element)) return false\n    return true\n}\n\n/**\n * Returns `true` if all elements match the given
[predicate].\n * \n * @sample samples.collections.Collections.Aggregates.all\n *\npublic inline fun
IntArray.all(predicate: (Int) -> Boolean): Boolean {\n    for (element in this) if (!predicate(element)) return false\n
return true\n}\n\n/**\n * Returns `true` if all elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.all\n *\npublic inline fun LongArray.all(predicate: (Long) -> Boolean):
Boolean {\n    for (element in this) if (!predicate(element)) return false\n    return true\n}\n\n/**\n * Returns `true`
if all elements match the given [predicate].\n * \n * @sample samples.collections.Collections.Aggregates.all\n
*\npublic inline fun FloatArray.all(predicate: (Float) -> Boolean): Boolean {\n    for (element in this) if
(!predicate(element)) return false\n    return true\n}\n\n/**\n * Returns `true` if all elements match the given
[predicate].\n * \n * @sample samples.collections.Collections.Aggregates.all\n *\npublic inline fun
DoubleArray.all(predicate: (Double) -> Boolean): Boolean {\n    for (element in this) if (!predicate(element)) return
false\n    return true\n}\n\n/**\n * Returns `true` if all elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.all\n *\npublic inline fun BooleanArray.all(predicate: (Boolean) ->
Boolean): Boolean {\n    for (element in this) if (!predicate(element)) return false\n    return true\n}\n\n/**\n *
Returns `true` if all elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.all\n *\npublic inline fun CharArray.all(predicate: (Char) -> Boolean):
Boolean {\n    for (element in this) if (!predicate(element)) return false\n    return true\n}\n\n/**\n * Returns `true`
if array has at least one element.\n * \n * @sample samples.collections.Collections.Aggregates.any\n *\npublic fun
<T> Array<out T>.any(): Boolean {\n    return !isEmpty()\n}\n\n/**\n * Returns `true` if array has at least one

```

```

element.\n * \n * @sample samples.collections.Collections.Aggregates.any\n */\npublic fun ByteArray.any():
Boolean {\n    return !isEmpty()\n}\n\n/**\n * Returns `true` if array has at least one element.\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic fun ShortArray.any(): Boolean {\n    return
isEmpty()\n}\n\n/**\n * Returns `true` if array has at least one element.\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic fun IntArray.any(): Boolean {\n    return
isEmpty()\n}\n\n/**\n * Returns `true` if array has at least one element.\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic fun LongArray.any(): Boolean {\n    return
isEmpty()\n}\n\n/**\n * Returns `true` if array has at least one element.\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic fun FloatArray.any(): Boolean {\n    return
isEmpty()\n}\n\n/**\n * Returns `true` if array has at least one element.\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic fun DoubleArray.any(): Boolean {\n    return
isEmpty()\n}\n\n/**\n * Returns `true` if array has at least one element.\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic fun BooleanArray.any(): Boolean {\n    return
isEmpty()\n}\n\n/**\n * Returns `true` if array has at least one element.\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic fun CharArray.any(): Boolean {\n    return
isEmpty()\n}\n\n/**\n * Returns `true` if at least one element matches the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic inline fun <T> Array<out
T>.any(predicate: (T) -> Boolean): Boolean {\n    for (element in this) if (predicate(element)) return true\n    return
false\n}\n\n/**\n * Returns `true` if at least one element matches the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic inline fun ByteArray.any(predicate:
(Byte) -> Boolean): Boolean {\n    for (element in this) if (predicate(element)) return true\n    return
false\n}\n\n/**\n * Returns `true` if at least one element matches the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic inline fun ShortArray.any(predicate:
(Short) -> Boolean): Boolean {\n    for (element in this) if (predicate(element)) return true\n    return
false\n}\n\n/**\n * Returns `true` if at least one element matches the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic inline fun IntArray.any(predicate: (Int) -
> Boolean): Boolean {\n    for (element in this) if (predicate(element)) return true\n    return false\n}\n\n/**\n *
Returns `true` if at least one element matches the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic inline fun LongArray.any(predicate:
(Long) -> Boolean): Boolean {\n    for (element in this) if (predicate(element)) return true\n    return
false\n}\n\n/**\n * Returns `true` if at least one element matches the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic inline fun FloatArray.any(predicate:
(Float) -> Boolean): Boolean {\n    for (element in this) if (predicate(element)) return true\n    return
false\n}\n\n/**\n * Returns `true` if at least one element matches the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic inline fun DoubleArray.any(predicate:
(Double) -> Boolean): Boolean {\n    for (element in this) if (predicate(element)) return true\n    return
false\n}\n\n/**\n * Returns `true` if at least one element matches the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic inline fun BooleanArray.any(predicate:
(Boolean) -> Boolean): Boolean {\n    for (element in this) if (predicate(element)) return true\n    return
false\n}\n\n/**\n * Returns `true` if at least one element matches the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic inline fun CharArray.any(predicate:
(Char) -> Boolean): Boolean {\n    for (element in this) if (predicate(element)) return true\n    return
false\n}\n\n/**\n * Returns the number of elements in this array.\n * \n */\n@kotlin.internal.InlineOnly\npublic inline
fun <T> Array<out T>.count(): Int {\n    return size\n}\n\n/**\n * Returns the number of elements in this array.\n *
\n */\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.count(): Int {\n    return size\n}\n\n/**\n * Returns the
number of elements in this array.\n * \n */\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.count(): Int {\n
return size\n}\n\n/**\n * Returns the number of elements in this array.\n * \n */\n@kotlin.internal.InlineOnly\npublic
inline fun IntArray.count(): Int {\n    return size\n}\n\n/**\n * Returns the number of elements in this array.\n

```

```

*  

@kotlin.internal.InlineOnly  

public inline fun LongArray.count(): Int {  

    return size  

}  

* Returns the number of elements in this array.  

@kotlin.internal.InlineOnly  

public inline fun FloatArray.count(): Int {  

    return size  

}  

* Returns the number of elements in this array.  

@kotlin.internal.InlineOnly  

public inline fun DoubleArray.count(): Int {  

    return size  

}  

* Returns the number of elements in this array.  

@kotlin.internal.InlineOnly  

public inline fun BooleanArray.count(): Int {  

    return size  

}  

* Returns the number of elements in this array.  

@kotlin.internal.InlineOnly  

public inline fun CharArray.count(): Int {  

    return size  

}  

* Returns the number of elements matching the given [predicate].  

public inline fun  

<T> Array<out T>.count(predicate: (T) -> Boolean): Int {  

    var count = 0  

    for (element in this) if  

    (predicate(element)) ++count  

    return count  

}  

* Returns the number of elements matching the given [predicate].  

public inline fun ByteArray.count(predicate: (Byte) -> Boolean): Int {  

    var count = 0  

    for (element in this) if (predicate(element)) ++count  

    return count  

}  

* Returns the number of elements matching the given [predicate].  

public inline fun ShortArray.count(predicate: (Short) -> Boolean): Int {  

    var count = 0  

    for (element in this) if (predicate(element)) ++count  

    return count  

}  

* Returns the number of elements matching the given [predicate].  

public inline fun IntArray.count(predicate: (Int) -> Boolean): Int {  

    var count = 0  

    for (element in this) if (predicate(element)) ++count  

    return count  

}  

* Returns the number of elements matching the given [predicate].  

public inline fun LongArray.count(predicate: (Long) -> Boolean): Int {  

    var count = 0  

    for (element in this) if (predicate(element)) ++count  

    return count  

}  

* Returns the number of elements matching the given [predicate].  

public inline fun FloatArray.count(predicate: (Float) -> Boolean): Int {  

    var count = 0  

    for (element in this) if (predicate(element)) ++count  

    return count  

}  

* Returns the number of elements matching the given [predicate].  

public inline fun DoubleArray.count(predicate: (Double) -> Boolean): Int {  

    var count = 0  

    for (element in this) if (predicate(element)) ++count  

    return count  

}  

* Returns the number of elements matching the given [predicate].  

public inline fun BooleanArray.count(predicate: (Boolean) -> Boolean): Int {  

    var count = 0  

    for (element in this) if (predicate(element)) ++count  

    return count  

}  

* Returns the number of elements matching the given [predicate].  

public inline fun CharArray.count(predicate: (Char) -> Boolean): Int {  

    var count = 0  

    for (element in this) if (predicate(element)) ++count  

    return count  

}  

* Accumulates value starting with [initial] value and applying [operation] from left to right  

* to current accumulator value and each element.  

* Returns the specified [initial] value if the array is empty.  

@param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.  

public inline fun <T, R> Array<out T>.fold(initial: R, operation: (acc: R, T) -> R): R {  

    var accumulator = initial  

    for (element in this) accumulator = operation(accumulator, element)  

    return accumulator  

}  

* Accumulates value starting with [initial] value and applying [operation] from left to right  

* to current accumulator value and each element.  

* Returns the specified [initial] value if the array is empty.  

@param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.  

public inline fun <R> ByteArray.fold(initial: R, operation: (acc: R, Byte) -> R): R {  

    var accumulator = initial  

    for (element in this) accumulator = operation(accumulator, element)  

    return accumulator  

}  

* Accumulates value starting with [initial] value and applying [operation] from left to right  

* to current accumulator value and each element.  

* Returns the specified [initial] value if the array is empty.  

@param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.  

public inline fun <R> ShortArray.fold(initial: R, operation: (acc: R, Short) -> R): R {  

    var accumulator = initial  

    for (element in this) accumulator = operation(accumulator, element)  

    return accumulator  

}  

* Accumulates value starting with [initial] value and applying [operation] from left to right  

* to current accumulator value and each element.  

* Returns the specified [initial] value if the array is empty.  

@param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.  

public inline fun <R> IntArray.fold(initial: R, operation: (acc: R, Int) -> R): R {  

    var accumulator = initial  

    for (element in this) accumulator = operation(accumulator, element)  

    return accumulator  

}  

* Accumulates value starting with [initial] value and applying [operation] from left to right  

* to current accumulator value and each element.  


```

```

\n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes
current accumulator value and an element, and calculates the next accumulator value.\n */\npublic inline fun <R>
LongArray.fold(initial: R, operation: (acc: R, Long) -> R): R {\n    var accumulator = initial\n    for (element in this)
accumulator = operation(accumulator, element)\n    return accumulator\n}\n\n/**\n * Accumulates value starting
with [initial] value and applying [operation] from left to right\n * to current accumulator value and each element.\n *
\n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes
current accumulator value and an element, and calculates the next accumulator value.\n */\npublic inline fun <R>
FloatArray.fold(initial: R, operation: (acc: R, Float) -> R): R {\n    var accumulator = initial\n    for (element in this)
accumulator = operation(accumulator, element)\n    return accumulator\n}\n\n/**\n * Accumulates value starting
with [initial] value and applying [operation] from left to right\n * to current accumulator value and each element.\n *
\n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes
current accumulator value and an element, and calculates the next accumulator value.\n */\npublic inline fun <R>
DoubleArray.fold(initial: R, operation: (acc: R, Double) -> R): R {\n    var accumulator = initial\n    for (element in
this) accumulator = operation(accumulator, element)\n    return accumulator\n}\n\n/**\n * Accumulates value
starting with [initial] value and applying [operation] from left to right\n * to current accumulator value and each
element.\n * \n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that
takes current accumulator value and an element, and calculates the next accumulator value.\n */\npublic inline fun
<R> BooleanArray.fold(initial: R, operation: (acc: R, Boolean) -> R): R {\n    var accumulator = initial\n    for
(element in this) accumulator = operation(accumulator, element)\n    return accumulator\n}\n\n/**\n * Accumulates
value starting with [initial] value and applying [operation] from left to right\n * to current accumulator value and
each element.\n * \n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation]
function that takes current accumulator value and an element, and calculates the next accumulator value.\n
*/\npublic inline fun <R> CharArray.fold(initial: R, operation: (acc: R, Char) -> R): R {\n    var accumulator =
initial\n    for (element in this) accumulator = operation(accumulator, element)\n    return accumulator\n}\n\n/**\n *
Accumulates value starting with [initial] value and applying [operation] from left to right\n * to current accumulator
value and each element with its index in the original array.\n * \n * Returns the specified [initial] value if the array
is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and
the element itself, and calculates the next accumulator value.\n */\npublic inline fun <T, R> Array<out
T>.foldIndexed(initial: R, operation: (index: Int, acc: R, T) -> R): R {\n    var index = 0\n    var accumulator =
initial\n    for (element in this) accumulator = operation(index++, accumulator, element)\n    return
accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from left to
right\n * to current accumulator value and each element with its index in the original array.\n * \n * Returns the
specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes the index of an
element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n
*/\npublic inline fun <R> ByteArray.foldIndexed(initial: R, operation: (index: Int, acc: R, Byte) -> R): R {\n    var
index = 0\n    var accumulator = initial\n    for (element in this) accumulator = operation(index++, accumulator,
element)\n    return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying
[operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n
\n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes the
index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator
value.\n */\npublic inline fun <R> ShortArray.foldIndexed(initial: R, operation: (index: Int, acc: R, Short) -> R): R
{\n    var index = 0\n    var accumulator = initial\n    for (element in this) accumulator = operation(index++,
accumulator, element)\n    return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and
applying [operation] from left to right\n * to current accumulator value and each element with its index in the
original array.\n * \n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation]
function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the
next accumulator value.\n */\npublic inline fun <R> IntArray.foldIndexed(initial: R, operation: (index: Int, acc: R,
Int) -> R): R {\n    var index = 0\n    var accumulator = initial\n    for (element in this) accumulator =

```

```

operation(index++, accumulator, element)\n  return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * \n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n */\npublic inline fun <R> LongArray.foldIndexed(initial: R, operation: (index: Int, acc: R, Long) -> R): R {\n  var index = 0\n  var accumulator = initial\n  for (element in this) accumulator = operation(index++, accumulator, element)\n  return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * \n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n */\npublic inline fun <R> FloatArray.foldIndexed(initial: R, operation: (index: Int, acc: R, Float) -> R): R {\n  var index = 0\n  var accumulator = initial\n  for (element in this) accumulator = operation(index++, accumulator, element)\n  return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * \n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n */\npublic inline fun <R> DoubleArray.foldIndexed(initial: R, operation: (index: Int, acc: R, Double) -> R): R {\n  var index = 0\n  var accumulator = initial\n  for (element in this) accumulator = operation(index++, accumulator, element)\n  return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * \n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n */\npublic inline fun <R> BooleanArray.foldIndexed(initial: R, operation: (index: Int, acc: R, Boolean) -> R): R {\n  var index = 0\n  var accumulator = initial\n  for (element in this) accumulator = operation(index++, accumulator, element)\n  return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * \n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n */\npublic inline fun <R> CharArray.foldIndexed(initial: R, operation: (index: Int, acc: R, Char) -> R): R {\n  var index = 0\n  var accumulator = initial\n  for (element in this) accumulator = operation(index++, accumulator, element)\n  return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from right to left\n * to each element and current accumulator value.\n * \n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.\n */\npublic inline fun <T, R> Array<out T>.foldRight(initial: R, operation: (T, acc: R) -> R): R {\n  var index = lastIndex\n  var accumulator = initial\n  while (index >= 0) {\n    accumulator = operation(get(index--), accumulator)\n  }\n  return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from right to left\n * to each element and current accumulator value.\n * \n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.\n */\npublic inline fun <R> ByteArray.foldRight(initial: R, operation: (Byte, acc: R) -> R): R {\n  var index = lastIndex\n  var accumulator = initial\n  while (index >= 0) {\n    accumulator = operation(get(index--), accumulator)\n  }\n  return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from right to left\n * to each element and current accumulator value.\n * \n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.\n */\npublic inline fun <R> ShortArray.foldRight(initial: R, operation: (Short, acc: R) -> R): R {\n  var index = lastIndex\n  var accumulator = initial\n  while (index >= 0) {\n    accumulator = operation(get(index--), accumulator)\n  }\n  return

```



```

accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from right to
left\n * to each element and current accumulator value.\n * \n * Returns the specified [initial] value if the array is
empty.\n * \n * @param [operation] function that takes an element and current accumulator value, and calculates the
next accumulator value.\n */\npublic inline fun <R> IntArray.foldRight(initial: R, operation: (Int, acc: R) -> R): R
{\n    var index = lastIndex\n    var accumulator = initial\n    while (index >= 0) {\n        accumulator =
operation(get(index--), accumulator)\n    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with
[initial] value and applying [operation] from right to left\n * to each element and current accumulator value.\n * \n *
Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes an element
and current accumulator value, and calculates the next accumulator value.\n */\npublic inline fun <R>
LongArray.foldRight(initial: R, operation: (Long, acc: R) -> R): R {\n    var index = lastIndex\n    var accumulator =
initial\n    while (index >= 0) {\n        accumulator = operation(get(index--), accumulator)\n    }\n    return
accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from right to
left\n * to each element and current accumulator value.\n * \n * Returns the specified [initial] value if the array is
empty.\n * \n * @param [operation] function that takes an element and current accumulator value, and calculates the
next accumulator value.\n */\npublic inline fun <R> FloatArray.foldRight(initial: R, operation: (Float, acc: R) -> R):
R {\n    var index = lastIndex\n    var accumulator = initial\n    while (index >= 0) {\n        accumulator =
operation(get(index--), accumulator)\n    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with
[initial] value and applying [operation] from right to left\n * to each element and current accumulator value.\n * \n *
Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes an element
and current accumulator value, and calculates the next accumulator value.\n */\npublic inline fun <R>
DoubleArray.foldRight(initial: R, operation: (Double, acc: R) -> R): R {\n    var index = lastIndex\n    var
accumulator = initial\n    while (index >= 0) {\n        accumulator = operation(get(index--), accumulator)\n    }\n
return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from right
to left\n * to each element and current accumulator value.\n * \n * Returns the specified [initial] value if the array is
empty.\n * \n * @param [operation] function that takes an element and current accumulator value, and calculates the
next accumulator value.\n */\npublic inline fun <R> BooleanArray.foldRight(initial: R, operation: (Boolean, acc: R)
-> R): R {\n    var index = lastIndex\n    var accumulator = initial\n    while (index >= 0) {\n        accumulator =
operation(get(index--), accumulator)\n    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with
[initial] value and applying [operation] from right to left\n * to each element and current accumulator value.\n * \n *
Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes an element
and current accumulator value, and calculates the next accumulator value.\n */\npublic inline fun <R>
CharArray.foldRight(initial: R, operation: (Char, acc: R) -> R): R {\n    var index = lastIndex\n    var accumulator =
initial\n    while (index >= 0) {\n        accumulator = operation(get(index--), accumulator)\n    }\n    return
accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from right to
left\n * to each element with its index in the original array and current accumulator value.\n * \n * Returns the
specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes the index of an
element, the element itself\n * and current accumulator value, and calculates the next accumulator value.\n */\npublic inline fun <T, R> Array<out T>.foldRightIndexed(initial: R, operation: (index: Int, T, acc: R) -> R): R
{\n    var index = lastIndex\n    var accumulator = initial\n    while (index >= 0) {\n        accumulator =
operation(index, get(index), accumulator)\n        --index\n    }\n    return accumulator\n}\n\n/**\n * Accumulates
value starting with [initial] value and applying [operation] from right to left\n * to each element with its index in the
original array and current accumulator value.\n * \n * Returns the specified [initial] value if the array is empty.\n *
\n * @param [operation] function that takes the index of an element, the element itself\n * and current accumulator
value, and calculates the next accumulator value.\n */\npublic inline fun <R> ByteArray.foldRightIndexed(initial: R,
operation: (index: Int, Byte, acc: R) -> R): R {\n    var index = lastIndex\n    var accumulator = initial\n    while
(index >= 0) {\n        accumulator = operation(index, get(index), accumulator)\n        --index\n    }\n    return
accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from right to
left\n * to each element with its index in the original array and current accumulator value.\n * \n * Returns the

```

```

specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes the index of an
element, the element itself\n * and current accumulator value, and calculates the next accumulator value.\n
*\npublic inline fun <R> ShortArray.foldRightIndexed(initial: R, operation: (index: Int, Short, acc: R) -> R): R {\n
var index = lastIndex\n var accumulator = initial\n while (index >= 0) {\n accumulator = operation(index,
get(index), accumulator)\n --index\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with
[initial] value and applying [operation] from right to left\n * to each element with its index in the original array and
current accumulator value.\n * \n * Returns the specified [initial] value if the array is empty.\n * \n * @param
[operation] function that takes the index of an element, the element itself\n * and current accumulator value, and
calculates the next accumulator value.\n *\npublic inline fun <R> IntArray.foldRightIndexed(initial: R, operation:
(index: Int, Int, acc: R) -> R): R {\n var index = lastIndex\n var accumulator = initial\n while (index >= 0) {\n
accumulator = operation(index, get(index), accumulator)\n --index\n }\n return accumulator\n}\n\n/**\n * Accumulates
value starting with [initial] value and applying [operation] from right to left\n * to each element with
its index in the original array and current accumulator value.\n * \n * Returns the specified [initial] value if the array
is empty.\n * \n * @param [operation] function that takes the index of an element, the element itself\n * and current
accumulator value, and calculates the next accumulator value.\n *\npublic inline fun <R>
LongArray.foldRightIndexed(initial: R, operation: (index: Int, Long, acc: R) -> R): R {\n var index = lastIndex\n
var accumulator = initial\n while (index >= 0) {\n accumulator = operation(index, get(index), accumulator)\n
--index\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying
[operation] from right to left\n * to each element with its index in the original array and current accumulator value.\n
* \n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes the
index of an element, the element itself\n * and current accumulator value, and calculates the next accumulator
value.\n *\npublic inline fun <R> FloatArray.foldRightIndexed(initial: R, operation: (index: Int, Float, acc: R) ->
R): R {\n var index = lastIndex\n var accumulator = initial\n while (index >= 0) {\n accumulator =
operation(index, get(index), accumulator)\n --index\n }\n return accumulator\n}\n\n/**\n * Accumulates
value starting with [initial] value and applying [operation] from right to left\n * to each element with its index in the
original array and current accumulator value.\n * \n * Returns the specified [initial] value if the array is empty.\n *
\n * @param [operation] function that takes the index of an element, the element itself\n * and current accumulator
value, and calculates the next accumulator value.\n *\npublic inline fun <R> DoubleArray.foldRightIndexed(initial:
R, operation: (index: Int, Double, acc: R) -> R): R {\n var index = lastIndex\n var accumulator = initial\n while
(index >= 0) {\n accumulator = operation(index, get(index), accumulator)\n --index\n }\n return
accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from right to
left\n * to each element with its index in the original array and current accumulator value.\n * \n * Returns the
specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes the index of an
element, the element itself\n * and current accumulator value, and calculates the next accumulator value.\n
*\npublic inline fun <R> BooleanArray.foldRightIndexed(initial: R, operation: (index: Int, Boolean, acc: R) -> R):
R {\n var index = lastIndex\n var accumulator = initial\n while (index >= 0) {\n accumulator =
operation(index, get(index), accumulator)\n --index\n }\n return accumulator\n}\n\n/**\n * Accumulates
value starting with [initial] value and applying [operation] from right to left\n * to each element with its index in the
original array and current accumulator value.\n * \n * Returns the specified [initial] value if the array is empty.\n *
\n * @param [operation] function that takes the index of an element, the element itself\n * and current accumulator
value, and calculates the next accumulator value.\n *\npublic inline fun <R> CharArray.foldRightIndexed(initial: R,
operation: (index: Int, Char, acc: R) -> R): R {\n var index = lastIndex\n var accumulator = initial\n while
(index >= 0) {\n accumulator = operation(index, get(index), accumulator)\n --index\n }\n return
accumulator\n}\n\n/**\n * Performs the given [action] on each element.\n *\npublic inline fun <T> Array<out
T>.forEach(action: (T) -> Unit): Unit {\n for (element in this) action(element)\n}\n\n/**\n * Performs the given
[action] on each element.\n *\npublic inline fun ByteArray.forEach(action: (Byte) -> Unit): Unit {\n for (element
in this) action(element)\n}\n\n/**\n * Performs the given [action] on each element.\n *\npublic inline fun
ShortArray.forEach(action: (Short) -> Unit): Unit {\n for (element in this) action(element)\n}\n\n/**\n * Performs

```

```

the given [action] on each element.\n */\npublic inline fun IntArray.forEach(action: (Int) -> Unit): Unit {\n  for
(element in this) action(element)\n}\n\n/**\n * Performs the given [action] on each element.\n */\npublic inline fun
LongArray.forEach(action: (Long) -> Unit): Unit {\n  for (element in this) action(element)\n}\n\n/**\n * Performs
the given [action] on each element.\n */\npublic inline fun FloatArray.forEach(action: (Float) -> Unit): Unit {\n
for (element in this) action(element)\n}\n\n/**\n * Performs the given [action] on each element.\n */\npublic inline
fun DoubleArray.forEach(action: (Double) -> Unit): Unit {\n  for (element in this) action(element)\n}\n\n/**\n *
Performs the given [action] on each element.\n */\npublic inline fun BooleanArray.forEach(action: (Boolean) ->
Unit): Unit {\n  for (element in this) action(element)\n}\n\n/**\n * Performs the given [action] on each element.\n
*/\npublic inline fun CharArray.forEach(action: (Char) -> Unit): Unit {\n  for (element in this)
action(element)\n}\n\n/**\n * Performs the given [action] on each element, providing sequential index with the
element.\n * @param [action] function that takes the index of an element and the element itself\n * and performs the
action on the element.\n */\npublic inline fun <T> Array<out T>.forEachIndexed(action: (index: Int, T) -> Unit):
Unit {\n  var index = 0\n  for (item in this) action(index++, item)\n}\n\n/**\n * Performs the given [action] on
each element, providing sequential index with the element.\n * @param [action] function that takes the index of an
element and the element itself\n * and performs the action on the element.\n */\npublic inline fun
ByteArray.forEachIndexed(action: (index: Int, Byte) -> Unit): Unit {\n  var index = 0\n  for (item in this)
action(index++, item)\n}\n\n/**\n * Performs the given [action] on each element, providing sequential index with
the element.\n * @param [action] function that takes the index of an element and the element itself\n * and performs
the action on the element.\n */\npublic inline fun ShortArray.forEachIndexed(action: (index: Int, Short) -> Unit):
Unit {\n  var index = 0\n  for (item in this) action(index++, item)\n}\n\n/**\n * Performs the given [action] on
each element, providing sequential index with the element.\n * @param [action] function that takes the index of an
element and the element itself\n * and performs the action on the element.\n */\npublic inline fun
IntArray.forEachIndexed(action: (index: Int, Int) -> Unit): Unit {\n  var index = 0\n  for (item in this)
action(index++, item)\n}\n\n/**\n * Performs the given [action] on each element, providing sequential index with
the element.\n * @param [action] function that takes the index of an element and the element itself\n * and performs
the action on the element.\n */\npublic inline fun LongArray.forEachIndexed(action: (index: Int, Long) -> Unit):
Unit {\n  var index = 0\n  for (item in this) action(index++, item)\n}\n\n/**\n * Performs the given [action] on
each element, providing sequential index with the element.\n * @param [action] function that takes the index of an
element and the element itself\n * and performs the action on the element.\n */\npublic inline fun
FloatArray.forEachIndexed(action: (index: Int, Float) -> Unit): Unit {\n  var index = 0\n  for (item in this)
action(index++, item)\n}\n\n/**\n * Performs the given [action] on each element, providing sequential index with
the element.\n * @param [action] function that takes the index of an element and the element itself\n * and performs
the action on the element.\n */\npublic inline fun DoubleArray.forEachIndexed(action: (index: Int, Double) -> Unit):
Unit {\n  var index = 0\n  for (item in this) action(index++, item)\n}\n\n/**\n * Performs the given [action] on
each element, providing sequential index with the element.\n * @param [action] function that takes the index of an
element and the element itself\n * and performs the action on the element.\n */\npublic inline fun
BooleanArray.forEachIndexed(action: (index: Int, Boolean) -> Unit): Unit {\n  var index = 0\n  for (item in this)
action(index++, item)\n}\n\n/**\n * Performs the given [action] on each element, providing sequential index with
the element.\n * @param [action] function that takes the index of an element and the element itself\n * and performs
the action on the element.\n */\npublic inline fun CharArray.forEachIndexed(action: (index: Int, Char) -> Unit): Unit
{\n  var index = 0\n  for (item in this) action(index++, item)\n}\n\n@Deprecated("Use maxOrNull instead.",
ReplaceWith("this.maxOrNull()"))\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")\n@SinceKotlin("1.1")\npublic fun Array<out Double>.max(): Double? {\n  return
maxOrNull()\n}\n\n@Deprecated("Use maxOrNull instead.",
ReplaceWith("this.maxOrNull()"))\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")\n@SinceKotlin("1.1")\npublic fun Array<out Float>.max(): Float? {\n  return
maxOrNull()\n}\n\n@Deprecated("Use maxOrNull instead.",
ReplaceWith("this.maxOrNull()"))\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",

```

```

hiddenSince = `1.6`)npublic fun <T : Comparable<T>> Array<out T>.max(): T? {n  return
maxOrNull()\n}\n\n@Deprecated(`Use maxOrNull instead.`),
ReplaceWith(`this.maxOrNull()\`))n@DeprecatedSinceKotlin(warningSince = `1.4`, errorSince = `1.5`,
hiddenSince = `1.6`)npublic fun ByteArray.max(): Byte? {n  return maxOrNull()\n}\n\n@Deprecated(`Use
maxOrNull instead.`), ReplaceWith(`this.maxOrNull()\`))n@DeprecatedSinceKotlin(warningSince = `1.4`,
errorSince = `1.5`, hiddenSince = `1.6`)npublic fun ShortArray.max(): Short? {n  return
maxOrNull()\n}\n\n@Deprecated(`Use maxOrNull instead.`),
ReplaceWith(`this.maxOrNull()\`))n@DeprecatedSinceKotlin(warningSince = `1.4`, errorSince = `1.5`,
hiddenSince = `1.6`)npublic fun IntArray.max(): Int? {n  return maxOrNull()\n}\n\n@Deprecated(`Use
maxOrNull instead.`), ReplaceWith(`this.maxOrNull()\`))n@DeprecatedSinceKotlin(warningSince = `1.4`,
errorSince = `1.5`, hiddenSince = `1.6`)npublic fun LongArray.max(): Long? {n  return
maxOrNull()\n}\n\n@Deprecated(`Use maxOrNull instead.`),
ReplaceWith(`this.maxOrNull()\`))n@DeprecatedSinceKotlin(warningSince = `1.4`, errorSince = `1.5`,
hiddenSince = `1.6`)npublic fun FloatArray.max(): Float? {n  return maxOrNull()\n}\n\n@Deprecated(`Use
maxOrNull instead.`), ReplaceWith(`this.maxOrNull()\`))n@DeprecatedSinceKotlin(warningSince = `1.4`,
errorSince = `1.5`, hiddenSince = `1.6`)npublic fun DoubleArray.max(): Double? {n  return
maxOrNull()\n}\n\n@Deprecated(`Use maxOrNull instead.`),
ReplaceWith(`this.maxOrNull()\`))n@DeprecatedSinceKotlin(warningSince = `1.4`, errorSince = `1.5`,
hiddenSince = `1.6`)npublic fun CharArray.max(): Char? {n  return maxOrNull()\n}\n\n@Deprecated(`Use
maxByOrNull instead.`), ReplaceWith(`this.maxByOrNull(selector)\`))n@DeprecatedSinceKotlin(warningSince =
`1.4`, errorSince = `1.5`, hiddenSince = `1.6`)npublic inline fun <T, R : Comparable<R>> Array<out
T>.maxBy(selector: (T) -> R): T? {n  return maxByOrNull(selector)\n}\n\n@Deprecated(`Use maxByOrNull
instead.`), ReplaceWith(`this.maxByOrNull(selector)\`))n@DeprecatedSinceKotlin(warningSince = `1.4`,
errorSince = `1.5`, hiddenSince = `1.6`)npublic inline fun <R : Comparable<R>> ByteArray.maxBy(selector:
(Byte) -> R): Byte? {n  return maxByOrNull(selector)\n}\n\n@Deprecated(`Use maxByOrNull instead.`),
ReplaceWith(`this.maxByOrNull(selector)\`))n@DeprecatedSinceKotlin(warningSince = `1.4`, errorSince =
`1.5`, hiddenSince = `1.6`)npublic inline fun <R : Comparable<R>> ShortArray.maxBy(selector: (Short) -> R):
Short? {n  return maxByOrNull(selector)\n}\n\n@Deprecated(`Use maxByOrNull instead.`),
ReplaceWith(`this.maxByOrNull(selector)\`))n@DeprecatedSinceKotlin(warningSince = `1.4`, errorSince =
`1.5`, hiddenSince = `1.6`)npublic inline fun <R : Comparable<R>> IntArray.maxBy(selector: (Int) -> R): Int?
{n  return maxByOrNull(selector)\n}\n\n@Deprecated(`Use maxByOrNull instead.`),
ReplaceWith(`this.maxByOrNull(selector)\`))n@DeprecatedSinceKotlin(warningSince = `1.4`, errorSince =
`1.5`, hiddenSince = `1.6`)npublic inline fun <R : Comparable<R>> LongArray.maxBy(selector: (Long) -> R):
Long? {n  return maxByOrNull(selector)\n}\n\n@Deprecated(`Use maxByOrNull instead.`),
ReplaceWith(`this.maxByOrNull(selector)\`))n@DeprecatedSinceKotlin(warningSince = `1.4`, errorSince =
`1.5`, hiddenSince = `1.6`)npublic inline fun <R : Comparable<R>> FloatArray.maxBy(selector: (Float) -> R):
Float? {n  return maxByOrNull(selector)\n}\n\n@Deprecated(`Use maxByOrNull instead.`),
ReplaceWith(`this.maxByOrNull(selector)\`))n@DeprecatedSinceKotlin(warningSince = `1.4`, errorSince =
`1.5`, hiddenSince = `1.6`)npublic inline fun <R : Comparable<R>> DoubleArray.maxBy(selector: (Double) ->
R): Double? {n  return maxByOrNull(selector)\n}\n\n@Deprecated(`Use maxByOrNull instead.`),
ReplaceWith(`this.maxByOrNull(selector)\`))n@DeprecatedSinceKotlin(warningSince = `1.4`, errorSince =
`1.5`, hiddenSince = `1.6`)npublic inline fun <R : Comparable<R>> BooleanArray.maxBy(selector: (Boolean) -
> R): Boolean? {n  return maxByOrNull(selector)\n}\n\n@Deprecated(`Use maxByOrNull instead.`),
ReplaceWith(`this.maxByOrNull(selector)\`))n@DeprecatedSinceKotlin(warningSince = `1.4`, errorSince =
`1.5`, hiddenSince = `1.6`)npublic inline fun <R : Comparable<R>> CharArray.maxBy(selector: (Char) -> R):
Char? {n  return maxByOrNull(selector)\n}\n\n/**n * Returns the first element yielding the largest value of the
given function or `null` if there are no elements.n * \n * @sample
samples.collections.Collections.Aggregates.maxByOrNull\n */n@SinceKotlin(`1.4`)npublic inline fun <T, R :

```

```

Comparable<R>> Array<out T>.maxByOrNull(selector: (T) -> R): T? {\n  if (isEmpty()) return null\n  var
maxElem = this[0]\n  val lastIndex = this.lastIndex\n  if (lastIndex == 0) return maxElem\n  var maxValue =
selector(maxElem)\n  for (i in 1..lastIndex) {\n    val e = this[i]\n    val v = selector(e)\n    if (maxValue < v)
{\n      maxElem = e\n      maxValue = v\n    }\n  }\n  return maxElem\n}\n\n/**\n * Returns the first
element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.maxByOrNull\n */\n\n@SinceKotlin("1.4")\npublic inline fun <R :
Comparable<R>> ByteArray.maxByOrNull(selector: (Byte) -> R): Byte? {\n  if (isEmpty()) return null\n  var
maxElem = this[0]\n  val lastIndex = this.lastIndex\n  if (lastIndex == 0) return maxElem\n  var maxValue =
selector(maxElem)\n  for (i in 1..lastIndex) {\n    val e = this[i]\n    val v = selector(e)\n    if (maxValue < v)
{\n      maxElem = e\n      maxValue = v\n    }\n  }\n  return maxElem\n}\n\n/**\n * Returns the first
element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.maxByOrNull\n */\n\n@SinceKotlin("1.4")\npublic inline fun <R :
Comparable<R>> ShortArray.maxByOrNull(selector: (Short) -> R): Short? {\n  if (isEmpty()) return null\n  var
maxElem = this[0]\n  val lastIndex = this.lastIndex\n  if (lastIndex == 0) return maxElem\n  var maxValue =
selector(maxElem)\n  for (i in 1..lastIndex) {\n    val e = this[i]\n    val v = selector(e)\n    if (maxValue < v)
{\n      maxElem = e\n      maxValue = v\n    }\n  }\n  return maxElem\n}\n\n/**\n * Returns the first
element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.maxByOrNull\n */\n\n@SinceKotlin("1.4")\npublic inline fun <R :
Comparable<R>> IntArray.maxByOrNull(selector: (Int) -> R): Int? {\n  if (isEmpty()) return null\n  var maxElem
= this[0]\n  val lastIndex = this.lastIndex\n  if (lastIndex == 0) return maxElem\n  var maxValue =
selector(maxElem)\n  for (i in 1..lastIndex) {\n    val e = this[i]\n    val v = selector(e)\n    if (maxValue < v)
{\n      maxElem = e\n      maxValue = v\n    }\n  }\n  return maxElem\n}\n\n/**\n * Returns the first
element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.maxByOrNull\n */\n\n@SinceKotlin("1.4")\npublic inline fun <R :
Comparable<R>> LongArray.maxByOrNull(selector: (Long) -> R): Long? {\n  if (isEmpty()) return null\n  var
maxElem = this[0]\n  val lastIndex = this.lastIndex\n  if (lastIndex == 0) return maxElem\n  var maxValue =
selector(maxElem)\n  for (i in 1..lastIndex) {\n    val e = this[i]\n    val v = selector(e)\n    if (maxValue < v)
{\n      maxElem = e\n      maxValue = v\n    }\n  }\n  return maxElem\n}\n\n/**\n * Returns the first
element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.maxByOrNull\n */\n\n@SinceKotlin("1.4")\npublic inline fun <R :
Comparable<R>> FloatArray.maxByOrNull(selector: (Float) -> R): Float? {\n  if (isEmpty()) return null\n  var
maxElem = this[0]\n  val lastIndex = this.lastIndex\n  if (lastIndex == 0) return maxElem\n  var maxValue =
selector(maxElem)\n  for (i in 1..lastIndex) {\n    val e = this[i]\n    val v = selector(e)\n    if (maxValue < v)
{\n      maxElem = e\n      maxValue = v\n    }\n  }\n  return maxElem\n}\n\n/**\n * Returns the first
element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.maxByOrNull\n */\n\n@SinceKotlin("1.4")\npublic inline fun <R :
Comparable<R>> DoubleArray.maxByOrNull(selector: (Double) -> R): Double? {\n  if (isEmpty()) return null\n
var maxElem = this[0]\n  val lastIndex = this.lastIndex\n  if (lastIndex == 0) return maxElem\n  var maxValue =
selector(maxElem)\n  for (i in 1..lastIndex) {\n    val e = this[i]\n    val v = selector(e)\n    if (maxValue < v)
{\n      maxElem = e\n      maxValue = v\n    }\n  }\n  return maxElem\n}\n\n/**\n * Returns the first
element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.maxByOrNull\n */\n\n@SinceKotlin("1.4")\npublic inline fun <R :
Comparable<R>> BooleanArray.maxByOrNull(selector: (Boolean) -> R): Boolean? {\n  if (isEmpty()) return
null\n  var maxElem = this[0]\n  val lastIndex = this.lastIndex\n  if (lastIndex == 0) return maxElem\n  var
maxValue = selector(maxElem)\n  for (i in 1..lastIndex) {\n    val e = this[i]\n    val v = selector(e)\n    if
(maxValue < v) {\n      maxElem = e\n      maxValue = v\n    }\n  }\n  return maxElem\n}\n\n/**\n * Returns the first
element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.maxByOrNull\n */\n\n@SinceKotlin("1.4")\npublic inline fun

```

```

<R : Comparable<R>> CharArray.maxByOrNull(selector: (Char) -> R): Char? {
    if (isEmpty()) return null
    var maxElem = this[0]
    val lastIndex = this.lastIndex
    if (lastIndex == 0) return maxElem
    var maxValue = selector(maxElem)
    for (i in 1..lastIndex) {
        val e = this[i]
        val v = selector(e)
        if (maxValue < v) {
            maxElem = e
            maxValue = v
        }
    }
    return maxElem
}

Returns the largest value among all values produced by [selector] function applied to each element in the array.
If any of values produced by [selector] function is NaN, the returned result is NaN.
@throws NoSuchElementException if the array is empty.

@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun <T> Array<out T>.maxOf(selector: (T) -> Double): Double {
    if (isEmpty()) throw NoSuchElementException()
    var maxValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        maxValue = maxOf(maxValue, v)
    }
    return maxValue
}

Returns the largest value among all values produced by [selector] function applied to each element in the array.
If any of values produced by [selector] function is NaN, the returned result is NaN.
@throws NoSuchElementException if the array is empty.

@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun ByteArray.maxOf(selector: (Byte) -> Double): Double {
    if (isEmpty()) throw NoSuchElementException()
    var maxValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        maxValue = maxOf(maxValue, v)
    }
    return maxValue
}

Returns the largest value among all values produced by [selector] function applied to each element in the array.
If any of values produced by [selector] function is NaN, the returned result is NaN.
@throws NoSuchElementException if the array is empty.

@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun ShortArray.maxOf(selector: (Short) -> Double): Double {
    if (isEmpty()) throw NoSuchElementException()
    var maxValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        maxValue = maxOf(maxValue, v)
    }
    return maxValue
}

Returns the largest value among all values produced by [selector] function applied to each element in the array.
If any of values produced by [selector] function is NaN, the returned result is NaN.
@throws NoSuchElementException if the array is empty.

@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun IntArray.maxOf(selector: (Int) -> Double): Double {
    if (isEmpty()) throw NoSuchElementException()
    var maxValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        maxValue = maxOf(maxValue, v)
    }
    return maxValue
}

Returns the largest value among all values produced by [selector] function applied to each element in the array.
If any of values produced by [selector] function is NaN, the returned result is NaN.
@throws NoSuchElementException if the array is empty.

@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun LongArray.maxOf(selector: (Long) -> Double): Double {
    if (isEmpty()) throw NoSuchElementException()
    var maxValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        maxValue = maxOf(maxValue, v)
    }
    return maxValue
}

Returns the largest value among all values produced by [selector] function applied to each element in the array.
If any of values produced by [selector] function is NaN, the returned result is NaN.
@throws NoSuchElementException if the array is empty.

@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun FloatArray.maxOf(selector: (Float) -> Double): Double {
    if (isEmpty()) throw NoSuchElementException()
    var maxValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        maxValue = maxOf(maxValue, v)
    }
    return maxValue
}

Returns the largest value among all values produced by [selector] function applied to each element in the array.
If any of values produced by [selector] function is NaN, the returned result is

```

```

`NaN`.n * .n * @throws NoSuchElementException if the array is empty.n
*/n@SinceKotlin("1.4")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@kotlin.internal.InlineOnlynpublic inline fun DoubleArray.maxOf(selector: (Double) ->
Double): Double {n if (isEmpty()) throw NoSuchElementException()n var maxValue = selector(this[0])n for
(i in 1..lastIndex) {n val v = selector(this[i])n maxValue = maxOf(maxValue, v)n }n return
maxValue\n}\n/n/**n * Returns the largest value among all values produced by [selector] function\n * applied to
each element in the array.n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.n * \n * @throws NoSuchElementException if the array is empty.n
*/n@SinceKotlin("1.4")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@kotlin.internal.InlineOnlynpublic inline fun BooleanArray.maxOf(selector: (Boolean) ->
Double): Double {n if (isEmpty()) throw NoSuchElementException()n var maxValue = selector(this[0])n for
(i in 1..lastIndex) {n val v = selector(this[i])n maxValue = maxOf(maxValue, v)n }n return
maxValue\n}\n/n/**n * Returns the largest value among all values produced by [selector] function\n * applied to
each element in the array.n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.n * \n * @throws NoSuchElementException if the array is empty.n
*/n@SinceKotlin("1.4")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@kotlin.internal.InlineOnlynpublic inline fun CharArray.maxOf(selector: (Char) ->
Double): Double {n if (isEmpty()) throw NoSuchElementException()n var maxValue = selector(this[0])n for
(i in 1..lastIndex) {n val v = selector(this[i])n maxValue = maxOf(maxValue, v)n }n return
maxValue\n}\n/n/**n * Returns the largest value among all values produced by [selector] function\n * applied to
each element in the array.n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.n * \n * @throws NoSuchElementException if the array is empty.n
*/n@SinceKotlin("1.4")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@kotlin.internal.InlineOnlynpublic inline fun <T> Array<out T>.maxOf(selector: (T) ->
Float): Float {n if (isEmpty()) throw NoSuchElementException()n var maxValue = selector(this[0])n for (i
in 1..lastIndex) {n val v = selector(this[i])n maxValue = maxOf(maxValue, v)n }n return
maxValue\n}\n/n/**n * Returns the largest value among all values produced by [selector] function\n * applied to
each element in the array.n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.n * \n * @throws NoSuchElementException if the array is empty.n
*/n@SinceKotlin("1.4")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@kotlin.internal.InlineOnlynpublic inline fun ByteArray.maxOf(selector: (Byte) -> Float):
Float {n if (isEmpty()) throw NoSuchElementException()n var maxValue = selector(this[0])n for (i in
1..lastIndex) {n val v = selector(this[i])n maxValue = maxOf(maxValue, v)n }n return
maxValue\n}\n/n/**n * Returns the largest value among all values produced by [selector] function\n * applied to
each element in the array.n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.n * \n * @throws NoSuchElementException if the array is empty.n
*/n@SinceKotlin("1.4")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@kotlin.internal.InlineOnlynpublic inline fun ShortArray.maxOf(selector: (Short) ->
Float): Float {n if (isEmpty()) throw NoSuchElementException()n var maxValue = selector(this[0])n for (i
in 1..lastIndex) {n val v = selector(this[i])n maxValue = maxOf(maxValue, v)n }n return
maxValue\n}\n/n/**n * Returns the largest value among all values produced by [selector] function\n * applied to
each element in the array.n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.n * \n * @throws NoSuchElementException if the array is empty.n
*/n@SinceKotlin("1.4")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@kotlin.internal.InlineOnlynpublic inline fun IntArray.maxOf(selector: (Int) -> Float):
Float {n if (isEmpty()) throw NoSuchElementException()n var maxValue = selector(this[0])n for (i in
1..lastIndex) {n val v = selector(this[i])n maxValue = maxOf(maxValue, v)n }n return
maxValue\n}\n/n/**n * Returns the largest value among all values produced by [selector] function\n * applied to

```

```

each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.maxOf(selector: (Long) ->
Float): Float {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue = selector(this[0])\n for (i
in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return
maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.maxOf(selector: (Float) ->
Float): Float {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue = selector(this[0])\n for (i
in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return
maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.maxOf(selector: (Double) ->
Float): Float {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue = selector(this[0])\n for (i
in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return
maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.maxOf(selector: (Boolean) ->
Float): Float {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue = selector(this[0])\n for (i
in 1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return
maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.maxOf(selector: (Char) -> Float):
Float {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue = selector(this[0])\n for (i in
1..lastIndex) {\n val v = selector(this[i])\n maxValue = maxOf(maxValue, v)\n }\n return
maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Comparable<R>> Array<out
T>.maxOf(selector: (T) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n
maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced
by [selector] function\n * applied to each element in the array.\n * \n * @throws NoSuchElementException if the
array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
ByteArray.maxOf(selector: (Byte) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n
maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values

```



```

produced by [selector] function\n * applied to each element in the array.\n * \n * @throws
NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
ShortArray.maxOf(selector: (Short) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n
maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values
produced by [selector] function\n * applied to each element in the array.\n * \n * @throws
NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
IntArray.maxOf(selector: (Int) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var maxValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n
maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values produced
by [selector] function\n * applied to each element in the array.\n * \n * @throws NoSuchElementException if the
array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
LongArray.maxOf(selector: (Long) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n
maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values
produced by [selector] function\n * applied to each element in the array.\n * \n * @throws
NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
FloatArray.maxOf(selector: (Float) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n
maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values
produced by [selector] function\n * applied to each element in the array.\n * \n * @throws
NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
DoubleArray.maxOf(selector: (Double) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n
maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values
produced by [selector] function\n * applied to each element in the array.\n * \n * @throws
NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
BooleanArray.maxOf(selector: (Boolean) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n
maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n * Returns the largest value among all values
produced by [selector] function\n * applied to each element in the array.\n * \n * @throws
NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
CharArray.maxOf(selector: (Char) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (maxValue < v) {\n

```

```

    maxValue = v\n    }\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value among all values
produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If
any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n
*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.maxOfOrNull(selector:
(T) -> Double): Double? {\n    if (isEmpty()) return null\n    var maxValue = selector(this[0])\n    for (i in
1..lastIndex) {\n        val v = selector(this[i])\n        maxValue = maxOf(maxValue, v)\n    }\n    return
maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to
each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function
is `NaN`, the returned result is `NaN`.\n
*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.maxOfOrNull(selector: (Byte) ->
Double): Double? {\n    if (isEmpty()) return null\n    var maxValue = selector(this[0])\n    for (i in 1..lastIndex) {\n
        val v = selector(this[i])\n        maxValue = maxOf(maxValue, v)\n    }\n    return maxValue\n}\n\n/**\n
 * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array or `null`
if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n
*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.maxOfOrNull(selector: (Short) -
> Double): Double? {\n    if (isEmpty()) return null\n    var maxValue = selector(this[0])\n    for (i in 1..lastIndex)
{\n        val v = selector(this[i])\n        maxValue = maxOf(maxValue, v)\n    }\n    return maxValue\n}\n\n/**\n
 * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array
or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned
result is `NaN`.\n
*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.maxOfOrNull(selector: (Int) ->
Double): Double? {\n    if (isEmpty()) return null\n    var maxValue = selector(this[0])\n    for (i in 1..lastIndex) {\n
        val v = selector(this[i])\n        maxValue = maxOf(maxValue, v)\n    }\n    return maxValue\n}\n\n/**\n
 * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array or `null`
if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n
*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.maxOfOrNull(selector: (Long) -
> Double): Double? {\n    if (isEmpty()) return null\n    var maxValue = selector(this[0])\n    for (i in 1..lastIndex)
{\n        val v = selector(this[i])\n        maxValue = maxOf(maxValue, v)\n    }\n    return maxValue\n}\n\n/**\n
 * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array
or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned
result is `NaN`.\n
*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.maxOfOrNull(selector: (Float) -
> Double): Double? {\n    if (isEmpty()) return null\n    var maxValue = selector(this[0])\n    for (i in 1..lastIndex)
{\n        val v = selector(this[i])\n        maxValue = maxOf(maxValue, v)\n    }\n    return maxValue\n}\n\n/**\n
 * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array
or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned
result is `NaN`.\n
*/\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.maxOfOrNull(selector:
(Double) -> Double): Double? {\n    if (isEmpty()) return null\n    var maxValue = selector(this[0])\n    for (i in

```

```

1..lastIndex) {\n    val v = selector(this[i])\n    maxValue = maxOf(maxValue, v)\n } \n return
maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to
each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function
is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.maxOfOrNull(selector:
(Boolean) -> Double): Double? {\n    if (isEmpty()) return null\n    var maxValue = selector(this[0])\n    for (i in
1..lastIndex) {\n        val v = selector(this[i])\n        maxValue = maxOf(maxValue, v)\n    }\n    return
maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to
each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function
is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.maxOfOrNull(selector: (Char) ->
Double): Double? {\n    if (isEmpty()) return null\n    var maxValue = selector(this[0])\n    for (i in 1..lastIndex) {\n
        val v = selector(this[i])\n        maxValue = maxOf(maxValue, v)\n    }\n    return maxValue\n}\n\n/**\n * Returns
the largest value among all values produced by [selector] function\n * applied to each element in the array or `null`
if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.maxOfOrNull(selector:
(T) -> Float): Float? {\n    if (isEmpty()) return null\n    var maxValue = selector(this[0])\n    for (i in 1..lastIndex)
{\n        val v = selector(this[i])\n        maxValue = maxOf(maxValue, v)\n    }\n    return maxValue\n}\n\n/**\n *
Returns the largest value among all values produced by [selector] function\n * applied to each element in the array
or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned
result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.maxOfOrNull(selector: (Byte) ->
Float): Float? {\n    if (isEmpty()) return null\n    var maxValue = selector(this[0])\n    for (i in 1..lastIndex) {\n
        val v = selector(this[i])\n        maxValue = maxOf(maxValue, v)\n    }\n    return maxValue\n}\n\n/**\n * Returns
the largest value among all values produced by [selector] function\n * applied to each element in the array or `null`
if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.maxOfOrNull(selector: (Short) -
> Float): Float? {\n    if (isEmpty()) return null\n    var maxValue = selector(this[0])\n    for (i in 1..lastIndex) {\n
        val v = selector(this[i])\n        maxValue = maxOf(maxValue, v)\n    }\n    return maxValue\n}\n\n/**\n * Returns
the largest value among all values produced by [selector] function\n * applied to each element in the array or `null`
if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.maxOfOrNull(selector: (Int) ->
Float): Float? {\n    if (isEmpty()) return null\n    var maxValue = selector(this[0])\n    for (i in 1..lastIndex) {\n
        val v = selector(this[i])\n        maxValue = maxOf(maxValue, v)\n    }\n    return maxValue\n}\n\n/**\n *
Returns the largest value among all values produced by [selector] function\n * applied to each element in the array
or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned
result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.maxOfOrNull(selector: (Long) -

```

```

> Float): Float? {\n  if (isEmpty()) return null\n  var maxValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    maxValue = maxOf(maxValue, v)\n  }\n  return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.maxOfOrNull(selector: (Float) -> Float): Float? {\n  if (isEmpty()) return null\n  var maxValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    maxValue = maxOf(maxValue, v)\n  }\n  return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.maxOfOrNull(selector: (Double) -> Float): Float? {\n  if (isEmpty()) return null\n  var maxValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    maxValue = maxOf(maxValue, v)\n  }\n  return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.maxOfOrNull(selector: (Boolean) -> Float): Float? {\n  if (isEmpty()) return null\n  var maxValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    maxValue = maxOf(maxValue, v)\n  }\n  return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.maxOfOrNull(selector: (Char) -> Float): Float? {\n  if (isEmpty()) return null\n  var maxValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    maxValue = maxOf(maxValue, v)\n  }\n  return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Comparable<R>> Array<out T>.maxOfOrNull(selector: (T) -> R): R? {\n  if (isEmpty()) return null\n  var maxValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    if (maxValue < v) {\n      maxValue = v\n    }\n  }\n  return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>> ByteArray.maxOfOrNull(selector: (Byte) -> R): R? {\n  if (isEmpty()) return null\n  var maxValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    if (maxValue < v) {\n      maxValue = v\n    }\n  }\n  return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>> ShortArray.maxOfOrNull(selector: (Short) -> R): R? {\n  if (isEmpty()) return null\n  var maxValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    if (maxValue < v) {\n

```

```

maxValue = v\n    }\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value among all values produced
by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
IntArray.maxOfOrNull(selector: (Int) -> R): R? {\n    if (isEmpty()) return null\n    var maxValue =
selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if (maxValue < v) {\n
maxValue = v\n    }\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value among all values produced
by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
LongArray.maxOfOrNull(selector: (Long) -> R): R? {\n    if (isEmpty()) return null\n    var maxValue =
selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if (maxValue < v) {\n
maxValue = v\n    }\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value among all values produced
by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
FloatArray.maxOfOrNull(selector: (Float) -> R): R? {\n    if (isEmpty()) return null\n    var maxValue =
selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if (maxValue < v) {\n
maxValue = v\n    }\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value among all values produced
by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
DoubleArray.maxOfOrNull(selector: (Double) -> R): R? {\n    if (isEmpty()) return null\n    var maxValue =
selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if (maxValue < v) {\n
maxValue = v\n    }\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value among all values produced
by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
BooleanArray.maxOfOrNull(selector: (Boolean) -> R): R? {\n    if (isEmpty()) return null\n    var maxValue =
selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if (maxValue < v) {\n
maxValue = v\n    }\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value among all values produced
by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
CharArray.maxOfOrNull(selector: (Char) -> R): R? {\n    if (isEmpty()) return null\n    var maxValue =
selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if (maxValue < v) {\n
maxValue = v\n    }\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value according to the provided
[comparator]\n * among all values produced by [selector] function applied to each element in the array.\n * \n *
@throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R> Array<out
T>.maxOfWith(comparator: Comparator<in R>, selector: (T) -> R): R {\n    if (isEmpty()) throw
NoSuchElementException()\n    var maxValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v =
selector(this[i])\n        if (comparator.compare(maxValue, v) < 0) {\n            maxValue = v\n        }\n    }\n    return
maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all values
produced by [selector] function applied to each element in the array.\n * \n * @throws NoSuchElementException if
the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution

```

```

ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> ByteArray.maxOfWith(comparator:
Comparator<in R>, selector: (Byte) -> R): R {\n  if (isEmpty()) throw NoSuchElementException()\n  var
maxValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    if
(comparator.compare(maxValue, v) < 0) {\n      maxValue = v\n    }\n  }\n  return maxValue\n}\n\n/**\n *
Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]
function applied to each element in the array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n *\n *\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> ShortArray.maxOfWith(comparator:
Comparator<in R>, selector: (Short) -> R): R {\n  if (isEmpty()) throw NoSuchElementException()\n  var
maxValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    if
(comparator.compare(maxValue, v) < 0) {\n      maxValue = v\n    }\n  }\n  return maxValue\n}\n\n/**\n *
Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]
function applied to each element in the array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n *\n *\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> IntArray.maxOfWith(comparator:
Comparator<in R>, selector: (Int) -> R): R {\n  if (isEmpty()) throw NoSuchElementException()\n  var maxValue
= selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    if
(comparator.compare(maxValue, v) < 0) {\n      maxValue = v\n    }\n  }\n  return maxValue\n}\n\n/**\n *
Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]
function applied to each element in the array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n *\n *\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> LongArray.maxOfWith(comparator:
Comparator<in R>, selector: (Long) -> R): R {\n  if (isEmpty()) throw NoSuchElementException()\n  var
maxValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    if
(comparator.compare(maxValue, v) < 0) {\n      maxValue = v\n    }\n  }\n  return maxValue\n}\n\n/**\n *
Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]
function applied to each element in the array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n *\n *\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> FloatArray.maxOfWith(comparator:
Comparator<in R>, selector: (Float) -> R): R {\n  if (isEmpty()) throw NoSuchElementException()\n  var
maxValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    if
(comparator.compare(maxValue, v) < 0) {\n      maxValue = v\n    }\n  }\n  return maxValue\n}\n\n/**\n *
Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]
function applied to each element in the array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n *\n *\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> DoubleArray.maxOfWith(comparator:
Comparator<in R>, selector: (Double) -> R): R {\n  if (isEmpty()) throw NoSuchElementException()\n  var
maxValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    if
(comparator.compare(maxValue, v) < 0) {\n      maxValue = v\n    }\n  }\n  return maxValue\n}\n\n/**\n *
Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]
function applied to each element in the array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n *\n *\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> BooleanArray.maxOfWith(comparator:
Comparator<in R>, selector: (Boolean) -> R): R {\n  if (isEmpty()) throw NoSuchElementException()\n  var
maxValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    if
(comparator.compare(maxValue, v) < 0) {\n      maxValue = v\n    }\n  }\n  return maxValue\n}\n\n/**\n *
Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]
function applied to each element in the array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n *\n *\n */

```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> CharArray.maxOfWith(comparator:\nComparator<in R>, selector: (Char) -> R): R {\n    if (isEmpty()) throw NoSuchElementException()\n    var\n    maxValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if\n        (comparator.compare(maxValue, v) < 0) {\n            maxValue = v\n        }\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]\n * function applied to each element in the array or `null` if there are no elements.\n */
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R> Array<out\nT>.maxOfWithOrNull(comparator: Comparator<in R>, selector: (T) -> R): R? {\n    if (isEmpty()) return null\n    var\n    maxValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if\n        (comparator.compare(maxValue, v) < 0) {\n            maxValue = v\n        }\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]\n * function applied to each element in the array or `null` if there are no elements.\n */
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nByteArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (Byte) -> R): R? {\n    if (isEmpty()) return\n    null\n    var\n    maxValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if\n        (comparator.compare(maxValue, v) < 0) {\n            maxValue = v\n        }\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]\n * function applied to each element in the array or `null` if there are no elements.\n */
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nShortArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (Short) -> R): R? {\n    if (isEmpty())\n    return null\n    var\n    maxValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if\n        (comparator.compare(maxValue, v) < 0) {\n            maxValue = v\n        }\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]\n * function applied to each element in the array or `null` if there are no elements.\n */
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nIntArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (Int) -> R): R? {\n    if (isEmpty()) return\n    null\n    var\n    maxValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if\n        (comparator.compare(maxValue, v) < 0) {\n            maxValue = v\n        }\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]\n * function applied to each element in the array or `null` if there are no elements.\n */
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nLongArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (Long) -> R): R? {\n    if (isEmpty())\n    return null\n    var\n    maxValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if\n        (comparator.compare(maxValue, v) < 0) {\n            maxValue = v\n        }\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]\n * function applied to each element in the array or `null` if there are no elements.\n */
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nFloatArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (Float) -> R): R? {\n    if (isEmpty())\n    return null\n    var\n    maxValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if\n        (comparator.compare(maxValue, v) < 0) {\n            maxValue = v\n        }\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]\n */
```

```

function applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R>
DoubleArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (Double) -> R): R? {\n if (isEmpty())
return null\n var max = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(comparator.compare(max, v) < 0) {\n max = v\n }\n }\n return max\n}\n\n/**\n *
Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]
function applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R>
BooleanArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (Boolean) -> R): R? {\n if (isEmpty())
return null\n var max = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(comparator.compare(max, v) < 0) {\n max = v\n }\n }\n return max\n}\n\n/**\n *
Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]
function applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R>
CharArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (Char) -> R): R? {\n if (isEmpty()) return
null\n var max = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(comparator.compare(max, v) < 0) {\n max = v\n }\n }\n return max\n}\n\n/**\n *
Returns the largest element or `null` if there are no elements.\n * \n * If any of elements is `NaN` returns `NaN`.\n
*\n@SinceKotlin("1.4")\npublic fun Array<out Double>.maxOrNull(): Double? {\n if (isEmpty()) return null\n
var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n max = maxOf(max, e)\n }\n return
max\n}\n\n/**\n * Returns the largest element or `null` if there are no elements.\n * \n * If any of elements is `NaN`
returns `NaN`.\n
*\n@SinceKotlin("1.4")\npublic fun Array<out Float>.maxOrNull(): Float? {\n if (isEmpty())
return null\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n max = maxOf(max, e)\n }\n
return max\n}\n\n/**\n * Returns the largest element or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\npublic fun <T : Comparable<T>> Array<out T>.maxOrNull(): T? {\n if (isEmpty())
return null\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (max < e) max = e\n }\n
return max\n}\n\n/**\n * Returns the largest element or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\npublic fun ByteArray.maxOrNull(): Byte? {\n if (isEmpty()) return null\n var max =
this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (max < e) max = e\n }\n return max\n}\n\n/**\n *
Returns the largest element or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\npublic fun ShortArray.maxOrNull(): Short? {\n if (isEmpty()) return null\n var max =
this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (max < e) max = e\n }\n return max\n}\n\n/**\n *
Returns the largest element or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\npublic fun IntArray.maxOrNull(): Int? {\n if (isEmpty())
return null\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (max < e) max = e\n }\n
return max\n}\n\n/**\n * Returns the largest element or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\npublic fun LongArray.maxOrNull(): Long? {\n if (isEmpty()) return null\n var max =
this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (max < e) max = e\n }\n return max\n}\n\n/**\n *
Returns the largest element or `null` if there are no elements.\n * \n * If any of elements is `NaN` returns `NaN`.\n
*\n@SinceKotlin("1.4")\npublic fun FloatArray.maxOrNull(): Float? {\n if (isEmpty()) return null\n var max =
this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n max = maxOf(max, e)\n }\n return
max\n}\n\n/**\n * Returns the largest element or `null` if there are no elements.\n * \n * If any of elements is `NaN`
returns `NaN`.\n
*\n@SinceKotlin("1.4")\npublic fun DoubleArray.maxOrNull(): Double? {\n if (isEmpty())
return null\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n max = maxOf(max, e)\n }\n
return max\n}\n\n/**\n * Returns the largest element or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\npublic fun CharArray.maxOrNull(): Char? {\n if (isEmpty()) return null\n var max =

```



```

this[0]\n for (i in 1..lastIndex) {\n     val e = this[i]\n     if (max < e) max = e\n } \n return
max\n}\n\n@Deprecated("Use maxWithOrNull instead.\",
ReplaceWith("this.maxWithOrNull(comparator)")\n)\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun <T> Array<out T>.maxWith(comparator: Comparator<in T>): T? {\n
return maxWithOrNull(comparator)\n}\n\n@Deprecated("Use maxWithOrNull instead.\",
ReplaceWith("this.maxWithOrNull(comparator)")\n)\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun ByteArray.maxWith(comparator: Comparator<in Byte>): Byte? {\n
return maxWithOrNull(comparator)\n}\n\n@Deprecated("Use maxWithOrNull instead.\",
ReplaceWith("this.maxWithOrNull(comparator)")\n)\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun ShortArray.maxWith(comparator: Comparator<in Short>): Short? {\n
return maxWithOrNull(comparator)\n}\n\n@Deprecated("Use maxWithOrNull instead.\",
ReplaceWith("this.maxWithOrNull(comparator)")\n)\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun IntArray.maxWith(comparator: Comparator<in Int>): Int? {\n return
maxWithOrNull(comparator)\n}\n\n@Deprecated("Use maxWithOrNull instead.\",
ReplaceWith("this.maxWithOrNull(comparator)")\n)\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun LongArray.maxWith(comparator: Comparator<in Long>): Long? {\n
return maxWithOrNull(comparator)\n}\n\n@Deprecated("Use maxWithOrNull instead.\",
ReplaceWith("this.maxWithOrNull(comparator)")\n)\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun FloatArray.maxWith(comparator: Comparator<in Float>): Float? {\n
return maxWithOrNull(comparator)\n}\n\n@Deprecated("Use maxWithOrNull instead.\",
ReplaceWith("this.maxWithOrNull(comparator)")\n)\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun DoubleArray.maxWith(comparator: Comparator<in Double>): Double?
{\n return maxWithOrNull(comparator)\n}\n\n@Deprecated("Use maxWithOrNull instead.\",
ReplaceWith("this.maxWithOrNull(comparator)")\n)\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun BooleanArray.maxWith(comparator: Comparator<in Boolean>):
Boolean? {\n return maxWithOrNull(comparator)\n}\n\n@Deprecated("Use maxWithOrNull instead.\",
ReplaceWith("this.maxWithOrNull(comparator)")\n)\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun CharArray.maxWith(comparator: Comparator<in Char>): Char? {\n
return maxWithOrNull(comparator)\n}\n\n/**\n * Returns the first element having the largest value according to the
provided [comparator] or `null` if there are no elements.\n */\n@SinceKotlin("1.4")\npublic fun <T> Array<out
T>.maxWithOrNull(comparator: Comparator<in T>): T? {\n if (isEmpty()) return null\n var max = this[0]\n
for (i in 1..lastIndex) {\n     val e = this[i]\n     if (comparator.compare(max, e) < 0) max = e\n } \n
return
max\n}\n\n/**\n * Returns the first element having the largest value according to the provided [comparator] or `null`
if there are no elements.\n */\n@SinceKotlin("1.4")\npublic fun ByteArray.maxWithOrNull(comparator:
Comparator<in Byte>): Byte? {\n if (isEmpty()) return null\n var max = this[0]\n for (i in 1..lastIndex) {\n
val e = this[i]\n     if (comparator.compare(max, e) < 0) max = e\n } \n return max\n}\n\n/**\n * Returns the
first element having the largest value according to the provided [comparator] or `null` if there are no elements.\n
*/\n@SinceKotlin("1.4")\npublic fun ShortArray.maxWithOrNull(comparator: Comparator<in Short>): Short? {\n
if (isEmpty()) return null\n var max = this[0]\n for (i in 1..lastIndex) {\n     val e = this[i]\n     if
(comparator.compare(max, e) < 0) max = e\n } \n return max\n}\n\n/**\n * Returns the first element having the
largest value according to the provided [comparator] or `null` if there are no elements.\n
*/\n@SinceKotlin("1.4")\npublic fun IntArray.maxWithOrNull(comparator: Comparator<in Int>): Int? {\n if
(isEmpty()) return null\n var max = this[0]\n for (i in 1..lastIndex) {\n     val e = this[i]\n     if
(comparator.compare(max, e) < 0) max = e\n } \n return max\n}\n\n/**\n * Returns the first element having the
largest value according to the provided [comparator] or `null` if there are no elements.\n
*/\n@SinceKotlin("1.4")\npublic fun LongArray.maxWithOrNull(comparator: Comparator<in Long>): Long? {\n
if (isEmpty()) return null\n var max = this[0]\n for (i in 1..lastIndex) {\n     val e = this[i]\n     if
(comparator.compare(max, e) < 0) max = e\n } \n return max\n}\n\n/**\n * Returns the first element having the

```

```

largest value according to the provided [comparator] or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\npublic fun FloatArray.maxOrNull(comparator: Comparator<in Float>): Float? {\n
if (isEmpty()) return null\n    var max = this[0]\n    for (i in 1..lastIndex) {\n        val e = this[i]\n        if
(comparator.compare(max, e) < 0) max = e\n    }\n    return max\n}\n\n/**\n * Returns the first element having the
largest value according to the provided [comparator] or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\npublic fun DoubleArray.maxOrNull(comparator: Comparator<in Double>):
Double? {\n    if (isEmpty()) return null\n    var max = this[0]\n    for (i in 1..lastIndex) {\n        val e = this[i]\n
if (comparator.compare(max, e) < 0) max = e\n    }\n    return max\n}\n\n/**\n * Returns the first element having the
largest value according to the provided [comparator] or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\npublic fun BooleanArray.maxOrNull(comparator: Comparator<in Boolean>):
Boolean? {\n    if (isEmpty()) return null\n    var max = this[0]\n    for (i in 1..lastIndex) {\n        val e = this[i]\n
if (comparator.compare(max, e) < 0) max = e\n    }\n    return max\n}\n\n/**\n * Returns the first element having the
largest value according to the provided [comparator] or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\npublic fun CharArray.maxOrNull(comparator: Comparator<in Char>): Char? {\n
if (isEmpty()) return null\n    var max = this[0]\n    for (i in 1..lastIndex) {\n        val e = this[i]\n        if
(comparator.compare(max, e) < 0) max = e\n    }\n    return max\n}\n\n@Deprecated("Use minOrNull instead.",
ReplaceWith("this.minOrNull()"))\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")\n@SinceKotlin("1.1")\npublic fun Array<out Double>.min(): Double? {\n    return
minOrNull()\n}\n\n@Deprecated("Use minOrNull instead.",
ReplaceWith("this.minOrNull()"))\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")\n@SinceKotlin("1.1")\npublic fun Array<out Float>.min(): Float? {\n    return
minOrNull()\n}\n\n@Deprecated("Use minOrNull instead.",
ReplaceWith("this.minOrNull()"))\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")\npublic fun <T : Comparable<T>> Array<out T>.min(): T? {\n    return
minOrNull()\n}\n\n@Deprecated("Use minOrNull instead.",
ReplaceWith("this.minOrNull()"))\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")\npublic fun ByteArray.min(): Byte? {\n    return minOrNull()\n}\n\n@Deprecated("Use
minOrNull instead.", ReplaceWith("this.minOrNull()"))\n@DeprecatedSinceKotlin(warningSince = "1.4",
errorSince = "1.5", hiddenSince = "1.6")\npublic fun ShortArray.min(): Short? {\n    return
minOrNull()\n}\n\n@Deprecated("Use minOrNull instead.",
ReplaceWith("this.minOrNull()"))\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")\npublic fun IntArray.min(): Int? {\n    return minOrNull()\n}\n\n@Deprecated("Use
minOrNull instead.", ReplaceWith("this.minOrNull()"))\n@DeprecatedSinceKotlin(warningSince = "1.4",
errorSince = "1.5", hiddenSince = "1.6")\npublic fun LongArray.min(): Long? {\n    return
minOrNull()\n}\n\n@Deprecated("Use minOrNull instead.",
ReplaceWith("this.minOrNull()"))\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")\npublic fun FloatArray.min(): Float? {\n    return minOrNull()\n}\n\n@Deprecated("Use
minOrNull instead.", ReplaceWith("this.minOrNull()"))\n@DeprecatedSinceKotlin(warningSince = "1.4",
errorSince = "1.5", hiddenSince = "1.6")\npublic fun DoubleArray.min(): Double? {\n    return
minOrNull()\n}\n\n@Deprecated("Use minOrNull instead.",
ReplaceWith("this.minOrNull()"))\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")\npublic fun CharArray.min(): Char? {\n    return minOrNull()\n}\n\n@Deprecated("Use
minByOrNull instead.", ReplaceWith("this.minByOrNull(selector)"))\n@DeprecatedSinceKotlin(warningSince =
"1.4", errorSince = "1.5", hiddenSince = "1.6")\npublic inline fun <T, R : Comparable<R>> Array<out
T>.minBy(selector: (T) -> R): T? {\n    return minByOrNull(selector)\n}\n\n@Deprecated("Use minByOrNull
instead.", ReplaceWith("this.minByOrNull(selector)"))\n@DeprecatedSinceKotlin(warningSince = "1.4",
errorSince = "1.5", hiddenSince = "1.6")\npublic inline fun <R : Comparable<R>> ByteArray.minBy(selector:
(Byte) -> R): Byte? {\n    return minByOrNull(selector)\n}\n\n@Deprecated("Use minByOrNull instead.",

```

```

ReplaceWith("this.minByOrNull(selector)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince =
"1.5", hiddenSince = "1.6")\npublic inline fun <R : Comparable<R>> ShortArray.minBy(selector: (Short) -> R):
Short? {\n    return minByOrNull(selector)\n}\n\n@Deprecated("Use minByOrNull instead."),
ReplaceWith("this.minByOrNull(selector)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince =
"1.5", hiddenSince = "1.6")\npublic inline fun <R : Comparable<R>> IntArray.minBy(selector: (Int) -> R): Int?
{\n    return minByOrNull(selector)\n}\n\n@Deprecated("Use minByOrNull instead."),
ReplaceWith("this.minByOrNull(selector)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince =
"1.5", hiddenSince = "1.6")\npublic inline fun <R : Comparable<R>> LongArray.minBy(selector: (Long) -> R):
Long? {\n    return minByOrNull(selector)\n}\n\n@Deprecated("Use minByOrNull instead."),
ReplaceWith("this.minByOrNull(selector)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince =
"1.5", hiddenSince = "1.6")\npublic inline fun <R : Comparable<R>> FloatArray.minBy(selector: (Float) -> R):
Float? {\n    return minByOrNull(selector)\n}\n\n@Deprecated("Use minByOrNull instead."),
ReplaceWith("this.minByOrNull(selector)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince =
"1.5", hiddenSince = "1.6")\npublic inline fun <R : Comparable<R>> DoubleArray.minBy(selector: (Double) ->
R): Double? {\n    return minByOrNull(selector)\n}\n\n@Deprecated("Use minByOrNull instead."),
ReplaceWith("this.minByOrNull(selector)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince =
"1.5", hiddenSince = "1.6")\npublic inline fun <R : Comparable<R>> BooleanArray.minBy(selector: (Boolean) -
> R): Boolean? {\n    return minByOrNull(selector)\n}\n\n@Deprecated("Use minByOrNull instead."),
ReplaceWith("this.minByOrNull(selector)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince =
"1.5", hiddenSince = "1.6")\npublic inline fun <R : Comparable<R>> CharArray.minBy(selector: (Char) -> R):
Char? {\n    return minByOrNull(selector)\n}\n\n/**\n * Returns the first element yielding the smallest value of the
given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.minByOrNull\n * \n@SinceKotlin("1.4")\npublic inline fun <T, R :
Comparable<R>> Array<out T>.minByOrNull(selector: (T) -> R): T? {\n    if (isEmpty()) return null\n    var
minElem = this[0]\n    val lastIndex = this.lastIndex\n    if (lastIndex == 0) return minElem\n    var minValue =
selector(minElem)\n    for (i in 1..lastIndex) {\n        val e = this[i]\n        val v = selector(e)\n        if (minValue > v)
{\n            minElem = e\n            minValue = v\n        }\n    }\n    return minElem\n}\n\n/**\n * Returns the first
element yielding the smallest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.minByOrNull\n * \n@SinceKotlin("1.4")\npublic inline fun <R :
Comparable<R>> ByteArray.minByOrNull(selector: (Byte) -> R): Byte? {\n    if (isEmpty()) return null\n    var
minElem = this[0]\n    val lastIndex = this.lastIndex\n    if (lastIndex == 0) return minElem\n    var minValue =
selector(minElem)\n    for (i in 1..lastIndex) {\n        val e = this[i]\n        val v = selector(e)\n        if (minValue > v)
{\n            minElem = e\n            minValue = v\n        }\n    }\n    return minElem\n}\n\n/**\n * Returns the first
element yielding the smallest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.minByOrNull\n * \n@SinceKotlin("1.4")\npublic inline fun <R :
Comparable<R>> ShortArray.minByOrNull(selector: (Short) -> R): Short? {\n    if (isEmpty()) return null\n    var
minElem = this[0]\n    val lastIndex = this.lastIndex\n    if (lastIndex == 0) return minElem\n    var minValue =
selector(minElem)\n    for (i in 1..lastIndex) {\n        val e = this[i]\n        val v = selector(e)\n        if (minValue > v)
{\n            minElem = e\n            minValue = v\n        }\n    }\n    return minElem\n}\n\n/**\n * Returns the first
element yielding the smallest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.minByOrNull\n * \n@SinceKotlin("1.4")\npublic inline fun <R :
Comparable<R>> IntArray.minByOrNull(selector: (Int) -> R): Int? {\n    if (isEmpty()) return null\n    var minElem
= this[0]\n    val lastIndex = this.lastIndex\n    if (lastIndex == 0) return minElem\n    var minValue =
selector(minElem)\n    for (i in 1..lastIndex) {\n        val e = this[i]\n        val v = selector(e)\n        if (minValue > v)
{\n            minElem = e\n            minValue = v\n        }\n    }\n    return minElem\n}\n\n/**\n * Returns the first
element yielding the smallest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.minByOrNull\n * \n@SinceKotlin("1.4")\npublic inline fun <R :
Comparable<R>> LongArray.minByOrNull(selector: (Long) -> R): Long? {\n    if (isEmpty()) return null\n    var

```

```

minElem = this[0]\n    val lastIndex = this.lastIndex\n    if (lastIndex == 0) return minElem\n    var minValue =
selector(minElem)\n    for (i in 1..lastIndex) {\n        val e = this[i]\n        val v = selector(e)\n        if (minValue > v)
{\n            minElem = e\n            minValue = v\n        }\n    }\n    return minElem\n}\n\n/**\n * Returns the first
element yielding the smallest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.minByOrNull\n * \n * @SinceKotlin("1.4")\npublic inline fun <R :
Comparable<R>> FloatArray.minByOrNull(selector: (Float) -> R): Float? {\n    if (isEmpty()) return null\n    var
minElem = this[0]\n    val lastIndex = this.lastIndex\n    if (lastIndex == 0) return minElem\n    var minValue =
selector(minElem)\n    for (i in 1..lastIndex) {\n        val e = this[i]\n        val v = selector(e)\n        if (minValue > v)
{\n            minElem = e\n            minValue = v\n        }\n    }\n    return minElem\n}\n\n/**\n * Returns the first
element yielding the smallest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.minByOrNull\n * \n * @SinceKotlin("1.4")\npublic inline fun <R :
Comparable<R>> DoubleArray.minByOrNull(selector: (Double) -> R): Double? {\n    if (isEmpty()) return null\n
var minElem = this[0]\n    val lastIndex = this.lastIndex\n    if (lastIndex == 0) return minElem\n    var minValue =
selector(minElem)\n    for (i in 1..lastIndex) {\n        val e = this[i]\n        val v = selector(e)\n        if (minValue > v)
{\n            minElem = e\n            minValue = v\n        }\n    }\n    return minElem\n}\n\n/**\n * Returns the first
element yielding the smallest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.minByOrNull\n * \n * @SinceKotlin("1.4")\npublic inline fun <R :
Comparable<R>> BooleanArray.minByOrNull(selector: (Boolean) -> R): Boolean? {\n    if (isEmpty()) return
null\n    var minElem = this[0]\n    val lastIndex = this.lastIndex\n    if (lastIndex == 0) return minElem\n    var
minValue = selector(minElem)\n    for (i in 1..lastIndex) {\n        val e = this[i]\n        val v = selector(e)\n        if
(minValue > v) {\n            minElem = e\n            minValue = v\n        }\n    }\n    return minElem\n}\n\n/**\n *
Returns the first element yielding the smallest value of the given function or `null` if there are no elements.\n * \n *
@sample samples.collections.Collections.Aggregates.minByOrNull\n * \n * @SinceKotlin("1.4")\npublic inline fun
<R : Comparable<R>> CharArray.minByOrNull(selector: (Char) -> R): Char? {\n    if (isEmpty()) return null\n
var minElem = this[0]\n    val lastIndex = this.lastIndex\n    if (lastIndex == 0) return minElem\n    var minValue =
selector(minElem)\n    for (i in 1..lastIndex) {\n        val e = this[i]\n        val v = selector(e)\n        if (minValue > v)
{\n            minElem = e\n            minValue = v\n        }\n    }\n    return minElem\n}\n\n/**\n * Returns the smallest
value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of
values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws
NoSuchElementException if the array is empty.\n
*\n * @SinceKotlin("1.4")\n * @OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n * @OverloadResolution
ByLambdaReturnType\n * @kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.minOf(selector: (T) ->
Double): Double {\n    if (isEmpty()) throw NoSuchElementException()\n    var minValue = selector(this[0])\n    for
(i in 1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return
minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n * @SinceKotlin("1.4")\n * @OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n * @OverloadResolution
ByLambdaReturnType\n * @kotlin.internal.InlineOnly\npublic inline fun ByteArray.minOf(selector: (Byte) ->
Double): Double {\n    if (isEmpty()) throw NoSuchElementException()\n    var minValue = selector(this[0])\n    for
(i in 1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return
minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n * @SinceKotlin("1.4")\n * @OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n * @OverloadResolution
ByLambdaReturnType\n * @kotlin.internal.InlineOnly\npublic inline fun ShortArray.minOf(selector: (Short) ->
Double): Double {\n    if (isEmpty()) throw NoSuchElementException()\n    var minValue = selector(this[0])\n    for
(i in 1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return
minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n

```

```

minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.minOf(selector: (Int) -> Double): Double {\n    if (isEmpty()) throw NoSuchElementException()\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.minOf(selector: (Long) -> Double): Double {\n    if (isEmpty()) throw NoSuchElementException()\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.minOf(selector: (Float) -> Double): Double {\n    if (isEmpty()) throw NoSuchElementException()\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.minOf(selector: (Double) -> Double): Double {\n    if (isEmpty()) throw NoSuchElementException()\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.minOf(selector: (Boolean) -> Double): Double {\n    if (isEmpty()) throw NoSuchElementException()\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.minOf(selector: (Char) -> Double): Double {\n    if (isEmpty()) throw NoSuchElementException()\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.minOf(selector: (T) -> Float): Float {\n    if (isEmpty()) throw NoSuchElementException()\n    var minValue = selector(this[0])\n    for (i in

```

```

1..lastIndex) {\n    val v = selector(this[i])\n    minValue = minOf(minValue, v)\n } return
minValue}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.minOf(selector: (Byte) -> Float):
Float {\n    if (isEmpty()) throw NoSuchElementException()\n    var minValue = selector(this[0])\n    for (i in
1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return
minValue}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.minOf(selector: (Short) ->
Float): Float {\n    if (isEmpty()) throw NoSuchElementException()\n    var minValue = selector(this[0])\n    for (i in
1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return
minValue}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.minOf(selector: (Int) -> Float):
Float {\n    if (isEmpty()) throw NoSuchElementException()\n    var minValue = selector(this[0])\n    for (i in
1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return
minValue}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.minOf(selector: (Long) ->
Float): Float {\n    if (isEmpty()) throw NoSuchElementException()\n    var minValue = selector(this[0])\n    for (i in
1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return
minValue}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.minOf(selector: (Float) -> Float):
Float {\n    if (isEmpty()) throw NoSuchElementException()\n    var minValue = selector(this[0])\n    for (i in
1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return
minValue}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.minOf(selector: (Double) ->
Float): Float {\n    if (isEmpty()) throw NoSuchElementException()\n    var minValue = selector(this[0])\n    for (i in
1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return
minValue}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to
each element in the array.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is
`NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.minOf(selector: (Boolean) ->

```

```

Float): Float {
    if (isEmpty()) throw NoSuchElementException()
    var minValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        minValue = minOf(minValue, v)
    }
    return minValue
}

/** Returns the smallest value among all values produced by [selector] function
 * applied to each element in the array.
 * If any of values produced by [selector] function is `NaN`, the returned result is
 * `NaN`.
 * @throws NoSuchElementException if the array is empty.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun CharArray.minOf(selector: (Char) -> Float):
Float {
    if (isEmpty()) throw NoSuchElementException()
    var minValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        minValue = minOf(minValue, v)
    }
    return minValue
}

/** Returns the smallest value among all values produced by [selector] function
 * applied to each element in the array.
 * @throws NoSuchElementException if the array is empty.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun <T, R : Comparable<R>> Array<out T>.minOf(selector: (T) -> R): R {
    if (isEmpty()) throw NoSuchElementException()
    var minValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        if (minValue > v) {
            minValue = v
        }
    }
    return minValue
}

/** Returns the smallest value among all values produced
 * by [selector] function
 * applied to each element in the array.
 * @throws NoSuchElementException if the
 * array is empty.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun <R : Comparable<R>>
ByteArray.minOf(selector: (Byte) -> R): R {
    if (isEmpty()) throw NoSuchElementException()
    var minValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        if (minValue > v) {
            minValue = v
        }
    }
    return minValue
}

/** Returns the smallest value among all values produced
 * by [selector] function
 * applied to each element in the array.
 * @throws NoSuchElementException if the
 * array is empty.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun <R : Comparable<R>>
ShortArray.minOf(selector: (Short) -> R): R {
    if (isEmpty()) throw NoSuchElementException()
    var minValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        if (minValue > v) {
            minValue = v
        }
    }
    return minValue
}

/** Returns the smallest value among all values
 * produced by [selector] function
 * applied to each element in the array.
 * @throws
 * NoSuchElementException if the array is empty.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun <R : Comparable<R>>
IntArray.minOf(selector: (Int) -> R): R {
    if (isEmpty()) throw NoSuchElementException()
    var minValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        if (minValue > v) {
            minValue = v
        }
    }
    return minValue
}

/** Returns the smallest value among all values produced
 * by [selector] function
 * applied to each element in the array.
 * @throws NoSuchElementException if the
 * array is empty.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun <R : Comparable<R>>
LongArray.minOf(selector: (Long) -> R): R {
    if (isEmpty()) throw NoSuchElementException()
    var minValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        if (minValue > v) {
            minValue = v
        }
    }
    return minValue
}

/** Returns the smallest value among all values
 * produced by [selector] function
 * applied to each element in the array.
 * @throws
 * NoSuchElementException if the array is empty.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun <R : Comparable<R>>

```

```

FloatArray.minOf(selector: (Float) -> R): R {
    if (isEmpty()) throw NoSuchElementException()
    var minValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        if (minValue > v) {
            minValue = v
        }
    }
    return minValue
}
/** Returns the smallest value among all values produced by [selector] function applied to each element in the array.
 * @throws NoSuchElementException if the array is empty.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun <R : Comparable<R>>
DoubleArray.minOf(selector: (Double) -> R): R {
    if (isEmpty()) throw NoSuchElementException()
    var minValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        if (minValue > v) {
            minValue = v
        }
    }
    return minValue
}
/** Returns the smallest value among all values produced by [selector] function applied to each element in the array.
 * @throws NoSuchElementException if the array is empty.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun <R : Comparable<R>>
BooleanArray.minOf(selector: (Boolean) -> R): R {
    if (isEmpty()) throw NoSuchElementException()
    var minValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        if (minValue > v) {
            minValue = v
        }
    }
    return minValue
}
/** Returns the smallest value among all values produced by [selector] function applied to each element in the array.
 * @throws NoSuchElementException if the array is empty.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun <R : Comparable<R>>
CharArray.minOf(selector: (Char) -> R): R {
    if (isEmpty()) throw NoSuchElementException()
    var minValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        if (minValue > v) {
            minValue = v
        }
    }
    return minValue
}
/** Returns the smallest value among all values produced by [selector] function applied to each element in the array or `null` if there are no elements.
 * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun <T> Array<out T>.minOfOrNull(selector: (T) -> Double): Double? {
    if (isEmpty()) return null
    var minValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        minValue = minOf(minValue, v)
    }
    return minValue
}
/** Returns the smallest value among all values produced by [selector] function applied to each element in the array or `null` if there are no elements.
 * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun ByteArray.minOfOrNull(selector: (Byte) -> Double): Double? {
    if (isEmpty()) return null
    var minValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        minValue = minOf(minValue, v)
    }
    return minValue
}
/** Returns the smallest value among all values produced by [selector] function applied to each element in the array or `null` if there are no elements.
 * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun ShortArray.minOfOrNull(selector: (Short) -> Double): Double? {
    if (isEmpty()) return null
    var minValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        minValue = minOf(minValue, v)
    }
    return minValue
}
/** Returns the smallest value among all values produced by [selector] function applied to each element in the array or `null` if there are no elements.
 * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolution

```


ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.minOrNull(selector: (Int) -> Double): Double? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.minOrNull(selector: (Long) -> Double): Double? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.minOrNull(selector: (Float) -> Double): Double? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.minOrNull(selector: (Double) -> Double): Double? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.minOrNull(selector: (Boolean) -> Double): Double? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.minOrNull(selector: (Char) -> Double): Double? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.minOrNull(selector: (T) -> Float): Float? {\n if (isEmpty()) return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n }\n return minValue\n}\n\n**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.minOfOrNull(selector: (Byte) ->\nFloat): Float? {\n    if (isEmpty()) return null\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return minValue\n}\n\n/**\n * Returns the\n smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if\n there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is\n `NaN`.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.minOfOrNull(selector: (Short) ->\nFloat): Float? {\n    if (isEmpty()) return null\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return minValue\n}\n\n/**\n * Returns the\n smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if\n there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is\n `NaN`.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.minOfOrNull(selector: (Int) ->\nFloat): Float? {\n    if (isEmpty()) return null\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return minValue\n}\n\n/**\n * Returns the\n smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if\n there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is\n `NaN`.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.minOfOrNull(selector: (Long) ->\nFloat): Float? {\n    if (isEmpty()) return null\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return minValue\n}\n\n/**\n * Returns the\n smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if\n there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is\n `NaN`.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.minOfOrNull(selector: (Float) ->\nFloat): Float? {\n    if (isEmpty()) return null\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return minValue\n}\n\n/**\n * Returns the\n smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if\n there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is\n `NaN`.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.minOfOrNull(selector:\n(Double) -> Float): Float? {\n    if (isEmpty()) return null\n    var minValue = selector(this[0])\n    for (i in\n1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return\nminValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to\n each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function\n is `NaN`, the returned result is `NaN`.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.minOfOrNull(selector:\n(Boolean) -> Float): Float? {\n    if (isEmpty()) return null\n    var minValue = selector(this[0])\n    for (i in\n1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return\nminValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to\n each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector] function
```

is `NaN`, the returned result is `NaN`.\n

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.minOrNull(selector: (Char) ->\nFloat): Float? {\n    if (isEmpty()) return null\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return minValue\n}\n\n/**\n * Returns the\n smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if\n there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Comparable<R>> Array<out\nT>.minOrNull(selector: (T) -> R): R? {\n    if (isEmpty()) return null\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if (minValue > v) {\n            minValue = v\n        }\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>\nByteArray.minOrNull(selector: (Byte) -> R): R? {\n    if (isEmpty()) return null\n    var minValue =\nselector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if (minValue > v) {\n            minValue = v\n        }\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value among all values produced\n by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>\nShortArray.minOrNull(selector: (Short) -> R): R? {\n    if (isEmpty()) return null\n    var minValue =\nselector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if (minValue > v) {\n            minValue = v\n        }\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value among all values produced\n by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>\nIntArray.minOrNull(selector: (Int) -> R): R? {\n    if (isEmpty()) return null\n    var minValue =\nselector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if (minValue > v) {\n            minValue = v\n        }\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value among all values produced\n by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>\nLongArray.minOrNull(selector: (Long) -> R): R? {\n    if (isEmpty()) return null\n    var minValue =\nselector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if (minValue > v) {\n            minValue = v\n        }\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value among all values produced\n by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>\nFloatArray.minOrNull(selector: (Float) -> R): R? {\n    if (isEmpty()) return null\n    var minValue =\nselector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if (minValue > v) {\n            minValue = v\n        }\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value among all values produced\n by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>\nDoubleArray.minOrNull(selector: (Double) -> R): R? {\n    if (isEmpty()) return null\n    var minValue =\nselector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if (minValue > v) {\n            minValue = v\n        }\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value among all values produced\n
```

by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n

```

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
BooleanArray.minOfOrNull(selector: (Boolean) -> R): R? {\n if (isEmpty()) return null\n var minValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (minValue > v) {\n
minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced
by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
*/\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
CharArray.minOfOrNull(selector: (Char) -> R): R? {\n if (isEmpty()) return null\n var minValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (minValue > v) {\n
minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value according to the provided
[comparator]\n * among all values produced by [selector] function applied to each element in the array.\n * \n *
@throws NoSuchElementException if the array is empty.\n
*/\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R> Array<out
T>.minOfWith(comparator: Comparator<in R>, selector: (T) -> R): R {\n if (isEmpty()) throw
NoSuchElementException()\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =
selector(this[i])\n if (comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return
minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values
produced by [selector] function applied to each element in the array.\n * \n * @throws NoSuchElementException if
the array is empty.\n
*/\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> ByteArray.minOfWith(comparator:
Comparator<in R>, selector: (Byte) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n *
Returns the smallest value according to the provided [comparator]\n * among all values produced by [selector]
function applied to each element in the array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*/\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> ShortArray.minOfWith(comparator:
Comparator<in R>, selector: (Short) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n *
Returns the smallest value according to the provided [comparator]\n * among all values produced by [selector]
function applied to each element in the array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*/\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> IntArray.minOfWith(comparator:
Comparator<in R>, selector: (Int) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var minValue
= selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (comparator.compare(minValue,
v) > 0) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n * Returns the smallest value
according to the provided [comparator]\n * among all values produced by [selector] function applied to each
element in the array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*/\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> LongArray.minOfWith(comparator:
Comparator<in R>, selector: (Long) -> R): R {\n if (isEmpty()) throw NoSuchElementException()\n var
minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n *
Returns the smallest value according to the provided [comparator]\n * among all values produced by [selector]
function applied to each element in the array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*/\n

```

Returns the smallest value according to the provided [comparator] * among all values produced by [selector] function applied to each element in the array. * @throws NoSuchElementException if the array is empty. *

```

*^@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnly\npublic inline fun <R> FloatArray.minOfWith(comparator:
Comparator<in R>, selector: (Float) -> R): R {\n  if (isEmpty()) throw NoSuchElementException()\n  var
minValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    if
(comparator.compare(minValue, v) > 0) {\n      minValue = v\n    }\n  }\n  return minValue\n}\n\n/**
Returns the smallest value according to the provided [comparator] * among all values produced by [selector]
function applied to each element in the array. * @throws NoSuchElementException if the array is empty.
*\n^@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnly\npublic inline fun <R> DoubleArray.minOfWith(comparator:
Comparator<in R>, selector: (Double) -> R): R {\n  if (isEmpty()) throw NoSuchElementException()\n  var
minValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    if
(comparator.compare(minValue, v) > 0) {\n      minValue = v\n    }\n  }\n  return minValue\n}\n\n/**
Returns the smallest value according to the provided [comparator] * among all values produced by [selector]
function applied to each element in the array. * @throws NoSuchElementException if the array is empty.
*\n^@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnly\npublic inline fun <R> BooleanArray.minOfWith(comparator:
Comparator<in R>, selector: (Boolean) -> R): R {\n  if (isEmpty()) throw NoSuchElementException()\n  var
minValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    if
(comparator.compare(minValue, v) > 0) {\n      minValue = v\n    }\n  }\n  return minValue\n}\n\n/**
Returns the smallest value according to the provided [comparator] * among all values produced by [selector]
function applied to each element in the array. * @throws NoSuchElementException if the array is empty.
*\n^@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnly\npublic inline fun <R> CharArray.minOfWith(comparator:
Comparator<in R>, selector: (Char) -> R): R {\n  if (isEmpty()) throw NoSuchElementException()\n  var
minValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    if
(comparator.compare(minValue, v) > 0) {\n      minValue = v\n    }\n  }\n  return minValue\n}\n\n/**
Returns the smallest value according to the provided [comparator] * among all values produced by [selector]
function applied to each element in the array or `null` if there are no elements.\n
*\n^@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnly\npublic inline fun <T, R> Array<out
T>.minOfWithOrNull(comparator: Comparator<in R>, selector: (T) -> R): R? {\n  if (isEmpty()) return null\n
var minValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    if
(comparator.compare(minValue, v) > 0) {\n      minValue = v\n    }\n  }\n  return minValue\n}\n\n/**
Returns the smallest value according to the provided [comparator] * among all values produced by [selector]
function applied to each element in the array or `null` if there are no elements.\n
*\n^@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnly\npublic inline fun <R>
ByteArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (Byte) -> R): R? {\n  if (isEmpty()) return
null\n  var minValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    if
(comparator.compare(minValue, v) > 0) {\n      minValue = v\n    }\n  }\n  return minValue\n}\n\n/**
Returns the smallest value according to the provided [comparator] * among all values produced by [selector]
function applied to each element in the array or `null` if there are no elements.\n
*\n^@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnly\npublic inline fun <R>
ShortArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (Short) -> R): R? {\n  if (isEmpty())
return null\n  var minValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    if

```

```

(comparator.compare(minValue, v) > 0) {\n        minValue = v\n    }\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values produced by [selector]\n function applied to each element in the array or `null` if there are no elements.\n *\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nIntArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (Int) -> R): R? {\n    if (isEmpty()) return\n    null\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if\n        (comparator.compare(minValue, v) > 0) {\n            minValue = v\n        }\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values produced by [selector]\n function applied to each element in the array or `null` if there are no elements.\n *\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nLongArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (Long) -> R): R? {\n    if (isEmpty()) return\n    null\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if\n        (comparator.compare(minValue, v) > 0) {\n            minValue = v\n        }\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values produced by [selector]\n function applied to each element in the array or `null` if there are no elements.\n *\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nFloatArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (Float) -> R): R? {\n    if (isEmpty()) return\n    null\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if\n        (comparator.compare(minValue, v) > 0) {\n            minValue = v\n        }\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values produced by [selector]\n function applied to each element in the array or `null` if there are no elements.\n *\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nDoubleArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (Double) -> R): R? {\n    if (isEmpty())\n    return null\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if\n        (comparator.compare(minValue, v) > 0) {\n            minValue = v\n        }\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values produced by [selector]\n function applied to each element in the array or `null` if there are no elements.\n *\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nBooleanArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (Boolean) -> R): R? {\n    if (isEmpty())\n    return null\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if\n        (comparator.compare(minValue, v) > 0) {\n            minValue = v\n        }\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values produced by [selector]\n function applied to each element in the array or `null` if there are no elements.\n *\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nCharArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (Char) -> R): R? {\n    if (isEmpty()) return\n    null\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if\n        (comparator.compare(minValue, v) > 0) {\n            minValue = v\n        }\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n * \n * If any of elements is `NaN` returns `NaN`.\n *\n */\n@SinceKotlin("1.4")\npublic fun Array<out Double>.minOrNull(): Double? {\n    if (isEmpty()) return null\n    var min = this[0]\n    for (i in 1..lastIndex) {\n        val e = this[i]\n        min = minOf(min, e)\n    }\n    return\n    min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n * \n * If any of elements is\n `NaN` returns `NaN`.\n *\n */\n@SinceKotlin("1.4")\npublic fun Array<out Float>.minOrNull(): Float? {\n    if

```

```

(isEmpty()) return null\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n min = minOf(min,
e)\n }\n return min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\npublic fun <T : Comparable<T>> Array<out T>.minOrNull(): T? {\n if (isEmpty())
return null\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min = e\n }\n
return min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\npublic fun ByteArray.minOrNull(): Byte? {\n if (isEmpty()) return null\n var min =
this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min = e\n }\n return min\n}\n\n/**\n *
Returns the smallest element or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\npublic fun ShortArray.minOrNull(): Short? {\n if (isEmpty()) return null\n var min =
this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min = e\n }\n return min\n}\n\n/**\n *
Returns the smallest element or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\npublic fun IntArray.minOrNull(): Int? {\n if (isEmpty())
return null\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min = e\n }\n
return min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\npublic fun LongArray.minOrNull(): Long? {\n if (isEmpty()) return null\n var min =
this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min = e\n }\n return min\n}\n\n/**\n *
Returns the smallest element or `null` if there are no elements.\n
*\n * \n * If any of elements is `NaN` returns `NaN`.\n
*\n@SinceKotlin("1.4")\npublic fun FloatArray.minOrNull(): Float? {\n if (isEmpty()) return null\n var min =
this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n min = minOf(min, e)\n }\n return min\n}\n\n/**\n *
Returns the smallest element or `null` if there are no elements.\n
*\n * \n * If any of elements is `NaN` returns `NaN`.\n
*\n@SinceKotlin("1.4")\npublic fun DoubleArray.minOrNull(): Double? {\n if (isEmpty()) return null\n var
min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n min = minOf(min, e)\n }\n return
min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\npublic fun CharArray.minOrNull(): Char? {\n if (isEmpty()) return null\n var min =
this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min = e\n }\n return
min\n}\n\n@Deprecated("Use minWithOrNull instead.")
ReplaceWith("this.minWithOrNull(comparator)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun <T> Array<out T>.minWith(comparator: Comparator<in T>): T? {\n
return minWithOrNull(comparator)\n}\n\n@Deprecated("Use minWithOrNull instead.")
ReplaceWith("this.minWithOrNull(comparator)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun ByteArray.minWith(comparator: Comparator<in Byte>): Byte? {\n
return minWithOrNull(comparator)\n}\n\n@Deprecated("Use minWithOrNull instead.")
ReplaceWith("this.minWithOrNull(comparator)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun ShortArray.minWith(comparator: Comparator<in Short>): Short? {\n
return minWithOrNull(comparator)\n}\n\n@Deprecated("Use minWithOrNull instead.")
ReplaceWith("this.minWithOrNull(comparator)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun IntArray.minWith(comparator: Comparator<in Int>): Int? {\n return
minWithOrNull(comparator)\n}\n\n@Deprecated("Use minWithOrNull instead.")
ReplaceWith("this.minWithOrNull(comparator)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun LongArray.minWith(comparator: Comparator<in Long>): Long? {\n
return minWithOrNull(comparator)\n}\n\n@Deprecated("Use minWithOrNull instead.")
ReplaceWith("this.minWithOrNull(comparator)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun FloatArray.minWith(comparator: Comparator<in Float>): Float? {\n
return minWithOrNull(comparator)\n}\n\n@Deprecated("Use minWithOrNull instead.")
ReplaceWith("this.minWithOrNull(comparator)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun DoubleArray.minWith(comparator: Comparator<in Double>): Double?
{\n return minWithOrNull(comparator)\n}\n\n@Deprecated("Use minWithOrNull instead.")
ReplaceWith("this.minWithOrNull(comparator)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun BooleanArray.minWith(comparator: Comparator<in Boolean>):

```

```

Boolean? { \n  return minWithOrNull(comparator)\n}\n\n@Deprecated(\ "Use minWithOrNull instead.\ ",
ReplaceWith(\ "this.minWithOrNull(comparator)\ ") )\n@DeprecatedSinceKotlin(warningSince = \ "1.4\ ", errorSince
= \ "1.5\ ", hiddenSince = \ "1.6\ ") \npublic fun CharArray.minWith(comparator: Comparator<in Char>): Char? { \n
return minWithOrNull(comparator)\n}\n\n/** \n * Returns the first element having the smallest value according to
the provided [comparator] or `null` if there are no elements.\n * \n @SinceKotlin(\ "1.4\ ") \npublic fun <T> Array<out
T>.minWithOrNull(comparator: Comparator<in T>): T? { \n  if (isEmpty()) return null\n  var min = this[0]\n  for
(i in 1..lastIndex) { \n    val e = this[i]\n    if (comparator.compare(min, e) > 0) min = e\n  } \n  return
min\n}\n\n/** \n * Returns the first element having the smallest value according to the provided [comparator] or
`null` if there are no elements.\n * \n @SinceKotlin(\ "1.4\ ") \npublic fun ByteArray.minWithOrNull(comparator:
Comparator<in Byte>): Byte? { \n  if (isEmpty()) return null\n  var min = this[0]\n  for (i in 1..lastIndex) { \n
val e = this[i]\n    if (comparator.compare(min, e) > 0) min = e\n  } \n  return min\n}\n\n/** \n * Returns the first
element having the smallest value according to the provided [comparator] or `null` if there are no elements.\n
\n @SinceKotlin(\ "1.4\ ") \npublic fun ShortArray.minWithOrNull(comparator: Comparator<in Short>): Short? { \n
if (isEmpty()) return null\n  var min = this[0]\n  for (i in 1..lastIndex) { \n    val e = this[i]\n    if
(comparator.compare(min, e) > 0) min = e\n  } \n  return min\n}\n\n/** \n * Returns the first element having the
smallest value according to the provided [comparator] or `null` if there are no elements.\n
\n @SinceKotlin(\ "1.4\ ") \npublic fun IntArray.minWithOrNull(comparator: Comparator<in Int>): Int? { \n  if
(isEmpty()) return null\n  var min = this[0]\n  for (i in 1..lastIndex) { \n    val e = this[i]\n    if
(comparator.compare(min, e) > 0) min = e\n  } \n  return min\n}\n\n/** \n * Returns the first element having the
smallest value according to the provided [comparator] or `null` if there are no elements.\n
\n @SinceKotlin(\ "1.4\ ") \npublic fun LongArray.minWithOrNull(comparator: Comparator<in Long>): Long? { \n
if (isEmpty()) return null\n  var min = this[0]\n  for (i in 1..lastIndex) { \n    val e = this[i]\n    if
(comparator.compare(min, e) > 0) min = e\n  } \n  return min\n}\n\n/** \n * Returns the first element having the
smallest value according to the provided [comparator] or `null` if there are no elements.\n
\n @SinceKotlin(\ "1.4\ ") \npublic fun FloatArray.minWithOrNull(comparator: Comparator<in Float>): Float? { \n
if (isEmpty()) return null\n  var min = this[0]\n  for (i in 1..lastIndex) { \n    val e = this[i]\n    if
(comparator.compare(min, e) > 0) min = e\n  } \n  return min\n}\n\n/** \n * Returns the first element having the
smallest value according to the provided [comparator] or `null` if there are no elements.\n
\n @SinceKotlin(\ "1.4\ ") \npublic fun DoubleArray.minWithOrNull(comparator: Comparator<in Double>):
Double? { \n  if (isEmpty()) return null\n  var min = this[0]\n  for (i in 1..lastIndex) { \n    val e = this[i]\n
if (comparator.compare(min, e) > 0) min = e\n  } \n  return min\n}\n\n/** \n * Returns the first element having the
smallest value according to the provided [comparator] or `null` if there are no elements.\n
\n @SinceKotlin(\ "1.4\ ") \npublic fun BooleanArray.minWithOrNull(comparator: Comparator<in Boolean>):
Boolean? { \n  if (isEmpty()) return null\n  var min = this[0]\n  for (i in 1..lastIndex) { \n    val e = this[i]\n
if (comparator.compare(min, e) > 0) min = e\n  } \n  return min\n}\n\n/** \n * Returns the first element having the
smallest value according to the provided [comparator] or `null` if there are no elements.\n
\n @SinceKotlin(\ "1.4\ ") \npublic fun CharArray.minWithOrNull(comparator: Comparator<in Char>): Char? { \n
if (isEmpty()) return null\n  var min = this[0]\n  for (i in 1..lastIndex) { \n    val e = this[i]\n    if
(comparator.compare(min, e) > 0) min = e\n  } \n  return min\n}\n\n/** \n * Returns `true` if the array has no
elements.\n * \n * @sample samples.collections.Collections.Aggregates.none\n * \n public fun <T> Array<out
T>.none(): Boolean { \n  return isEmpty()\n}\n\n/** \n * Returns `true` if the array has no elements.\n * \n *
@sample samples.collections.Collections.Aggregates.none\n * \n public fun ByteArray.none(): Boolean { \n  return
isEmpty()\n}\n\n/** \n * Returns `true` if the array has no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.none\n * \n public fun ShortArray.none(): Boolean { \n  return
isEmpty()\n}\n\n/** \n * Returns `true` if the array has no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.none\n * \n public fun IntArray.none(): Boolean { \n  return
isEmpty()\n}\n\n/** \n * Returns `true` if the array has no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.none\n * \n public fun LongArray.none(): Boolean { \n  return

```



```

isEmpty()\n\n/**\n * Returns `true` if the array has no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.none\n *^\npublic fun FloatArray.none(): Boolean {\n return
isEmpty()\n\n/**\n * Returns `true` if the array has no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.none\n *^\npublic fun DoubleArray.none(): Boolean {\n return
isEmpty()\n\n/**\n * Returns `true` if the array has no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.none\n *^\npublic fun BooleanArray.none(): Boolean {\n return
isEmpty()\n\n/**\n * Returns `true` if no elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.noneWithPredicate\n *^\npublic inline fun <T> Array<out
T>.none(predicate: (T) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return false\n return
true\n}\n\n/**\n * Returns `true` if no elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.noneWithPredicate\n *^\npublic inline fun ByteArray.none(predicate:
(Byte) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return false\n return
true\n}\n\n/**\n * Returns `true` if no elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.noneWithPredicate\n *^\npublic inline fun ShortArray.none(predicate:
(Short) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return false\n return
true\n}\n\n/**\n * Returns `true` if no elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.noneWithPredicate\n *^\npublic inline fun IntArray.none(predicate: (Int)
-> Boolean): Boolean {\n for (element in this) if (predicate(element)) return false\n return true\n}\n\n/**\n *
Returns `true` if no elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.noneWithPredicate\n *^\npublic inline fun LongArray.none(predicate:
(Long) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return false\n return
true\n}\n\n/**\n * Returns `true` if no elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.noneWithPredicate\n *^\npublic inline fun FloatArray.none(predicate:
(Float) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return false\n return
true\n}\n\n/**\n * Returns `true` if no elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.noneWithPredicate\n *^\npublic inline fun DoubleArray.none(predicate:
(Double) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return false\n return
true\n}\n\n/**\n * Returns `true` if no elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.noneWithPredicate\n *^\npublic inline fun
BooleanArray.none(predicate: (Boolean) -> Boolean): Boolean {\n for (element in this) if (predicate(element))
return false\n return true\n}\n\n/**\n * Returns `true` if no elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.noneWithPredicate\n *^\npublic inline fun CharArray.none(predicate:
(Char) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return false\n return
true\n}\n\n/**\n * Performs the given [action] on each element and returns the array itself afterwards.\n
*\n *^\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.onEach(action: (T) ->
Unit): Array<out T> {\n return apply { for (element in this) action(element) }\n}\n\n/**\n * Performs the given
[action] on each element and returns the array itself afterwards.\n
*\n *^\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.onEach(action: (Byte) ->
Unit): ByteArray {\n return apply { for (element in this) action(element) }\n}\n\n/**\n * Performs the given
[action] on each element and returns the array itself afterwards.\n
*\n *^\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.onEach(action: (Short) ->
Unit): ShortArray {\n return apply { for (element in this) action(element) }\n}\n\n/**\n * Performs the given
[action] on each element and returns the array itself afterwards.\n
*\n *^\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.onEach(action: (Int) -> Unit):
IntArray {\n return apply { for (element in this) action(element) }\n}\n\n/**\n * Performs the given [action] on
each element and returns the array itself afterwards.\n

```

```

*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.onEach(action: (Long) ->
Unit): LongArray {\n    return apply { for (element in this) action(element) }\n}\n\n/**\n * Performs the given
[action] on each element and returns the array itself afterwards.\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.onEach(action: (Float) ->
Unit): FloatArray {\n    return apply { for (element in this) action(element) }\n}\n\n/**\n * Performs the given
[action] on each element and returns the array itself afterwards.\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.onEach(action: (Double) ->
Unit): DoubleArray {\n    return apply { for (element in this) action(element) }\n}\n\n/**\n * Performs the given
[action] on each element and returns the array itself afterwards.\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.onEach(action: (Boolean)
-> Unit): BooleanArray {\n    return apply { for (element in this) action(element) }\n}\n\n/**\n * Performs the given
[action] on each element and returns the array itself afterwards.\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.onEach(action: (Char) ->
Unit): CharArray {\n    return apply { for (element in this) action(element) }\n}\n\n/**\n * Performs the given
[action] on each element, providing sequential index with the element,\n * and returns the array itself afterwards.\n *
@param [action] function that takes the index of an element and the element itself\n * and performs the action on
the element.\n *
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out
T>.onEachIndexed(action: (index: Int, T) -> Unit): Array<out T> {\n    return apply { forEachIndexed(action)
}\n}\n\n/**\n * Performs the given [action] on each element, providing sequential index with the element,\n * and
returns the array itself afterwards.\n *
@param [action] function that takes the index of an element and the element
itself\n * and performs the action on the element.\n *
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic
inline fun ByteArray.onEachIndexed(action: (index: Int, Byte) -> Unit): ByteArray {\n    return apply {
forEachIndexed(action) }\n}\n\n/**\n * Performs the given [action] on each element, providing sequential index
with the element,\n * and returns the array itself afterwards.\n *
@param [action] function that takes the index of an
element and the element itself\n * and performs the action on the element.\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.onEachIndexed(action:
(index: Int, Short) -> Unit): ShortArray {\n    return apply { forEachIndexed(action) }\n}\n\n/**\n * Performs the
given [action] on each element, providing sequential index with the element,\n * and returns the array itself
afterwards.\n *
@param [action] function that takes the index of an element and the element itself\n * and performs
the action on the element.\n *
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun
IntArray.onEachIndexed(action: (index: Int, Int) -> Unit): IntArray {\n    return apply { forEachIndexed(action)
}\n}\n\n/**\n * Performs the given [action] on each element, providing sequential index with the element,\n * and
returns the array itself afterwards.\n *
@param [action] function that takes the index of an element and the element
itself\n * and performs the action on the element.\n *
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic
inline fun LongArray.onEachIndexed(action: (index: Int, Long) -> Unit): LongArray {\n    return apply {
forEachIndexed(action) }\n}\n\n/**\n * Performs the given [action] on each element, providing sequential index
with the element,\n * and returns the array itself afterwards.\n *
@param [action] function that takes the index of an
element and the element itself\n * and performs the action on the element.\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.onEachIndexed(action:
(index: Int, Float) -> Unit): FloatArray {\n    return apply { forEachIndexed(action) }\n}\n\n/**\n * Performs the
given [action] on each element, providing sequential index with the element,\n * and returns the array itself
afterwards.\n *
@param [action] function that takes the index of an element and the element itself\n * and performs
the action on the element.\n *
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun
DoubleArray.onEachIndexed(action: (index: Int, Double) -> Unit): DoubleArray {\n    return apply {
forEachIndexed(action) }\n}\n\n/**\n * Performs the given [action] on each element, providing sequential index
with the element,\n * and returns the array itself afterwards.\n *
@param [action] function that takes the index of an
element and the element itself\n * and performs the action on the element.\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.onEachIndexed(action:

```

```

(index: Int, Boolean) -> Unit): BooleanArray {
    return apply {
        forEachIndexed(action)
    }
}

/**
 * Performs the given [action] on each element, providing sequential index with the element,
 * and returns the array itself afterwards.
 * @param [action] function that takes the index of an element and the element itself
 * and performs the action on the element.
 */
@SinceKotlin("1.4")
@kotlin.internal.InlineOnly
public inline fun CharArray.onEachIndexed(action: (index: Int, Char) -> Unit): CharArray {
    return apply {
        forEachIndexed(action)
    }
}

/**
 * Accumulates value starting with the first element and applying [operation]
 * from left to right
 * to current accumulator value and each element.
 * Throws an exception if this array is empty.
 * If the array can be empty in an expected way,
 * please use [reduceOrNull] instead.
 * It returns `null` when its receiver is empty.
 * @param [operation] function that takes current accumulator value and an element,
 * and calculates the next accumulator value.
 */
@sample samples.collections.Collections.Aggregates.reduce
public inline fun <S, T : S> Array<out T>.reduce(operation: (acc: S, T) -> S): S {
    if (isEmpty())
        throw UnsupportedOperationException("Empty array can't be reduced.")
    var accumulator: S = this[0]
    for (index in 1..lastIndex) {
        accumulator = operation(accumulator, this[index])
    }
    return accumulator
}

/**
 * Accumulates value starting with the first element and applying [operation] from left to right
 * to current accumulator value and each element.
 * Throws an exception if this array is empty.
 * If the array can be empty in an expected way,
 * please use [reduceOrNull] instead.
 * It returns `null` when its receiver is empty.
 * @param [operation] function that takes current accumulator value and an element,
 * and calculates the next accumulator value.
 */
@sample samples.collections.Collections.Aggregates.reduce
public inline fun ByteArray.reduce(operation: (acc: Byte, Byte) -> Byte): Byte {
    if (isEmpty())
        throw UnsupportedOperationException("Empty array can't be reduced.")
    var accumulator = this[0]
    for (index in 1..lastIndex) {
        accumulator = operation(accumulator, this[index])
    }
    return accumulator
}

/**
 * Accumulates value starting with the first element and applying [operation] from left to right
 * to current accumulator value and each element.
 * Throws an exception if this array is empty.
 * If the array can be empty in an expected way,
 * please use [reduceOrNull] instead.
 * It returns `null` when its receiver is empty.
 * @param [operation] function that takes current accumulator value and an element,
 * and calculates the next accumulator value.
 */
@sample samples.collections.Collections.Aggregates.reduce
public inline fun ShortArray.reduce(operation: (acc: Short, Short) -> Short): Short {
    if (isEmpty())
        throw UnsupportedOperationException("Empty array can't be reduced.")
    var accumulator = this[0]
    for (index in 1..lastIndex) {
        accumulator = operation(accumulator, this[index])
    }
    return accumulator
}

/**
 * Accumulates value starting with the first element and applying [operation] from left to right
 * to current accumulator value and each element.
 * Throws an exception if this array is empty.
 * If the array can be empty in an expected way,
 * please use [reduceOrNull] instead.
 * It returns `null` when its receiver is empty.
 * @param [operation] function that takes current accumulator value and an element,
 * and calculates the next accumulator value.
 */
@sample samples.collections.Collections.Aggregates.reduce
public inline fun IntArray.reduce(operation: (acc: Int, Int) -> Int): Int {
    if (isEmpty())
        throw UnsupportedOperationException("Empty array can't be reduced.")
    var accumulator = this[0]
    for (index in 1..lastIndex) {
        accumulator = operation(accumulator, this[index])
    }
    return accumulator
}

/**
 * Accumulates value starting with the first element and applying [operation] from left to right
 * to current accumulator value and each element.
 * Throws an exception if this array is empty.
 * If the array can be empty in an expected way,
 * please use [reduceOrNull] instead.
 * It returns `null` when its receiver is empty.
 * @param [operation] function that takes current accumulator value and an element,
 * and calculates the next accumulator value.
 */
@sample samples.collections.Collections.Aggregates.reduce
public inline fun LongArray.reduce(operation: (acc: Long, Long) -> Long): Long {
    if (isEmpty())
        throw UnsupportedOperationException("Empty array can't be reduced.")
    var accumulator = this[0]
    for (index in 1..lastIndex) {
        accumulator = operation(accumulator, this[index])
    }
    return accumulator
}

/**
 * Accumulates value starting with the first element and applying [operation] from left to right
 * to current accumulator value and each element.
 * Throws an exception if this array is empty.
 * If the array can be empty in an expected way,
 * please use [reduceOrNull] instead.
 * It returns `null` when its receiver is empty.
 */

```

@param [operation] function that takes current accumulator value and an element,
 accumulator value.
 @sample samples.collections.Collections.Aggregates.reduce
 public inline fun FloatArray.reduce(operation: (acc: Float, Float) -> Float): Float {
 if (isEmpty()) throw
 UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(accumulator, this[index])
 }
 return accumulator
 }
 Accumulates value starting with the first element and applying [operation] from left to right
 to current accumulator value and each element.
 Throws an exception if this array is empty. If the array can be empty
 in an expected way, please use [reduceOrNull] instead. It returns `null` when its receiver is empty.

@param [operation] function that takes current accumulator value and an element,
 accumulator value.
 @sample samples.collections.Collections.Aggregates.reduce
 public inline fun DoubleArray.reduce(operation: (acc: Double, Double) -> Double): Double {
 if (isEmpty()) throw
 UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(accumulator, this[index])
 }
 return accumulator
 }
 Accumulates value starting with the first element and applying [operation] from left to right
 to current accumulator value and each element.
 Throws an exception if this array is empty. If the array can be empty
 in an expected way, please use [reduceOrNull] instead. It returns `null` when its receiver is empty.

@param [operation] function that takes current accumulator value and an element,
 accumulator value.
 @sample samples.collections.Collections.Aggregates.reduce
 public inline fun BooleanArray.reduce(operation: (acc: Boolean, Boolean) -> Boolean): Boolean {
 if (isEmpty()) throw
 UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(accumulator, this[index])
 }
 return accumulator
 }
 Accumulates value starting with the first element and applying [operation] from left to right
 to current accumulator value and each element.
 Throws an exception if this array is empty. If the array can be empty
 in an expected way, please use [reduceOrNull] instead. It returns `null` when its receiver is empty.

@param [operation] function that takes current accumulator value and an element,
 accumulator value.
 @sample samples.collections.Collections.Aggregates.reduce
 public inline fun CharArray.reduce(operation: (acc: Char, Char) -> Char): Char {
 if (isEmpty()) throw
 UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(accumulator, this[index])
 }
 return accumulator
 }
 Accumulates value starting with the first element and applying [operation] from left to right
 to current accumulator value and each element with its index in the original array.
 Throws an exception if this array is empty. If the array can be empty in an expected way,
 please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.

@param [operation] function that takes the index of an element, current
 accumulator value and the element itself,
 accumulator value.
 @sample samples.collections.Collections.Aggregates.reduce
 public inline fun <S, T : S> Array<out T>.reduceIndexed(operation: (index: Int, acc: S, T) -> S): S {
 if (isEmpty()) throw
 UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator: S = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(index, accumulator, this[index])
 }
 return accumulator
 }
 Accumulates value starting with the first element and applying [operation] from left to
 right to current accumulator value and each element with its index in the original array.
 Throws an exception if this array is empty. If the array can be empty in an expected way,
 please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.

@param [operation] function that takes the index of an
 element, current accumulator value and the element itself,
 accumulator value.
 @sample samples.collections.Collections.Aggregates.reduce
 public inline fun ByteArray.reduceIndexed(operation: (index: Int, acc: Byte, Byte) -> Byte): Byte {
 if (isEmpty()) throw
 UnsupportedOperationException("Empty array can't be reduced.")
 var accumulator = this[0]
 for (index in 1..lastIndex) {
 accumulator = operation(index, accumulator, this[index])
 }
 return accumulator
 }
 Accumulates value starting with the first element and applying [operation] from left to

right\n * to current accumulator value and each element with its index in the original array.\n * \n * Throws an exception if this array is empty. If the array can be empty in an expected way,\n * please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value and the element itself,\n * and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduce\n * ^\npublic inline fun

ShortArray.reduceIndexed(operation: (index: Int, acc: Short, Short) -> Short): Short {\n if (isEmpty())\n throw UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator = this[0]\n for (index in 1..lastIndex) {\n accumulator = operation(index, accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * \n * Throws an exception if this array is empty. If the array can be empty in an expected way,\n * please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value and the element itself,\n * and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduce\n * ^\npublic inline fun

IntArray.reduceIndexed(operation: (index: Int, acc: Int, Int) -> Int): Int {\n if (isEmpty())\n throw UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator = this[0]\n for (index in 1..lastIndex) {\n accumulator = operation(index, accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * \n * Throws an exception if this array is empty. If the array can be empty in an expected way,\n * please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value and the element itself,\n * and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduce\n * ^\npublic inline fun

LongArray.reduceIndexed(operation: (index: Int, acc: Long, Long) -> Long): Long {\n if (isEmpty())\n throw UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator = this[0]\n for (index in 1..lastIndex) {\n accumulator = operation(index, accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * \n * Throws an exception if this array is empty. If the array can be empty in an expected way,\n * please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value and the element itself,\n * and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduce\n * ^\npublic inline fun

FloatArray.reduceIndexed(operation: (index: Int, acc: Float, Float) -> Float): Float {\n if (isEmpty())\n throw UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator = this[0]\n for (index in 1..lastIndex) {\n accumulator = operation(index, accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * \n * Throws an exception if this array is empty. If the array can be empty in an expected way,\n * please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value and the element itself,\n * and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduce\n * ^\npublic inline fun

DoubleArray.reduceIndexed(operation: (index: Int, acc: Double, Double) -> Double): Double {\n if (isEmpty())\n throw UnsupportedOperationException("Empty array can't be reduced.")\n var accumulator = this[0]\n for (index in 1..lastIndex) {\n accumulator = operation(index, accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * \n * Throws an exception if this array is empty. If the array can be empty in an expected way,\n * please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param [operation] function that takes the index of an

element, current accumulator value and the element itself, and calculates the next accumulator value.

```

@sample samples.collections.Collections.Aggregates.reduce
BooleanArray.reduceIndexed(operation: (index: Int, acc: Boolean, Boolean) -> Boolean): Boolean {
    if (isEmpty())
        throw UnsupportedOperationException("Empty array can't be reduced.")
    var accumulator = this[0]
    for (index in 1..lastIndex) {
        accumulator = operation(index, accumulator, this[index])
    }
    return accumulator
}

```

Accumulates value starting with the first element and applying [operation] from left to right to current accumulator value and each element with its index in the original array. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.

```

@param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.
@sample samples.collections.Collections.Aggregates.reduce
CharArray.reduceIndexed(operation: (index: Int, acc: Char, Char) -> Char): Char {
    if (isEmpty())
        throw UnsupportedOperationException("Empty array can't be reduced.")
    var accumulator = this[0]
    for (index in 1..lastIndex) {
        accumulator = operation(index, accumulator, this[index])
    }
    return accumulator
}

```

Accumulates value starting with the first element and applying [operation] from left to right to current accumulator value and each element with its index in the original array. Returns `null` if the array is empty.

```

@param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.
@sample samples.collections.Collections.Aggregates.reduceOrNull
@SinceKotlin("1.4")
public inline fun <S, T : S> Array<out T>.reduceIndexedOrNull(operation: (index: Int, acc: S, T) -> S): S? {
    if (isEmpty())
        return null
    var accumulator: S = this[0]
    for (index in 1..lastIndex) {
        accumulator = operation(index, accumulator, this[index])
    }
    return accumulator
}

```

Accumulates value starting with the first element and applying [operation] from left to right to current accumulator value and each element with its index in the original array. Returns `null` if the array is empty.

```

@param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.
@sample samples.collections.Collections.Aggregates.reduceOrNull
@SinceKotlin("1.4")
public inline fun ByteArray.reduceIndexedOrNull(operation: (index: Int, acc: Byte, Byte) -> Byte): Byte? {
    if (isEmpty())
        return null
    var accumulator = this[0]
    for (index in 1..lastIndex) {
        accumulator = operation(index, accumulator, this[index])
    }
    return accumulator
}

```

Accumulates value starting with the first element and applying [operation] from left to right to current accumulator value and each element with its index in the original array. Returns `null` if the array is empty.

```

@param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.
@sample samples.collections.Collections.Aggregates.reduceOrNull
@SinceKotlin("1.4")
public inline fun ShortArray.reduceIndexedOrNull(operation: (index: Int, acc: Short, Short) -> Short): Short? {
    if (isEmpty())
        return null
    var accumulator = this[0]
    for (index in 1..lastIndex) {
        accumulator = operation(index, accumulator, this[index])
    }
    return accumulator
}

```

Accumulates value starting with the first element and applying [operation] from left to right to current accumulator value and each element with its index in the original array. Returns `null` if the array is empty.

```

@param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.
@sample samples.collections.Collections.Aggregates.reduceOrNull
@SinceKotlin("1.4")
public inline fun IntArray.reduceIndexedOrNull(operation: (index: Int, acc: Int, Int) -> Int): Int? {
    if (isEmpty())
        return null
    var accumulator = this[0]
    for (index in 1..lastIndex) {
        accumulator = operation(index, accumulator, this[index])
    }
    return accumulator
}

```

Accumulates value starting with the first element and applying [operation] from left to right to current accumulator value and each element with its index in the original array. Returns `null` if the array is empty.

```

@param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value.
@sample samples.collections.Collections.Aggregates.reduceOrNull

```

```

*^@SinceKotlin("1.4")\npublic inline fun LongArray.reduceIndexedOrNull(operation: (index: Int, acc: Long, Long) -> Long): Long? {\n if (isEmpty())\n return null\n var accumulator = this[0]\n for (index in 1..lastIndex) {\n accumulator = operation(index, accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value and the element itself,\n * and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceOrNull\n */\n\n*^@SinceKotlin("1.4")\npublic inline fun FloatArray.reduceIndexedOrNull(operation: (index: Int, acc: Float, Float) -> Float): Float? {\n if (isEmpty())\n return null\n var accumulator = this[0]\n for (index in 1..lastIndex) {\n accumulator = operation(index, accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value and the element itself,\n * and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceOrNull\n */\n\n*^@SinceKotlin("1.4")\npublic inline fun DoubleArray.reduceIndexedOrNull(operation: (index: Int, acc: Double, Double) -> Double): Double? {\n if (isEmpty())\n return null\n var accumulator = this[0]\n for (index in 1..lastIndex) {\n accumulator = operation(index, accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value and the element itself,\n * and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceOrNull\n */\n\n*^@SinceKotlin("1.4")\npublic inline fun BooleanArray.reduceIndexedOrNull(operation: (index: Int, acc: Boolean, Boolean) -> Boolean): Boolean? {\n if (isEmpty())\n return null\n var accumulator = this[0]\n for (index in 1..lastIndex) {\n accumulator = operation(index, accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value and the element itself,\n * and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceOrNull\n */\n\n*^@SinceKotlin("1.4")\npublic inline fun CharArray.reduceIndexedOrNull(operation: (index: Int, acc: Char, Char) -> Char): Char? {\n if (isEmpty())\n return null\n var accumulator = this[0]\n for (index in 1..lastIndex) {\n accumulator = operation(index, accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation] from left to right\n * to current accumulator value and each element.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes current accumulator value and an element,\n * and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceOrNull\n */\n\n*^@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun <S, T : S> Array<out T>.reduceOrNull(operation: (acc: S, T) -> S): S? {\n if (isEmpty())\n return null\n var accumulator: S = this[0]\n for (index in 1..lastIndex) {\n accumulator = operation(accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation] from left to right\n * to current accumulator value and each element.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes current accumulator value and an element,\n * and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceOrNull\n */\n\n*^@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun ByteArray.reduceOrNull(operation: (acc: Byte, Byte) -> Byte): Byte? {\n if (isEmpty())\n return null\n var accumulator = this[0]\n for (index in 1..lastIndex) {\n accumulator = operation(accumulator, this[index])\n }\n return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation]

```

```

from left to right\n * to current accumulator value and each element.\n * \n * Returns `null` if the array is empty.\n *
\n * @param [operation] function that takes current accumulator value and an element,\n * and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceOrNull\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun
ShortArray.reduceOrNull(operation: (acc: Short, Short) -> Short): Short? {\n  if (isEmpty())\n    return null\n
var accumulator = this[0]\n  for (index in 1..lastIndex) {\n    accumulator = operation(accumulator, this[index])\n
  }\n  return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation]
from left to right\n * to current accumulator value and each element.\n * \n * Returns `null` if the array is empty.\n *
\n * @param [operation] function that takes current accumulator value and an element,\n * and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceOrNull\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun
IntArray.reduceOrNull(operation: (acc: Int, Int) -> Int): Int? {\n  if (isEmpty())\n    return null\n  var
accumulator = this[0]\n  for (index in 1..lastIndex) {\n    accumulator = operation(accumulator, this[index])\n
  }\n  return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation]
from left to right\n * to current accumulator value and each element.\n * \n * Returns `null` if the array is empty.\n *
\n * @param [operation] function that takes current accumulator value and an element,\n * and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceOrNull\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun
LongArray.reduceOrNull(operation: (acc: Long, Long) -> Long): Long? {\n  if (isEmpty())\n    return null\n
var accumulator = this[0]\n  for (index in 1..lastIndex) {\n    accumulator = operation(accumulator, this[index])\n
  }\n  return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation]
from left to right\n * to current accumulator value and each element.\n * \n * Returns `null` if the array is empty.\n *
\n * @param [operation] function that takes current accumulator value and an element,\n * and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceOrNull\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun
FloatArray.reduceOrNull(operation: (acc: Float, Float) -> Float): Float? {\n  if (isEmpty())\n    return null\n  var
accumulator = this[0]\n  for (index in 1..lastIndex) {\n    accumulator = operation(accumulator, this[index])\n
  }\n  return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation]
from left to right\n * to current accumulator value and each element.\n * \n * Returns `null` if the array is empty.\n *
\n * @param [operation] function that takes current accumulator value and an element,\n * and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceOrNull\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun
DoubleArray.reduceOrNull(operation: (acc: Double, Double) -> Double): Double? {\n  if (isEmpty())\n    return
null\n  var accumulator = this[0]\n  for (index in 1..lastIndex) {\n    accumulator = operation(accumulator,
this[index])\n  }\n  return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and
applying [operation] from left to right\n * to current accumulator value and each element.\n * \n * Returns `null` if
the array is empty.\n * \n * @param [operation] function that takes current accumulator value and an element,\n *
and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceOrNull\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun
BooleanArray.reduceOrNull(operation: (acc: Boolean, Boolean) -> Boolean): Boolean? {\n  if (isEmpty())\n    return
null\n  var accumulator = this[0]\n  for (index in 1..lastIndex) {\n    accumulator =
operation(accumulator, this[index])\n  }\n  return accumulator\n}\n\n/**\n * Accumulates value starting with the
first element and applying [operation] from left to right\n * to current accumulator value and each element.\n * \n *
Returns `null` if the array is empty.\n * \n * @param [operation] function that takes current accumulator value and
an element,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceOrNull\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun

```



```

CharArray.reduceOrNull(operation: (acc: Char, Char) -> Char): Char? {
    if (isEmpty()) return null
    var accumulator = this[0]
    for (index in 1..lastIndex) {
        accumulator = operation(accumulator, this[index])
    }
    return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element and current accumulator value. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightOrNull] instead. It returns `null` when its receiver is empty.
 @param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.
 @sample

```

samples.collections.Collections.Aggregates.reduceRight
public inline fun <S, T : S> Array<out T>.reduceRight(operation: (T, acc: S) -> S): S {
    var index = lastIndex
    if (index < 0) throw
    UnsupportedOperationException("Empty array can't be reduced.")
    var accumulator: S = get(index--)
    while (index >= 0) {
        accumulator = operation(get(index--), accumulator)
    }
    return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element and current accumulator value. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightOrNull] instead. It returns `null` when its receiver is empty.
 @param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.
 @sample

```

samples.collections.Collections.Aggregates.reduceRight
public inline fun ByteArray.reduceRight(operation: (Byte, acc: Byte) -> Byte): Byte {
    var index = lastIndex
    if (index < 0) throw
    UnsupportedOperationException("Empty array can't be reduced.")
    var accumulator = get(index--)
    while (index >= 0) {
        accumulator = operation(get(index--), accumulator)
    }
    return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element and current accumulator value. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightOrNull] instead. It returns `null` when its receiver is empty.
 @param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.
 @sample

```

samples.collections.Collections.Aggregates.reduceRight
public inline fun ShortArray.reduceRight(operation: (Short, acc: Short) -> Short): Short {
    var index = lastIndex
    if (index < 0) throw
    UnsupportedOperationException("Empty array can't be reduced.")
    var accumulator = get(index--)
    while (index >= 0) {
        accumulator = operation(get(index--), accumulator)
    }
    return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element and current accumulator value. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightOrNull] instead. It returns `null` when its receiver is empty.
 @param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.
 @sample

```

samples.collections.Collections.Aggregates.reduceRight
public inline fun IntArray.reduceRight(operation: (Int, acc: Int) -> Int): Int {
    var index = lastIndex
    if (index < 0) throw
    UnsupportedOperationException("Empty array can't be reduced.")
    var accumulator = get(index--)
    while (index >= 0) {
        accumulator = operation(get(index--), accumulator)
    }
    return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element and current accumulator value. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightOrNull] instead. It returns `null` when its receiver is empty.
 @param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.
 @sample

```

samples.collections.Collections.Aggregates.reduceRight
public inline fun LongArray.reduceRight(operation: (Long, acc: Long) -> Long): Long {
    var index = lastIndex
    if (index < 0) throw
    UnsupportedOperationException("Empty array can't be reduced.")
    var accumulator = get(index--)
    while (index >= 0) {
        accumulator = operation(get(index--), accumulator)
    }
    return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element and current accumulator value. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightOrNull] instead. It returns `null` when its receiver is empty.
 @param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.

and calculates the next accumulator value.

```

samples.collections.Collections.Aggregates.reduceRight
public inline fun FloatArray.reduceRight(operation: (Float, acc: Float) -> Float): Float {
    var index = lastIndex
    if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")
    var accumulator = get(index--)
    while (index >= 0) {
        accumulator = operation(get(index--), accumulator)
    }
    return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element and current accumulator value. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightOrNull] instead. It returns `null` when its receiver is empty.

@param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.

```

samples.collections.Collections.Aggregates.reduceRight
public inline fun DoubleArray.reduceRight(operation: (Double, acc: Double) -> Double): Double {
    var index = lastIndex
    if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")
    var accumulator = get(index--)
    while (index >= 0) {
        accumulator = operation(get(index--), accumulator)
    }
    return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element and current accumulator value. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightOrNull] instead. It returns `null` when its receiver is empty.

@param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.

```

samples.collections.Collections.Aggregates.reduceRight
public inline fun BooleanArray.reduceRight(operation: (Boolean, acc: Boolean) -> Boolean): Boolean {
    var index = lastIndex
    if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")
    var accumulator = get(index--)
    while (index >= 0) {
        accumulator = operation(get(index--), accumulator)
    }
    return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element and current accumulator value. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightOrNull] instead. It returns `null` when its receiver is empty.

@param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.

```

samples.collections.Collections.Aggregates.reduceRight
public inline fun CharArray.reduceRight(operation: (Char, acc: Char) -> Char): Char {
    var index = lastIndex
    if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")
    var accumulator = get(index--)
    while (index >= 0) {
        accumulator = operation(get(index--), accumulator)
    }
    return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element with its index in the original array and current accumulator value. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.

@param [operation] function that takes the index of an element, the element itself and current accumulator value, and calculates the next accumulator value.

```

samples.collections.Collections.Aggregates.reduceRight
public inline fun <S, T : S> Array<out T>.reduceRightIndexed(operation: (index: Int, T, acc: S) -> S): S {
    var index = lastIndex
    if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")
    var accumulator: S = get(index--)
    while (index >= 0) {
        accumulator = operation(index, get(index), accumulator)
        --index
    }
    return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element with its index in the original array and current accumulator value. Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.

@param [operation] function that takes the index of an element, the element itself and current accumulator value, and calculates the next accumulator value.

```

samples.collections.Collections.Aggregates.reduceRight
public inline fun ByteArray.reduceRightIndexed(operation: (index: Int, Byte, acc: Byte) -> Byte): Byte {
    var index = lastIndex
    if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")
    var

```

```

accumulator = get(index--)\n  while (index >= 0) {\n    accumulator = operation(index, get(index),
accumulator)\n    --index\n  }\n  return accumulator\n}\n\n/**\n * Accumulates value starting with the last
element and applying [operation] from right to left\n * to each element with its index in the original array and
current accumulator value.\n * \n * Throws an exception if this array is empty. If the array can be empty in an
expected way,\n * please use [reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n
* @param [operation] function that takes the index of an element, the element itself and current accumulator
value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRight\n */\n\npublic inline fun
ShortArray.reduceRightIndexed(operation: (index: Int, Short, acc: Short) -> Short): Short {\n  var index =
lastIndex\n  if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n  var
accumulator = get(index--)\n  while (index >= 0) {\n    accumulator = operation(index, get(index),
accumulator)\n    --index\n  }\n  return accumulator\n}\n\n/**\n * Accumulates value starting with the last
element and applying [operation] from right to left\n * to each element with its index in the original array and
current accumulator value.\n * \n * Throws an exception if this array is empty. If the array can be empty in an
expected way,\n * please use [reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n
* @param [operation] function that takes the index of an element, the element itself and current accumulator
value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRight\n */\n\npublic inline fun
IntArray.reduceRightIndexed(operation: (index: Int, Int, acc: Int) -> Int): Int {\n  var index = lastIndex\n  if (index
< 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n  var accumulator = get(index--)\n
while (index >= 0) {\n    accumulator = operation(index, get(index), accumulator)\n    --index\n  }\n  return
accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation] from right to
left\n * to each element with its index in the original array and current accumulator value.\n * \n * Throws an
exception if this array is empty. If the array can be empty in an expected way,\n * please use
[reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param [operation]
function that takes the index of an element, the element itself and current accumulator value,\n * and calculates the
next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceRight\n */\n\npublic
inline fun LongArray.reduceRightIndexed(operation: (index: Int, Long, acc: Long) -> Long): Long {\n  var index =
lastIndex\n  if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n  var
accumulator = get(index--)\n  while (index >= 0) {\n    accumulator = operation(index, get(index),
accumulator)\n    --index\n  }\n  return accumulator\n}\n\n/**\n * Accumulates value starting with the last
element and applying [operation] from right to left\n * to each element with its index in the original array and
current accumulator value.\n * \n * Throws an exception if this array is empty. If the array can be empty in an
expected way,\n * please use [reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n
* @param [operation] function that takes the index of an element, the element itself and current accumulator
value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRight\n */\n\npublic inline fun
FloatArray.reduceRightIndexed(operation: (index: Int, Float, acc: Float) -> Float): Float {\n  var index =
lastIndex\n  if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n  var
accumulator = get(index--)\n  while (index >= 0) {\n    accumulator = operation(index, get(index),
accumulator)\n    --index\n  }\n  return accumulator\n}\n\n/**\n * Accumulates value starting with the last
element and applying [operation] from right to left\n * to each element with its index in the original array and
current accumulator value.\n * \n * Throws an exception if this array is empty. If the array can be empty in an
expected way,\n * please use [reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n
* @param [operation] function that takes the index of an element, the element itself and current accumulator
value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRight\n */\n\npublic inline fun
DoubleArray.reduceRightIndexed(operation: (index: Int, Double, acc: Double) -> Double): Double {\n  var index =

```

```

lastIndex\n    if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n    var
accumulator = get(index--)\n    while (index >= 0) {\n        accumulator = operation(index, get(index),
accumulator)\n        --index\n    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with the last
element and applying [operation] from right to left\n * to each element with its index in the original array and
current accumulator value.\n * \n * Throws an exception if this array is empty. If the array can be empty in an
expected way,\n * please use [reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n *
@param [operation] function that takes the index of an element, the element itself and current accumulator
value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRight\n */\npublic inline fun
BooleanArray.reduceRightIndexed(operation: (index: Int, Boolean, acc: Boolean) -> Boolean): Boolean {\n    var
index = lastIndex\n    if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n    var
accumulator = get(index--)\n    while (index >= 0) {\n        accumulator = operation(index, get(index),
accumulator)\n        --index\n    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with the last
element and applying [operation] from right to left\n * to each element with its index in the original array and
current accumulator value.\n * \n * Throws an exception if this array is empty. If the array can be empty in an
expected way,\n * please use [reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n *
@param [operation] function that takes the index of an element, the element itself and current accumulator
value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRight\n */\npublic inline fun
CharArray.reduceRightIndexed(operation: (index: Int, Char, acc: Char) -> Char): Char {\n    var index = lastIndex\n
if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n    var accumulator =
get(index--)\n    while (index >= 0) {\n        accumulator = operation(index, get(index), accumulator)\n        --index\n
    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation]
from right to left\n * to each element with its index in the original array and current accumulator value.\n * \n *
Returns `null` if the array is empty.\n * \n * @param [operation] function that takes the index of an element, the
element itself and current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRightOrNull\n */\n@SinceKotlin("1.4")\npublic inline fun <S,
T : S> Array<out T>.reduceRightIndexedOrNull(operation: (index: Int, T, acc: S) -> S): S? {\n    var index =
lastIndex\n    if (index < 0) return null\n    var accumulator: S = get(index--)\n    while (index >= 0) {\n
accumulator = operation(index, get(index), accumulator)\n        --index\n    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation] from right to left\n * to each element with
its index in the original array and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n *
@param [operation] function that takes the index of an element, the element itself and current accumulator value,\n *
and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRightOrNull\n */\n@SinceKotlin("1.4")\npublic inline fun
ByteArray.reduceRightIndexedOrNull(operation: (index: Int, Byte, acc: Byte) -> Byte): Byte? {\n    var index =
lastIndex\n    if (index < 0) return null\n    var accumulator = get(index--)\n    while (index >= 0) {\n
accumulator = operation(index, get(index), accumulator)\n        --index\n    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation] from right to left\n * to each element with
its index in the original array and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n *
@param [operation] function that takes the index of an element, the element itself and current accumulator value,\n *
and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRightOrNull\n */\n@SinceKotlin("1.4")\npublic inline fun
ShortArray.reduceRightIndexedOrNull(operation: (index: Int, Short, acc: Short) -> Short): Short? {\n    var index =
lastIndex\n    if (index < 0) return null\n    var accumulator = get(index--)\n    while (index >= 0) {\n
accumulator = operation(index, get(index), accumulator)\n        --index\n    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation] from right to left\n * to each element with
its index in the original array and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n *

```

@param [operation] function that takes the index of an element, the element itself and current accumulator value, and calculates the next accumulator value. @sample

```

samples.collections.Collections.Aggregates.reduceRightOrNull<T>@SinceKotlin("1.4")\npublic inline fun
IntArray.reduceRightIndexedOrNull(operation: (index: Int, Int, acc: Int) -> Int): Int? {\n  var index = lastIndex\n
if (index < 0) return null\n  var accumulator = get(index--)\n  while (index >= 0) {\n    accumulator =
operation(index, get(index), accumulator)\n    --index\n  }\n  return accumulator\n}\n\n/**\n * Accumulates
value starting with the last element and applying [operation] from right to left\n * to each element with its index in
the original array and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n * @param
[operation] function that takes the index of an element, the element itself and current accumulator value,\n * and
calculates the next accumulator value.\n * \n * @sample

```

```

samples.collections.Collections.Aggregates.reduceRightOrNull<T>@SinceKotlin("1.4")\npublic inline fun
LongArray.reduceRightIndexedOrNull(operation: (index: Int, Long, acc: Long) -> Long): Long? {\n  var index =
lastIndex\n  if (index < 0) return null\n  var accumulator = get(index--)\n  while (index >= 0) {\n
accumulator = operation(index, get(index), accumulator)\n    --index\n  }\n  return accumulator\n}\n\n/**\n *
Accumulates value starting with the last element and applying [operation] from right to left\n * to each element with
its index in the original array and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n *
@param [operation] function that takes the index of an element, the element itself and current accumulator value,\n *
and calculates the next accumulator value.\n * \n * @sample

```

```

samples.collections.Collections.Aggregates.reduceRightOrNull<T>@SinceKotlin("1.4")\npublic inline fun
FloatArray.reduceRightIndexedOrNull(operation: (index: Int, Float, acc: Float) -> Float): Float? {\n  var index =
lastIndex\n  if (index < 0) return null\n  var accumulator = get(index--)\n  while (index >= 0) {\n
accumulator = operation(index, get(index), accumulator)\n    --index\n  }\n  return accumulator\n}\n\n/**\n *
Accumulates value starting with the last element and applying [operation] from right to left\n * to each element with
its index in the original array and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n *
@param [operation] function that takes the index of an element, the element itself and current accumulator value,\n *
and calculates the next accumulator value.\n * \n * @sample

```

```

samples.collections.Collections.Aggregates.reduceRightOrNull<T>@SinceKotlin("1.4")\npublic inline fun
DoubleArray.reduceRightIndexedOrNull(operation: (index: Int, Double, acc: Double) -> Double): Double? {\n  var
index = lastIndex\n  if (index < 0) return null\n  var accumulator = get(index--)\n  while (index >= 0) {\n
accumulator = operation(index, get(index), accumulator)\n    --index\n  }\n  return accumulator\n}\n\n/**\n *
Accumulates value starting with the last element and applying [operation] from right to left\n * to each element with
its index in the original array and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n *
@param [operation] function that takes the index of an element, the element itself and current accumulator value,\n *
and calculates the next accumulator value.\n * \n * @sample

```

```

samples.collections.Collections.Aggregates.reduceRightOrNull<T>@SinceKotlin("1.4")\npublic inline fun
BooleanArray.reduceRightIndexedOrNull(operation: (index: Int, Boolean, acc: Boolean) -> Boolean): Boolean? {\n
var index = lastIndex\n  if (index < 0) return null\n  var accumulator = get(index--)\n  while (index >= 0) {\n
accumulator = operation(index, get(index), accumulator)\n    --index\n  }\n  return accumulator\n}\n\n/**\n *
Accumulates value starting with the last element and applying [operation] from right to left\n * to each element with
its index in the original array and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n *
@param [operation] function that takes the index of an element, the element itself and current accumulator value,\n *
and calculates the next accumulator value.\n * \n * @sample

```

```

samples.collections.Collections.Aggregates.reduceRightOrNull<T>@SinceKotlin("1.4")\npublic inline fun
CharArray.reduceRightIndexedOrNull(operation: (index: Int, Char, acc: Char) -> Char): Char? {\n  var index =
lastIndex\n  if (index < 0) return null\n  var accumulator = get(index--)\n  while (index >= 0) {\n
accumulator = operation(index, get(index), accumulator)\n    --index\n  }\n  return accumulator\n}\n\n/**\n *
Accumulates value starting with the last element and applying [operation] from right to left\n * to each element and
current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that

```

takes an element and current accumulator value, \n * and calculates the next accumulator value. \n * \n * @sample
samples.collections.Collections.Aggregates.reduceRightOrNull\n

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun <S, T : S>  
Array<out T>.reduceRightOrNull(operation: (T, acc: S) -> S): S? {\n    var index = lastIndex\n    if (index < 0)  
return null\n    var accumulator: S = get(index--)\n    while (index >= 0) {\n        accumulator = operation(get(index--  
, accumulator)\n    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with the last element and  
applying [operation] from right to left\n * to each element and current accumulator value.\n * \n * Returns `null` if  
the array is empty.\n * \n * @param [operation] function that takes an element and current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample  
samples.collections.Collections.Aggregates.reduceRightOrNull\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun  
ByteArray.reduceRightOrNull(operation: (Byte, acc: Byte) -> Byte): Byte? {\n    var index = lastIndex\n    if (index  
< 0) return null\n    var accumulator = get(index--)\n    while (index >= 0) {\n        accumulator =  
operation(get(index--), accumulator)\n    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with the  
last element and applying [operation] from right to left\n * to each element and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes an element and current  
accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample  
samples.collections.Collections.Aggregates.reduceRightOrNull\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun  
ShortArray.reduceRightOrNull(operation: (Short, acc: Short) -> Short): Short? {\n    var index = lastIndex\n    if  
(index < 0) return null\n    var accumulator = get(index--)\n    while (index >= 0) {\n        accumulator =  
operation(get(index--), accumulator)\n    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with the  
last element and applying [operation] from right to left\n * to each element and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes an element and current  
accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample  
samples.collections.Collections.Aggregates.reduceRightOrNull\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun  
IntArray.reduceRightOrNull(operation: (Int, acc: Int) -> Int): Int? {\n    var index = lastIndex\n    if (index < 0)  
return null\n    var accumulator = get(index--)\n    while (index >= 0) {\n        accumulator = operation(get(index--),  
accumulator)\n    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with the last element and  
applying [operation] from right to left\n * to each element and current accumulator value.\n * \n * Returns `null` if  
the array is empty.\n * \n * @param [operation] function that takes an element and current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample  
samples.collections.Collections.Aggregates.reduceRightOrNull\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun  
LongArray.reduceRightOrNull(operation: (Long, acc: Long) -> Long): Long? {\n    var index = lastIndex\n    if  
(index < 0) return null\n    var accumulator = get(index--)\n    while (index >= 0) {\n        accumulator =  
operation(get(index--), accumulator)\n    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with the  
last element and applying [operation] from right to left\n * to each element and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes an element and current  
accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample  
samples.collections.Collections.Aggregates.reduceRightOrNull\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun  
FloatArray.reduceRightOrNull(operation: (Float, acc: Float) -> Float): Float? {\n    var index = lastIndex\n    if  
(index < 0) return null\n    var accumulator = get(index--)\n    while (index >= 0) {\n        accumulator =  
operation(get(index--), accumulator)\n    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with the  
last element and applying [operation] from right to left\n * to each element and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes an element and current
```

```

accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRightOrNull\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun
DoubleArray.reduceRightOrNull(operation: (Double, acc: Double) -> Double): Double? {\n  var index =
lastIndex\n  if (index < 0) return null\n  var accumulator = get(index--)\n  while (index >= 0) {\n
accumulator = operation(get(index--), accumulator)\n  }\n  return accumulator\n}\n\n/**\n * Accumulates value
starting with the last element and applying [operation] from right to left\n * to each element and current accumulator
value.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes an element and
current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRightOrNull\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun
BooleanArray.reduceRightOrNull(operation: (Boolean, acc: Boolean) -> Boolean): Boolean? {\n  var index =
lastIndex\n  if (index < 0) return null\n  var accumulator = get(index--)\n  while (index >= 0) {\n
accumulator = operation(get(index--), accumulator)\n  }\n  return accumulator\n}\n\n/**\n * Accumulates value
starting with the last element and applying [operation] from right to left\n * to each element and current accumulator
value.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes an element and
current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRightOrNull\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun
CharArray.reduceRightOrNull(operation: (Char, acc: Char) -> Char): Char? {\n  var index = lastIndex\n  if (index
< 0) return null\n  var accumulator = get(index--)\n  while (index >= 0) {\n    accumulator =
operation(get(index--), accumulator)\n  }\n  return accumulator\n}\n\n/**\n * Returns a list containing successive
accumulation values generated by applying [operation] from left to right\n * to each element and current
accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should
not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation]
function that takes current accumulator value and an element, and calculates the next accumulator value.\n * \n *
@sample samples.collections.Collections.Aggregates.runningFold\n
*\n@SinceKotlin("1.4")\npublic inline fun
<T, R> Array<out T>.runningFold(initial: R, operation: (acc: R, T) -> R): List<R> {\n  if (isEmpty()) return
listOf(initial)\n  val result = ArrayList<R>(size + 1).apply { add(initial) }\n  var accumulator = initial\n  for
(element in this) {\n    accumulator = operation(accumulator, element)\n    result.add(accumulator)\n  }\n  return result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying
[operation] from left to right\n * to each element and current accumulator value that starts with [initial] value.\n *
\n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the
previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value and an
element, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.runningFold\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R> ByteArray.runningFold(initial: R,
operation: (acc: R, Byte) -> R): List<R> {\n  if (isEmpty()) return listOf(initial)\n  val result = ArrayList<R>(size
+ 1).apply { add(initial) }\n  var accumulator = initial\n  for (element in this) {\n    accumulator =
operation(accumulator, element)\n    result.add(accumulator)\n  }\n  return result\n}\n\n/**\n * Returns a list
containing successive accumulation values generated by applying [operation] from left to right\n * to each element
and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation]
function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param
[operation] function that takes current accumulator value and an element, and calculates the next accumulator
value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R> ShortArray.runningFold(initial: R,
operation: (acc: R, Short) -> R): List<R> {\n  if (isEmpty()) return listOf(initial)\n  val result = ArrayList<R>(size
+ 1).apply { add(initial) }\n  var accumulator = initial\n  for (element in this) {\n    accumulator =

```

```

operation(accumulator, element)\n    result.add(accumulator)\n } \n return result\n}\n\n/**\n * Returns a list
containing successive accumulation values generated by applying [operation] from left to right\n * to each element
and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation]
function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param
[operation] function that takes current accumulator value and an element, and calculates the next accumulator
value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R> IntArray.runningFold(initial: R,
operation: (acc: R, Int) -> R): List<R> {\n    if (isEmpty()) return listOf(initial)\n    val result = ArrayList<R>(size +
1).apply { add(initial) }\n    var accumulator = initial\n    for (element in this) {\n        accumulator =
operation(accumulator, element)\n        result.add(accumulator)\n    }\n    return result\n}\n\n/**\n * Returns a list
containing successive accumulation values generated by applying [operation] from left to right\n * to each element
and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation]
function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param
[operation] function that takes current accumulator value and an element, and calculates the next accumulator
value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R> LongArray.runningFold(initial: R,
operation: (acc: R, Long) -> R): List<R> {\n    if (isEmpty()) return listOf(initial)\n    val result = ArrayList<R>(size
+ 1).apply { add(initial) }\n    var accumulator = initial\n    for (element in this) {\n        accumulator =
operation(accumulator, element)\n        result.add(accumulator)\n    }\n    return result\n}\n\n/**\n * Returns a list
containing successive accumulation values generated by applying [operation] from left to right\n * to each element
and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation]
function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param
[operation] function that takes current accumulator value and an element, and calculates the next accumulator
value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R> FloatArray.runningFold(initial: R,
operation: (acc: R, Float) -> R): List<R> {\n    if (isEmpty()) return listOf(initial)\n    val result = ArrayList<R>(size
+ 1).apply { add(initial) }\n    var accumulator = initial\n    for (element in this) {\n        accumulator =
operation(accumulator, element)\n        result.add(accumulator)\n    }\n    return result\n}\n\n/**\n * Returns a list
containing successive accumulation values generated by applying [operation] from left to right\n * to each element
and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation]
function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param
[operation] function that takes current accumulator value and an element, and calculates the next accumulator
value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R> DoubleArray.runningFold(initial: R,
operation: (acc: R, Double) -> R): List<R> {\n    if (isEmpty()) return listOf(initial)\n    val result =
ArrayList<R>(size + 1).apply { add(initial) }\n    var accumulator = initial\n    for (element in this) {\n
accumulator = operation(accumulator, element)\n        result.add(accumulator)\n    }\n    return result\n}\n\n/**\n *
Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to
each element and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to
[operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n *
@param [operation] function that takes current accumulator value and an element, and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <R> BooleanArray.runningFold(initial:
R, operation: (acc: R, Boolean) -> R): List<R> {\n    if (isEmpty()) return listOf(initial)\n    val result =
ArrayList<R>(size + 1).apply { add(initial) }\n    var accumulator = initial\n    for (element in this) {\n
accumulator = operation(accumulator, element)\n        result.add(accumulator)\n    }\n    return result\n}\n\n/**\n *
Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to
each element and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to
[operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n *
@param [operation] function that takes current accumulator value and an element, and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n

```


[operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n * \n @SinceKotlin("1.4")\n @kotlin.internal.InlineOnly\n public inline fun <R> CharArray.runningFold(initial: R, operation: (acc: R, Char) -> R): List<R> {\n if (isEmpty()) return listOf(initial)\n val result = ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n for (element in this) {\n accumulator = operation(accumulator, element)\n result.add(accumulator)\n }\n return result\n }\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n * \n @SinceKotlin("1.4")\n public inline fun <T, R> Array<out T>.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, T) -> R): List<R> {\n if (isEmpty()) return listOf(initial)\n val result = ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n for (index in indices) {\n accumulator = operation(index, accumulator, this[index])\n result.add(accumulator)\n }\n return result\n }\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n * \n @SinceKotlin("1.4")\n @kotlin.internal.InlineOnly\n public inline fun <R> ByteArray.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, Byte) -> R): List<R> {\n if (isEmpty()) return listOf(initial)\n val result = ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n for (index in indices) {\n accumulator = operation(index, accumulator, this[index])\n result.add(accumulator)\n }\n return result\n }\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n * \n @SinceKotlin("1.4")\n @kotlin.internal.InlineOnly\n public inline fun <R> ShortArray.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, Short) -> R): List<R> {\n if (isEmpty()) return listOf(initial)\n val result = ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n for (index in indices) {\n accumulator = operation(index, accumulator, this[index])\n result.add(accumulator)\n }\n return result\n }\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n * \n @SinceKotlin("1.4")\n @kotlin.internal.InlineOnly\n public inline fun <R> IntArray.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, Int) -> R): List<R> {\n if (isEmpty()) return listOf(initial)\n val result = ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n for (index in indices) {\n accumulator = operation(index, accumulator, this[index])\n result.add(accumulator)\n }\n return result\n }\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original array and current accumulator value that

starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n * \n @SinceKotlin("1.4")\n @kotlin.internal.InlineOnly\n public inline fun <R>
LongArray.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, Long) -> R): List<R> {\n if (isEmpty())\n return listOf(initial)\n val result = ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n for (index in indices) {\n accumulator = operation(index, accumulator, this[index])\n result.add(accumulator)\n }\n return result\n}\n\n**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n * \n @SinceKotlin("1.4")\n @kotlin.internal.InlineOnly\n public inline fun <R>
FloatArray.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, Float) -> R): List<R> {\n if (isEmpty())\n return listOf(initial)\n val result = ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n for (index in indices) {\n accumulator = operation(index, accumulator, this[index])\n result.add(accumulator)\n }\n return result\n}\n\n**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n * \n @SinceKotlin("1.4")\n @kotlin.internal.InlineOnly\n public inline fun <R>
DoubleArray.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, Double) -> R): List<R> {\n if (isEmpty())\n return listOf(initial)\n val result = ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n for (index in indices) {\n accumulator = operation(index, accumulator, this[index])\n result.add(accumulator)\n }\n return result\n}\n\n**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n * \n @SinceKotlin("1.4")\n @kotlin.internal.InlineOnly\n public inline fun <R>
BooleanArray.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, Boolean) -> R): List<R> {\n if (isEmpty())\n return listOf(initial)\n val result = ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n for (index in indices) {\n accumulator = operation(index, accumulator, this[index])\n result.add(accumulator)\n }\n return result\n}\n\n**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n * \n @SinceKotlin("1.4")\n @kotlin.internal.InlineOnly\n public inline fun <R>
CharArray.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, Char) -> R): List<R> {\n if (isEmpty())\n return listOf(initial)\n val result = ArrayList<R>(size + 1).apply { add(initial) }\n var accumulator = initial\n for (index in indices) {\n accumulator = operation(index, accumulator, this[index])\n

```

result.add(accumulator)\n    }\n    return result\n}\n\n/**\n * Returns a list containing successive accumulation
values generated by applying [operation] from left to right\n * to each element and current accumulator value that
starts with the first element of this array.\n * \n * Note that `acc` value passed to [operation] function should not be
mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that
takes current accumulator value and the element, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.runningReduce\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun <S, T : S>
Array<out T>.runningReduce(operation: (acc: S, T) -> S): List<S> {\n    if (isEmpty()) return emptyList()\n    var
accumulator: S = this[0]\n    val result = ArrayList<S>(size).apply { add(accumulator) }\n    for (index in 1 until
size) {\n        accumulator = operation(accumulator, this[index])\n        result.add(accumulator)\n    }\n    return
result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from
left to right\n * to each element and current accumulator value that starts with the first element of this array.\n * \n *
@param [operation] function that takes current accumulator value and an element, and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningReduce\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.runningReduce(operation:
(acc: Byte, Byte) -> Byte): List<Byte> {\n    if (isEmpty()) return emptyList()\n    var accumulator = this[0]\n    val
result = ArrayList<Byte>(size).apply { add(accumulator) }\n    for (index in 1 until size) {\n        accumulator =
operation(accumulator, this[index])\n        result.add(accumulator)\n    }\n    return result\n}\n\n/**\n * Returns a list
containing successive accumulation values generated by applying [operation] from left to right\n * to each element
and current accumulator value that starts with the first element of this array.\n * \n * @param [operation] function
that takes current accumulator value and an element, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.runningReduce\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.runningReduce(operation:
(acc: Short, Short) -> Short): List<Short> {\n    if (isEmpty()) return emptyList()\n    var accumulator = this[0]\n
val result = ArrayList<Short>(size).apply { add(accumulator) }\n    for (index in 1 until size) {\n        accumulator =
operation(accumulator, this[index])\n        result.add(accumulator)\n    }\n    return result\n}\n\n/**\n * Returns a list
containing successive accumulation values generated by applying [operation] from left to right\n * to each element
and current accumulator value that starts with the first element of this array.\n * \n * @param [operation] function
that takes current accumulator value and an element, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.runningReduce\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.runningReduce(operation: (acc:
Int, Int) -> Int): List<Int> {\n    if (isEmpty()) return emptyList()\n    var accumulator = this[0]\n    val result =
ArrayList<Int>(size).apply { add(accumulator) }\n    for (index in 1 until size) {\n        accumulator =
operation(accumulator, this[index])\n        result.add(accumulator)\n    }\n    return result\n}\n\n/**\n * Returns a list
containing successive accumulation values generated by applying [operation] from left to right\n * to each element
and current accumulator value that starts with the first element of this array.\n * \n * @param [operation] function
that takes current accumulator value and an element, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.runningReduce\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.runningReduce(operation:
(acc: Long, Long) -> Long): List<Long> {\n    if (isEmpty()) return emptyList()\n    var accumulator = this[0]\n
val result = ArrayList<Long>(size).apply { add(accumulator) }\n    for (index in 1 until size) {\n        accumulator =
operation(accumulator, this[index])\n        result.add(accumulator)\n    }\n    return result\n}\n\n/**\n * Returns a list
containing successive accumulation values generated by applying [operation] from left to right\n * to each element
and current accumulator value that starts with the first element of this array.\n * \n * @param [operation] function
that takes current accumulator value and an element, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.runningReduce\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.runningReduce(operation:
(acc: Float, Float) -> Float): List<Float> {\n    if (isEmpty()) return emptyList()\n    var accumulator = this[0]\n    val

```

result = ArrayList<Float>(size).apply { add(accumulator) } for (index in 1 until size) { accumulator = operation(accumulator, this[index]) result.add(accumulator) } return result

* Returns a list containing successive accumulation values generated by applying [operation] from left to right * to each element and current accumulator value that starts with the first element of this array.

* @param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.

@sample samples.collections.Collections.Aggregates.runningReduce

```
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.runningReduce(operation: (acc: Double, Double) -> Double): List<Double> {\n    if (isEmpty()) return emptyList()\n    var accumulator = this[0]\n    val result = ArrayList<Double>(size).apply { add(accumulator) } for (index in 1 until size) {\n        accumulator = operation(accumulator, this[index])\n        result.add(accumulator)\n    }\n    return result\n}
```

* Returns a list containing successive accumulation values generated by applying [operation] from left to right * to each element and current accumulator value that starts with the first element of this array.

* @param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.

@sample samples.collections.Collections.Aggregates.runningReduce

```
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.runningReduce(operation: (acc: Boolean, Boolean) -> Boolean): List<Boolean> {\n    if (isEmpty()) return emptyList()\n    var accumulator = this[0]\n    val result = ArrayList<Boolean>(size).apply { add(accumulator) } for (index in 1 until size) {\n        accumulator = operation(accumulator, this[index])\n        result.add(accumulator)\n    }\n    return result\n}
```

* Returns a list containing successive accumulation values generated by applying [operation] from left to right * to each element and current accumulator value that starts with the first element of this array.

* @param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.

@sample samples.collections.Collections.Aggregates.runningReduce

```
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.runningReduce(operation: (acc: Char, Char) -> Char): List<Char> {\n    if (isEmpty()) return emptyList()\n    var accumulator = this[0]\n    val result = ArrayList<Char>(size).apply { add(accumulator) } for (index in 1 until size) {\n        accumulator = operation(accumulator, this[index])\n        result.add(accumulator)\n    }\n    return result\n}
```

* Returns a list containing successive accumulation values generated by applying [operation] from left to right * to each element, its index in the original array and current accumulator value that starts with the first element of this array.

* Note that `acc` value passed to [operation] function should not be mutated; otherwise it would affect the previous value in resulting list.

* @param [operation] function that takes the index of an element, current accumulator value * and the element itself, and calculates the next accumulator value.

@sample samples.collections.Collections.Aggregates.runningReduce

```
*\n@SinceKotlin("1.4")\npublic inline fun <S, T : S> Array<out T>.runningReduceIndexed(operation: (index: Int, acc: S, T) -> S): List<S> {\n    if (isEmpty()) return emptyList()\n    var accumulator: S = this[0]\n    val result = ArrayList<S>(size).apply { add(accumulator) } for (index in 1 until size) {\n        accumulator = operation(index, accumulator, this[index])\n        result.add(accumulator)\n    }\n    return result\n}
```

* Returns a list containing successive accumulation values generated by applying [operation] from left to right * to each element, its index in the original array and current accumulator value that starts with the first element of this array.

* @param [operation] function that takes the index of an element, current accumulator value * and the element itself, and calculates the next accumulator value.

@sample samples.collections.Collections.Aggregates.runningReduce

```
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.runningReduceIndexed(operation: (index: Int, acc: Byte, Byte) -> Byte): List<Byte> {\n    if (isEmpty()) return emptyList()\n    var accumulator = this[0]\n    val result = ArrayList<Byte>(size).apply { add(accumulator) } for (index in 1 until size) {\n        accumulator = operation(index, accumulator, this[index])\n        result.add(accumulator)\n    }\n    return result\n}
```

* Returns a list containing successive accumulation values generated by applying [operation] from left to right * to each element, its index in the original array and current accumulator value that starts with the first element of this array.

* @param [operation] function that takes the index of an element, current accumulator value * and the element itself, and calculates the next

```

accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningReduce\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun
ShortArray.runningReduceIndexed(operation: (index: Int, acc: Short, Short) -> Short): List<Short> {\n if
(isEmpty()) return emptyList()\n var accumulator = this[0]\n val result = ArrayList<Short>(size).apply {
add(accumulator) }\n for (index in 1 until size) {\n accumulator = operation(index, accumulator, this[index])\n
result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation
values generated by applying [operation] from left to right\n * to each element, its index in the original array and
current accumulator value that starts with the first element of this array.\n * \n * @param [operation] function that
takes the index of an element, current accumulator value\n * and the element itself, and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningReduce\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun
IntArray.runningReduceIndexed(operation: (index: Int, acc: Int, Int) -> Int): List<Int> {\n if (isEmpty()) return
emptyList()\n var accumulator = this[0]\n val result = ArrayList<Int>(size).apply { add(accumulator) }\n for
(index in 1 until size) {\n accumulator = operation(index, accumulator, this[index])\n
result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation
values generated by applying [operation] from left to right\n * to each element, its index in the original array and
current accumulator value that starts with the first element of this array.\n * \n * @param [operation] function that
takes the index of an element, current accumulator value\n * and the element itself, and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningReduce\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun
LongArray.runningReduceIndexed(operation: (index: Int, acc: Long, Long) -> Long): List<Long> {\n if
(isEmpty()) return emptyList()\n var accumulator = this[0]\n val result = ArrayList<Long>(size).apply {
add(accumulator) }\n for (index in 1 until size) {\n accumulator = operation(index, accumulator, this[index])\n
result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation
values generated by applying [operation] from left to right\n * to each element, its index in the original array and
current accumulator value that starts with the first element of this array.\n * \n * @param [operation] function that
takes the index of an element, current accumulator value\n * and the element itself, and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningReduce\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun
FloatArray.runningReduceIndexed(operation: (index: Int, acc: Float, Float) -> Float): List<Float> {\n if
(isEmpty()) return emptyList()\n var accumulator = this[0]\n val result = ArrayList<Float>(size).apply {
add(accumulator) }\n for (index in 1 until size) {\n accumulator = operation(index, accumulator, this[index])\n
result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation
values generated by applying [operation] from left to right\n * to each element, its index in the original array and
current accumulator value that starts with the first element of this array.\n * \n * @param [operation] function that
takes the index of an element, current accumulator value\n * and the element itself, and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningReduce\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun
DoubleArray.runningReduceIndexed(operation: (index: Int, acc: Double, Double) -> Double): List<Double> {\n if
(isEmpty()) return emptyList()\n var accumulator = this[0]\n val result = ArrayList<Double>(size).apply {
add(accumulator) }\n for (index in 1 until size) {\n accumulator = operation(index, accumulator, this[index])\n
result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation
values generated by applying [operation] from left to right\n * to each element, its index in the original array and
current accumulator value that starts with the first element of this array.\n * \n * @param [operation] function that
takes the index of an element, current accumulator value\n * and the element itself, and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningReduce\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun
BooleanArray.runningReduceIndexed(operation: (index: Int, acc: Boolean, Boolean) -> Boolean): List<Boolean>

```

```

{\n  if (isEmpty()) return emptyList()\n  var accumulator = this[0]\n  val result =
ArrayList<Boolean>(size).apply { add(accumulator) }\n  for (index in 1 until size) {\n    accumulator =
operation(index, accumulator, this[index])\n    result.add(accumulator)\n  }\n  return result\n}\n\n/**\n *
Returns a list containing successive accumulation values generated by applying [operation] from left to right\n *
to each element, its index in the original array and current accumulator value that starts with the first element of this
array.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and
the element itself, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.runningReduce\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun
CharArray.runningReduceIndexed(operation: (index: Int, acc: Char, Char) -> Char): List<Char> {\n  if (isEmpty())
return emptyList()\n  var accumulator = this[0]\n  val result = ArrayList<Char>(size).apply { add(accumulator)
}\n  for (index in 1 until size) {\n    accumulator = operation(index, accumulator, this[index])\n
result.add(accumulator)\n  }\n  return result\n}\n\n/**\n * Returns a list containing successive accumulation
values generated by applying [operation] from left to right\n * to each element and current accumulator value that
starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n *
otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes current
accumulator value and an element, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.scan\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun <T, R>
Array<out T>.scan(initial: R, operation: (acc: R, T) -> R): List<R> {\n  return runningFold(initial,
operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation]
from left to right\n * to each element and current accumulator value that starts with [initial] value.\n * \n * Note that
`acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in
resulting list.\n * \n * @param [operation] function that takes current accumulator value and an element, and
calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npubli
c inline fun <R> ByteArray.scan(initial: R, operation: (acc: R, Byte) -> R): List<R> {\n  return runningFold(initial,
operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation]
from left to right\n * to each element and current accumulator value that starts with [initial] value.\n * \n * Note that
`acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in
resulting list.\n * \n * @param [operation] function that takes current accumulator value and an element, and
calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npubli
c inline fun <R> ShortArray.scan(initial: R, operation: (acc: R, Short) -> R): List<R> {\n  return
runningFold(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by
applying [operation] from left to right\n * to each element and current accumulator value that starts with [initial]
value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would
affect the previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value
and an element, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.scan\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npubli
c inline fun <R> IntArray.scan(initial: R, operation: (acc: R, Int) -> R): List<R> {\n  return runningFold(initial,
operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation]
from left to right\n * to each element and current accumulator value that starts with [initial] value.\n * \n * Note that
`acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in
resulting list.\n * \n * @param [operation] function that takes current accumulator value and an element, and
calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npubli

```

```

c inline fun <R> LongArray.scan(initial: R, operation: (acc: R, Long) -> R): List<R> {
    return
    runningFold(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by
    applying [operation] from left to right\n * to each element and current accumulator value that starts with [initial]
    value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would
    affect the previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value
    and an element, and calculates the next accumulator value.\n * \n * @sample
    samples.collections.Collections.Aggregates.scan\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
c inline fun <R> FloatArray.scan(initial: R, operation: (acc: R, Float) -> R): List<R> {
    return
    runningFold(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by
    applying [operation] from left to right\n * to each element and current accumulator value that starts with [initial]
    value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would
    affect the previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value
    and an element, and calculates the next accumulator value.\n * \n * @sample
    samples.collections.Collections.Aggregates.scan\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
c inline fun <R> DoubleArray.scan(initial: R, operation: (acc: R, Double) -> R): List<R> {
    return
    runningFold(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by
    applying [operation] from left to right\n * to each element and current accumulator value that starts with [initial]
    value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would
    affect the previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value
    and an element, and calculates the next accumulator value.\n * \n * @sample
    samples.collections.Collections.Aggregates.scan\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
c inline fun <R> BooleanArray.scan(initial: R, operation: (acc: R, Boolean) -> R): List<R> {
    return
    runningFold(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by
    applying [operation] from left to right\n * to each element and current accumulator value that starts with [initial]
    value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would
    affect the previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value
    and an element, and calculates the next accumulator value.\n * \n * @sample
    samples.collections.Collections.Aggregates.scan\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
c inline fun <R> CharArray.scan(initial: R, operation: (acc: R, Char) -> R): List<R> {
    return runningFold(initial,
    operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation]
    from left to right\n * to each element, its index in the original array and current accumulator value that starts with
    [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it
    would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an
    element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n *
    @sample samples.collections.Collections.Aggregates.scan\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun <T, R>
Array<out T>.scanIndexed(initial: R, operation: (index: Int, acc: R, T) -> R): List<R> {
    return
    runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values
    generated by applying [operation] from left to right\n * to each element, its index in the original array and current
    accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function
    should
    not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation]
    function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the
    next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic

```

```

c inline fun <R> ByteArray.scanIndexed(initial: R, operation: (index: Int, acc: R, Byte) -> R): List<R> {\n  return
runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values
generated by applying [operation] from left to right\n * to each element, its index in the original array and current
accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should
not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation]
function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the
next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
*\n*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npubli
c inline fun <R> ShortArray.scanIndexed(initial: R, operation: (index: Int, acc: R, Short) -> R): List<R> {\n  return
runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values
generated by applying [operation] from left to right\n * to each element, its index in the original array and current
accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should
not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation]
function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the
next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
*\n*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npubli
c inline fun <R> IntArray.scanIndexed(initial: R, operation: (index: Int, acc: R, Int) -> R): List<R> {\n  return
runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values
generated by applying [operation] from left to right\n * to each element, its index in the original array and current
accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should
not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation]
function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the
next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
*\n*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npubli
c inline fun <R> LongArray.scanIndexed(initial: R, operation: (index: Int, acc: R, Long) -> R): List<R> {\n  return
runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values
generated by applying [operation] from left to right\n * to each element, its index in the original array and current
accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should
not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation]
function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the
next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
*\n*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npubli
c inline fun <R> FloatArray.scanIndexed(initial: R, operation: (index: Int, acc: R, Float) -> R): List<R> {\n  return
runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values
generated by applying [operation] from left to right\n * to each element, its index in the original array and current
accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should
not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation]
function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the
next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
*\n*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npubli
c inline fun <R> DoubleArray.scanIndexed(initial: R, operation: (index: Int, acc: R, Double) -> R): List<R> {\n
return runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values
generated by applying [operation] from left to right\n * to each element, its index in the original array and current
accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should
not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation]
function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the
next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
*\n*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npubli

```



```

c inline fun <R> BooleanArray.scanIndexed(initial: R, operation: (index: Int, acc: R, Boolean) -> R): List<R> {\n
return runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values
generated by applying [operation] from left to right\n * to each element, its index in the original array and current
accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should
not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation]
function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the
next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
*/\n\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
c inline fun <R> CharArray.scanIndexed(initial: R, operation: (index: Int, acc: R, Char) -> R): List<R> {\n
return runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n */\n\n@Deprecated("Use sumOf instead.")\n
ReplaceWith("this.sumOf(selector)")\n\n@DeprecatedSinceKotlin(warningSince = "1.5")\n\npublic inline fun <T>
Array<out T>.sumBy(selector: (T) -> Int): Int {\n
var sum: Int = 0\n
for (element in this) {\n
sum +=
selector(element)\n
}\n
return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n */\n\n@Deprecated("Use sumOf instead.")\n
ReplaceWith("this.sumOf(selector)")\n\n@DeprecatedSinceKotlin(warningSince = "1.5")\n\npublic inline fun
ByteArray.sumBy(selector: (Byte) -> Int): Int {\n
var sum: Int = 0\n
for (element in this) {\n
sum +=
selector(element)\n
}\n
return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n */\n\n@Deprecated("Use sumOf instead.")\n
ReplaceWith("this.sumOf(selector)")\n\n@DeprecatedSinceKotlin(warningSince = "1.5")\n\npublic inline fun
ShortArray.sumBy(selector: (Short) -> Int): Int {\n
var sum: Int = 0\n
for (element in this) {\n
sum +=
selector(element)\n
}\n
return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n */\n\n@Deprecated("Use sumOf instead.")\n
ReplaceWith("this.sumOf(selector)")\n\n@DeprecatedSinceKotlin(warningSince = "1.5")\n\npublic inline fun
IntArray.sumBy(selector: (Int) -> Int): Int {\n
var sum: Int = 0\n
for (element in this) {\n
sum +=
selector(element)\n
}\n
return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n */\n\n@Deprecated("Use sumOf instead.")\n
ReplaceWith("this.sumOf(selector)")\n\n@DeprecatedSinceKotlin(warningSince = "1.5")\n\npublic inline fun
LongArray.sumBy(selector: (Long) -> Int): Int {\n
var sum: Int = 0\n
for (element in this) {\n
sum +=
selector(element)\n
}\n
return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n */\n\n@Deprecated("Use sumOf instead.")\n
ReplaceWith("this.sumOf(selector)")\n\n@DeprecatedSinceKotlin(warningSince = "1.5")\n\npublic inline fun
FloatArray.sumBy(selector: (Float) -> Int): Int {\n
var sum: Int = 0\n
for (element in this) {\n
sum +=
selector(element)\n
}\n
return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n */\n\n@Deprecated("Use sumOf instead.")\n
ReplaceWith("this.sumOf(selector)")\n\n@DeprecatedSinceKotlin(warningSince = "1.5")\n\npublic inline fun
DoubleArray.sumBy(selector: (Double) -> Int): Int {\n
var sum: Int = 0\n
for (element in this) {\n
sum +=
selector(element)\n
}\n
return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n */\n\n@Deprecated("Use sumOf instead.")\n
ReplaceWith("this.sumOf(selector)")\n\n@DeprecatedSinceKotlin(warningSince = "1.5")\n\npublic inline fun
BooleanArray.sumBy(selector: (Boolean) -> Int): Int {\n
var sum: Int = 0\n
for (element in this) {\n
sum +=
selector(element)\n
}\n
return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n */\n\n@Deprecated("Use sumOf instead.")\n
ReplaceWith("this.sumOf(selector)")\n\n@DeprecatedSinceKotlin(warningSince = "1.5")\n\npublic inline fun
CharArray.sumBy(selector: (Char) -> Int): Int {\n
var sum: Int = 0\n
for (element in this) {\n
sum +=
selector(element)\n
}\n
return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n */\n\n@Deprecated("Use sumOf instead.")\n
ReplaceWith("this.sumOf(selector)")\n\n@DeprecatedSinceKotlin(warningSince = "1.5")\n\npublic inline fun <T>

```

```

Array<out T>.sumByDouble(selector: (T) -> Double): Double {
    var sum: Double = 0.0
    for (element in this)
        sum += selector(element)
    return sum
}
// Returns the sum of all values produced by
// [selector] function applied to each element in the array.
// @Deprecated("Use sumOf instead.",
// ReplaceWith("this.sumOf(selector)"))
@DeprecatedSinceKotlin(warningSince = "1.5")
public inline fun
ByteArray.sumByDouble(selector: (Byte) -> Double): Double {
    var sum: Double = 0.0
    for (element in this)
        sum += selector(element)
    return sum
}
// Returns the sum of all values produced by
// [selector] function applied to each element in the array.
// @Deprecated("Use sumOf instead.",
// ReplaceWith("this.sumOf(selector)"))
@DeprecatedSinceKotlin(warningSince = "1.5")
public inline fun
ShortArray.sumByDouble(selector: (Short) -> Double): Double {
    var sum: Double = 0.0
    for (element in this)
        sum += selector(element)
    return sum
}
// Returns the sum of all values produced by
// [selector] function applied to each element in the array.
// @Deprecated("Use sumOf instead.",
// ReplaceWith("this.sumOf(selector)"))
@DeprecatedSinceKotlin(warningSince = "1.5")
public inline fun
IntArray.sumByDouble(selector: (Int) -> Double): Double {
    var sum: Double = 0.0
    for (element in this)
        sum += selector(element)
    return sum
}
// Returns the sum of all values produced by [selector]
// function applied to each element in the array.
// @Deprecated("Use sumOf instead.",
// ReplaceWith("this.sumOf(selector)"))
@DeprecatedSinceKotlin(warningSince = "1.5")
public inline fun
LongArray.sumByDouble(selector: (Long) -> Double): Double {
    var sum: Double = 0.0
    for (element in this)
        sum += selector(element)
    return sum
}
// Returns the sum of all values produced by
// [selector] function applied to each element in the array.
// @Deprecated("Use sumOf instead.",
// ReplaceWith("this.sumOf(selector)"))
@DeprecatedSinceKotlin(warningSince = "1.5")
public inline fun
FloatArray.sumByDouble(selector: (Float) -> Double): Double {
    var sum: Double = 0.0
    for (element in this)
        sum += selector(element)
    return sum
}
// Returns the sum of all values produced by
// [selector] function applied to each element in the array.
// @Deprecated("Use sumOf instead.",
// ReplaceWith("this.sumOf(selector)"))
@DeprecatedSinceKotlin(warningSince = "1.5")
public inline fun
DoubleArray.sumByDouble(selector: (Double) -> Double): Double {
    var sum: Double = 0.0
    for (element in
    this)
        sum += selector(element)
    return sum
}
// Returns the sum of all values produced by
// [selector] function applied to each element in the array.
// @Deprecated("Use sumOf instead.",
// ReplaceWith("this.sumOf(selector)"))
@DeprecatedSinceKotlin(warningSince = "1.5")
public inline fun
BooleanArray.sumByDouble(selector: (Boolean) -> Double): Double {
    var sum: Double = 0.0
    for (element
    in this)
        sum += selector(element)
    return sum
}
// Returns the sum of all values produced
// by [selector] function applied to each element in the array.
// @Deprecated("Use sumOf instead.",
// ReplaceWith("this.sumOf(selector)"))
@DeprecatedSinceKotlin(warningSince = "1.5")
public inline fun
CharArray.sumByDouble(selector: (Char) -> Double): Double {
    var sum: Double = 0.0
    for (element in this)
        sum += selector(element)
    return sum
}
// Returns the sum of all values produced by
// [selector] function applied to each element in the array.
// @SinceKotlin("1.4")
// @OptIn(kotlin.experimental.ExperimentalTypeInference::class)
// @OverloadResolution
// ByLambdaReturnType
// @kotlin.jvm.JvmName("sumOfDouble")
// @kotlin.internal.InlineOnly
public inline fun
<T> Array<out T>.sumOf(selector: (T) -> Double): Double {
    var sum: Double = 0.toDouble()
    for (element
    in this)
        sum += selector(element)
    return sum
}
// Returns the sum of all values produced
// by [selector] function applied to each element in the array.
// @SinceKotlin("1.4")
// @OptIn(kotlin.experimental.ExperimentalTypeInference::class)
// @OverloadResolution
// ByLambdaReturnType
// @kotlin.jvm.JvmName("sumOfDouble")
// @kotlin.internal.InlineOnly
public inline fun
ByteArray.sumOf(selector: (Byte) -> Double): Double {
    var sum: Double = 0.toDouble()
    for (element in
    this)
        sum += selector(element)
    return sum
}
// Returns the sum of all values produced by
// [selector] function applied to each element in the array.
// @SinceKotlin("1.4")
// @OptIn(kotlin.experimental.ExperimentalTypeInference::class)
// @OverloadResolution
// ByLambdaReturnType
// @kotlin.jvm.JvmName("sumOfDouble")
// @kotlin.internal.InlineOnly
public inline fun
ShortArray.sumOf(selector: (Short) -> Double): Double {
    var sum: Double = 0.toDouble()
    for (element in
    this)
        sum += selector(element)
    return sum
}
// Returns the sum of all values produced by
// [selector] function applied to each element in the array.

```

```

this) {\n    sum += selector(element)\n  }\n  return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each element in the array.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfDouble")\n@kotlin.internal.InlineOnly\npublic inline fun
IntArray.sumOf(selector: (Int) -> Double): Double {\n  var sum: Double = 0.toDouble()\n  for (element in this)
{\n    sum += selector(element)\n  }\n  return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each element in the array.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfDouble")\n@kotlin.internal.InlineOnly\npublic inline fun
LongArray.sumOf(selector: (Long) -> Double): Double {\n  var sum: Double = 0.toDouble()\n  for (element in
this) {\n    sum += selector(element)\n  }\n  return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each element in the array.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfDouble")\n@kotlin.internal.InlineOnly\npublic inline fun
FloatArray.sumOf(selector: (Float) -> Double): Double {\n  var sum: Double = 0.toDouble()\n  for (element in
this) {\n    sum += selector(element)\n  }\n  return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each element in the array.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfDouble")\n@kotlin.internal.InlineOnly\npublic inline fun
DoubleArray.sumOf(selector: (Double) -> Double): Double {\n  var sum: Double = 0.toDouble()\n  for (element
in this) {\n    sum += selector(element)\n  }\n  return sum\n}\n\n/**\n * Returns the sum of all values produced
by [selector] function applied to each element in the array.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfDouble")\n@kotlin.internal.InlineOnly\npublic inline fun
BooleanArray.sumOf(selector: (Boolean) -> Double): Double {\n  var sum: Double = 0.toDouble()\n  for
(element in this) {\n    sum += selector(element)\n  }\n  return sum\n}\n\n/**\n * Returns the sum of all values
produced by [selector] function applied to each element in the array.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfDouble")\n@kotlin.internal.InlineOnly\npublic inline fun
CharArray.sumOf(selector: (Char) -> Double): Double {\n  var sum: Double = 0.toDouble()\n  for (element in
this) {\n    sum += selector(element)\n  }\n  return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each element in the array.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfInt")\n@kotlin.internal.InlineOnly\npublic inline fun <T>
Array<out T>.sumOf(selector: (T) -> Int): Int {\n  var sum: Int = 0.toInt()\n  for (element in this) {\n    sum +=
selector(element)\n  }\n  return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfInt")\n@kotlin.internal.InlineOnly\npublic inline fun
ByteArray.sumOf(selector: (Byte) -> Int): Int {\n  var sum: Int = 0.toInt()\n  for (element in this) {\n    sum +=
selector(element)\n  }\n  return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfInt")\n@kotlin.internal.InlineOnly\npublic inline fun
ShortArray.sumOf(selector: (Short) -> Int): Int {\n  var sum: Int = 0.toInt()\n  for (element in this) {\n    sum +=
selector(element)\n  }\n  return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution

```

ByLambdaReturnType\n@kotlin.jvm.JvmName("\\sumOfInt\\")\n@kotlin.internal.InlineOnly\npublic inline fun
IntArray.sumOf(selector: (Int) -> Int): Int {\n var sum: Int = 0.toInt()\n for (element in this) {\n sum +=
selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\\sumOfInt\\")\n@kotlin.internal.InlineOnly\npublic inline fun
LongArray.sumOf(selector: (Long) -> Int): Int {\n var sum: Int = 0.toInt()\n for (element in this) {\n sum +=
selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\\sumOfInt\\")\n@kotlin.internal.InlineOnly\npublic inline fun
FloatArray.sumOf(selector: (Float) -> Int): Int {\n var sum: Int = 0.toInt()\n for (element in this) {\n sum +=
selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\\sumOfInt\\")\n@kotlin.internal.InlineOnly\npublic inline fun
DoubleArray.sumOf(selector: (Double) -> Int): Int {\n var sum: Int = 0.toInt()\n for (element in this) {\n sum +=
selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector]
function applied to each element in the array.\n

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\\sumOfInt\\")\n@kotlin.internal.InlineOnly\npublic inline fun
BooleanArray.sumOf(selector: (Boolean) -> Int): Int {\n var sum: Int = 0.toInt()\n for (element in this) {\n sum +=
selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector]
function applied to each element in the array.\n

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\\sumOfInt\\")\n@kotlin.internal.InlineOnly\npublic inline fun
CharArray.sumOf(selector: (Char) -> Int): Int {\n var sum: Int = 0.toInt()\n for (element in this) {\n sum +=
selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\\sumOfLong\\")\n@kotlin.internal.InlineOnly\npublic inline fun
<T> Array<out T>.sumOf(selector: (T) -> Long): Long {\n var sum: Long = 0.toLong()\n for (element in this)
{\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each element in the array.\n

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\\sumOfLong\\")\n@kotlin.internal.InlineOnly\npublic inline fun
ByteArray.sumOf(selector: (Byte) -> Long): Long {\n var sum: Long = 0.toLong()\n for (element in this) {\n sum +=
selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector]
function applied to each element in the array.\n

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\\sumOfLong\\")\n@kotlin.internal.InlineOnly\npublic inline fun
ShortArray.sumOf(selector: (Short) -> Long): Long {\n var sum: Long = 0.toLong()\n for (element in this) {\n sum +=
selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector]
function applied to each element in the array.\n

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\\sumOfLong\\")\n@kotlin.internal.InlineOnly\npublic inline fun
IntArray.sumOf(selector: (Int) -> Long): Long {\n var sum: Long = 0.toLong()\n for (element in this) {\n sum +=
selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector]

function applied to each element in the array.\n

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfLong")\n@kotlin.internal.InlineOnly\npublic inline fun\nLongArray.sumOf(selector: (Long) -> Long): Long {\n    var sum: Long = 0.toLong()\n    for (element in this) {\n        sum += selector(element)\n    }\n    return sum\n}\n/**\n * Returns the sum of all values produced by [selector]\nfunction applied to each element in the array.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfLong")\n@kotlin.internal.InlineOnly\npublic inline fun\nFloatArray.sumOf(selector: (Float) -> Long): Long {\n    var sum: Long = 0.toLong()\n    for (element in this) {\n        sum += selector(element)\n    }\n    return sum\n}\n/**\n * Returns the sum of all values produced by [selector]\nfunction applied to each element in the array.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfLong")\n@kotlin.internal.InlineOnly\npublic inline fun\nDoubleArray.sumOf(selector: (Double) -> Long): Long {\n    var sum: Long = 0.toLong()\n    for (element in this)\n    {\n        sum += selector(element)\n    }\n    return sum\n}\n/**\n * Returns the sum of all values produced by\n[selector] function applied to each element in the array.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfLong")\n@kotlin.internal.InlineOnly\npublic inline fun\nBooleanArray.sumOf(selector: (Boolean) -> Long): Long {\n    var sum: Long = 0.toLong()\n    for (element in this)\n    {\n        sum += selector(element)\n    }\n    return sum\n}\n/**\n * Returns the sum of all values produced by\n[selector] function applied to each element in the array.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfLong")\n@kotlin.internal.InlineOnly\npublic inline fun\nCharArray.sumOf(selector: (Char) -> Long): Long {\n    var sum: Long = 0.toLong()\n    for (element in this) {\n        sum += selector(element)\n    }\n    return sum\n}\n/**\n * Returns the sum of all values produced by [selector]\nfunction applied to each element in the array.\n
```

```
*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType\ns::class)\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.sumOf(selector: (T) -> UInt): UInt {\n    var sum: UInt = 0.toUInt()\n    for (element in this) {\n        sum += selector(element)\n    }\n    return\nsum\n}\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the\narray.\n
```

```
*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType\ns::class)\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.sumOf(selector: (Byte) -> UInt): UInt {\n    var\nsum: UInt = 0.toUInt()\n    for (element in this) {\n        sum += selector(element)\n    }\n    return sum\n}\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the array.\n
```

```
*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType\ns::class)\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.sumOf(selector: (Short) -> UInt): UInt {\n    var\nsum: UInt = 0.toUInt()\n    for (element in this) {\n        sum += selector(element)\n    }\n    return sum\n}\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the array.\n
```

```
*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType\ns::class)\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.sumOf(selector: (Int) -> UInt): UInt {\n    var\nsum: UInt = 0.toUInt()\n    for (element in this) {\n        sum += selector(element)\n    }\n    return sum\n}\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the array.\n
```

```
*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
```

```

ByLambdaReturnType\n@kotlin.jvm.JvmName("\sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType
s::class)\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.sumOf(selector: (Long) -> UInt): UInt {\n  var
sum: UInt = 0.toUInt()\n  for (element in this) {\n    sum += selector(element)\n  }\n  return sum\n}\n\n/*\n *
Returns the sum of all values produced by [selector] function applied to each element in the array.\n
*\n\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType
s::class)\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.sumOf(selector: (Float) -> UInt): UInt {\n  var
sum: UInt = 0.toUInt()\n  for (element in this) {\n    sum += selector(element)\n  }\n  return sum\n}\n\n/*\n *
Returns the sum of all values produced by [selector] function applied to each element in the array.\n
*\n\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType
s::class)\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.sumOf(selector: (Double) -> UInt): UInt {\n
var sum: UInt = 0.toUInt()\n  for (element in this) {\n    sum += selector(element)\n  }\n  return
sum\n}\n\n/*\n * Returns the sum of all values produced by [selector] function applied to each element in the
array.\n
*\n\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType
s::class)\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.sumOf(selector: (Boolean) -> UInt): UInt
{\n  var sum: UInt = 0.toUInt()\n  for (element in this) {\n    sum += selector(element)\n  }\n  return
sum\n}\n\n/*\n * Returns the sum of all values produced by [selector] function applied to each element in the
array.\n
*\n\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType
s::class)\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.sumOf(selector: (Char) -> UInt): UInt {\n  var
sum: UInt = 0.toUInt()\n  for (element in this) {\n    sum += selector(element)\n  }\n  return sum\n}\n\n/*\n *
Returns the sum of all values produced by [selector] function applied to each element in the array.\n
*\n\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\sumOfULong")\n@WasExperimental(ExperimentalUnsignedTy
pes::class)\n@kotlin.internal.InlineOnly\npublic inline fun <T> Array<out T>.sumOf(selector: (T) -> ULong):
ULong {\n  var sum: ULong = 0.toULong()\n  for (element in this) {\n    sum += selector(element)\n  }\n
return sum\n}\n\n/*\n * Returns the sum of all values produced by [selector] function applied to each element in
the array.\n
*\n\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\sumOfULong")\n@WasExperimental(ExperimentalUnsignedTy
pes::class)\n@kotlin.internal.InlineOnly\npublic inline fun ByteArray.sumOf(selector: (Byte) -> ULong): ULong
{\n  var sum: ULong = 0.toULong()\n  for (element in this) {\n    sum += selector(element)\n  }\n  return
sum\n}\n\n/*\n * Returns the sum of all values produced by [selector] function applied to each element in the
array.\n
*\n\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\sumOfULong")\n@WasExperimental(ExperimentalUnsignedTy
pes::class)\n@kotlin.internal.InlineOnly\npublic inline fun ShortArray.sumOf(selector: (Short) -> ULong): ULong
{\n  var sum: ULong = 0.toULong()\n  for (element in this) {\n    sum += selector(element)\n  }\n  return
sum\n}\n\n/*\n * Returns the sum of all values produced by [selector] function applied to each element in the
array.\n
*\n\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("\sumOfULong")\n@WasExperimental(ExperimentalUnsignedTy
pes::class)\n@kotlin.internal.InlineOnly\npublic inline fun IntArray.sumOf(selector: (Int) -> ULong): ULong {\n
var sum: ULong = 0.toULong()\n  for (element in this) {\n    sum += selector(element)\n  }\n  return

```

sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the array.\n

```

*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfULong")\n@WasExperimental(ExperimentalUnsignedTy
pes::class)\n@kotlin.internal.InlineOnly\npublic inline fun LongArray.sumOf(selector: (Long) -> ULong): ULong
{\n    var sum: ULong = 0.toULong()\n    for (element in this) {\n        sum += selector(element)\n    }\n    return
sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the
array.\n
```

```

*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfULong")\n@WasExperimental(ExperimentalUnsignedTy
pes::class)\n@kotlin.internal.InlineOnly\npublic inline fun FloatArray.sumOf(selector: (Float) -> ULong): ULong
{\n    var sum: ULong = 0.toULong()\n    for (element in this) {\n        sum += selector(element)\n    }\n    return
sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the
array.\n
```

```

*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfULong")\n@WasExperimental(ExperimentalUnsignedTy
pes::class)\n@kotlin.internal.InlineOnly\npublic inline fun DoubleArray.sumOf(selector: (Double) -> ULong):
ULong {\n    var sum: ULong = 0.toULong()\n    for (element in this) {\n        sum += selector(element)\n    }\n
return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in
the array.\n
```

```

*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfULong")\n@WasExperimental(ExperimentalUnsignedTy
pes::class)\n@kotlin.internal.InlineOnly\npublic inline fun BooleanArray.sumOf(selector: (Boolean) -> ULong):
ULong {\n    var sum: ULong = 0.toULong()\n    for (element in this) {\n        sum += selector(element)\n    }\n
return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in
the array.\n
```

```

*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfULong")\n@WasExperimental(ExperimentalUnsignedTy
pes::class)\n@kotlin.internal.InlineOnly\npublic inline fun CharArray.sumOf(selector: (Char) -> ULong): ULong
{\n    var sum: ULong = 0.toULong()\n    for (element in this) {\n        sum += selector(element)\n    }\n    return
sum\n}\n\n/**\n * Returns an original collection containing all the non-`null` elements, throwing an
[IllegalArgumentException] if there are any `null` elements.\n */\npublic fun <T : Any>
Array<T?>.requireNonNulls(): Array<T> {\n    for (element in this) {\n        if (element == null) {\n            throw
IllegalArgumentException("null element found in $this.")\n        }\n    }\n}
@Suppress("UNCHECKED_CAST")\nreturn this as Array<T>\n}\n\n/**\n * Splits the original array into pair
of lists,\n * where *first* list contains elements for which [predicate] yielded `true`,\n * while *second* list contains
elements for which [predicate] yielded `false`.\n * \n * @sample
samples.collections.Arrays.Transformations.partitionArrayOfPrimitives\n */\npublic inline fun <T> Array<out
T>.partition(predicate: (T) -> Boolean): Pair<List<T>, List<T>> {\n    val first = ArrayList<T>()\n    val second =
ArrayList<T>()\n    for (element in this) {\n        if (predicate(element)) {\n            first.add(element)\n        } else {\n
second.add(element)\n        }\n    }\n    return Pair(first, second)\n}\n\n/**\n * Splits the original array into pair
of lists,\n * where *first* list contains elements for which [predicate] yielded `true`,\n * while *second* list contains
elements for which [predicate] yielded `false`.\n * \n * @sample
samples.collections.Arrays.Transformations.partitionArrayOfPrimitives\n */\npublic inline fun
ByteArray.partition(predicate: (Byte) -> Boolean): Pair<List<Byte>, List<Byte>> {\n    val first =
ArrayList<Byte>()\n    val second = ArrayList<Byte>()\n    for (element in this) {\n        if (predicate(element)) {\n
first.add(element)\n        } else {\n            second.add(element)\n        }\n    }\n    return Pair(first,
second)\n}\n\n/**\n * Splits the original array into pair of lists,\n * where *first* list contains elements for which

```

```

[predicate] yielded `true`,\n * while *second* list contains elements for which [predicate] yielded `false`.\n * \n *
@sample samples.collections.Arrays.Transformations.partitionArrayOfPrimitives\n */\npublic inline fun
ShortArray.partition(predicate: (Short) -> Boolean): Pair<List<Short>, List<Short>> {\n    val first =
ArrayList<Short>()\n    val second = ArrayList<Short>()\n    for (element in this) {\n        if (predicate(element)) {\n
        first.add(element)\n        } else {\n            second.add(element)\n        }\n    }\n    return Pair(first,
second)\n}\n\n/**\n * Splits the original array into pair of lists,\n * where *first* list contains elements for which
[predicate] yielded `true`,\n * while *second* list contains elements for which [predicate] yielded `false`.\n * \n *
@sample samples.collections.Arrays.Transformations.partitionArrayOfPrimitives\n */\npublic inline fun
IntArray.partition(predicate: (Int) -> Boolean): Pair<List<Int>, List<Int>> {\n    val first = ArrayList<Int>()\n    val
second = ArrayList<Int>()\n    for (element in this) {\n        if (predicate(element)) {\n            first.add(element)\n
        }\n        else {\n            second.add(element)\n        }\n    }\n    return Pair(first, second)\n}\n\n/**\n * Splits the original
array into pair of lists,\n * where *first* list contains elements for which [predicate] yielded `true`,\n * while
*second* list contains elements for which [predicate] yielded `false`.\n * \n * @sample
samples.collections.Arrays.Transformations.partitionArrayOfPrimitives\n */\npublic inline fun
LongArray.partition(predicate: (Long) -> Boolean): Pair<List<Long>, List<Long>> {\n    val first =
ArrayList<Long>()\n    val second = ArrayList<Long>()\n    for (element in this) {\n        if (predicate(element)) {\n
        first.add(element)\n        } else {\n            second.add(element)\n        }\n    }\n    return Pair(first,
second)\n}\n\n/**\n * Splits the original array into pair of lists,\n * where *first* list contains elements for which
[predicate] yielded `true`,\n * while *second* list contains elements for which [predicate] yielded `false`.\n * \n *
@sample samples.collections.Arrays.Transformations.partitionArrayOfPrimitives\n */\npublic inline fun
FloatArray.partition(predicate: (Float) -> Boolean): Pair<List<Float>, List<Float>> {\n    val first =
ArrayList<Float>()\n    val second = ArrayList<Float>()\n    for (element in this) {\n        if (predicate(element)) {\n
        first.add(element)\n        } else {\n            second.add(element)\n        }\n    }\n    return Pair(first,
second)\n}\n\n/**\n * Splits the original array into pair of lists,\n * where *first* list contains elements for which
[predicate] yielded `true`,\n * while *second* list contains elements for which [predicate] yielded `false`.\n * \n *
@sample samples.collections.Arrays.Transformations.partitionArrayOfPrimitives\n */\npublic inline fun
DoubleArray.partition(predicate: (Double) -> Boolean): Pair<List<Double>, List<Double>> {\n    val first =
ArrayList<Double>()\n    val second = ArrayList<Double>()\n    for (element in this) {\n        if (predicate(element))
{\n            first.add(element)\n        }\n        else {\n            second.add(element)\n        }\n    }\n    return Pair(first,
second)\n}\n\n/**\n * Splits the original array into pair of lists,\n * where *first* list contains elements for which
[predicate] yielded `true`,\n * while *second* list contains elements for which [predicate] yielded `false`.\n * \n *
@sample samples.collections.Arrays.Transformations.partitionArrayOfPrimitives\n */\npublic inline fun
BooleanArray.partition(predicate: (Boolean) -> Boolean): Pair<List<Boolean>, List<Boolean>> {\n    val first =
ArrayList<Boolean>()\n    val second = ArrayList<Boolean>()\n    for (element in this) {\n        if
(predicate(element)) {\n            first.add(element)\n        }\n        else {\n            second.add(element)\n        }\n
    }\n    return Pair(first, second)\n}\n\n/**\n * Splits the original array into pair of lists,\n * where *first* list contains
elements for which [predicate] yielded `true`,\n * while *second* list contains elements for which [predicate]
yielded `false`.\n * \n * @sample samples.collections.Arrays.Transformations.partitionArrayOfPrimitives\n
*/\npublic inline fun CharArray.partition(predicate: (Char) -> Boolean): Pair<List<Char>, List<Char>> {\n    val
first = ArrayList<Char>()\n    val second = ArrayList<Char>()\n    for (element in this) {\n        if
(predicate(element)) {\n            first.add(element)\n        }\n        else {\n            second.add(element)\n        }\n
    }\n    return Pair(first, second)\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` array and the [other]
array with the same index.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n */\npublic infix fun <T, R> Array<out T>.zip(other:
Array<out R>): List<Pair<T, R>> {\n    return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs
built from the elements of `this` array and the [other] array with the same index.\n * The returned list has length of
the shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n */\npublic infix fun
<R> ByteArray.zip(other: Array<out R>): List<Pair<Byte, R>> {\n    return zip(other) { t1, t2 -> t1 to t2

```



```

}
}

Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.
The returned list has length of the shortest collection.
@sample
samples.collections.Iterables.Operations.zipIterable

public infix fun <R> ShortArray.zip(other: Array<out R>): List<Pair<Short, R>> {
    return zip(other) { t1, t2 -> t1 to t2 }
}

Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.
The returned list has length of the shortest collection.
@sample
samples.collections.Iterables.Operations.zipIterable

public infix fun <R> IntArray.zip(other: Array<out R>): List<Pair<Int, R>> {
    return zip(other) { t1, t2 -> t1 to t2 }
}

Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.
The returned list has length of the shortest collection.
@sample
samples.collections.Iterables.Operations.zipIterable

public infix fun <R> LongArray.zip(other: Array<out R>): List<Pair<Long, R>> {
    return zip(other) { t1, t2 -> t1 to t2 }
}

Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.
The returned list has length of the shortest collection.
@sample
samples.collections.Iterables.Operations.zipIterable

public infix fun <R> FloatArray.zip(other: Array<out R>): List<Pair<Float, R>> {
    return zip(other) { t1, t2 -> t1 to t2 }
}

Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.
The returned list has length of the shortest collection.
@sample
samples.collections.Iterables.Operations.zipIterable

public infix fun <R> DoubleArray.zip(other: Array<out R>): List<Pair<Double, R>> {
    return zip(other) { t1, t2 -> t1 to t2 }
}

Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.
The returned list has length of the shortest collection.
@sample
samples.collections.Iterables.Operations.zipIterable

public infix fun <R> BooleanArray.zip(other: Array<out R>): List<Pair<Boolean, R>> {
    return zip(other) { t1, t2 -> t1 to t2 }
}

Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.
The returned list has length of the shortest collection.
@sample
samples.collections.Iterables.Operations.zipIterable

public infix fun <R> CharArray.zip(other: Array<out R>): List<Pair<Char, R>> {
    return zip(other) { t1, t2 -> t1 to t2 }
}

Returns a list of values built from the elements of `this` array and the [other] array with the same index
using the provided [transform] function applied to each pair of elements.
The returned list has length of the shortest collection.
@sample
samples.collections.Iterables.Operations.zipIterableWithTransform

public inline fun <T, R, V> Array<out T>.zip(other: Array<out R>, transform: (a: T, b: R) -> V): List<V> {
    val size = minOf(size, other.size)
    val list = ArrayList<V>(size)
    for (i in 0 until size) {
        list.add(transform(this[i], other[i]))
    }
    return list
}

Returns a list of values built from the elements of `this` array and the [other] array with the same index
using the provided [transform] function applied to each pair of elements.
The returned list has length of the shortest collection.
@sample
samples.collections.Iterables.Operations.zipIterableWithTransform

public inline fun <R, V> ByteArray.zip(other: Array<out R>, transform: (a: Byte, b: R) -> V): List<V> {
    val size = minOf(size, other.size)
    val list = ArrayList<V>(size)
    for (i in 0 until size) {
        list.add(transform(this[i], other[i]))
    }
    return list
}

Returns a list of values built from the elements of `this` array and the [other] array with the same index
using the provided [transform] function applied to each pair of elements.
The returned list has length of the shortest collection.
@sample
samples.collections.Iterables.Operations.zipIterableWithTransform

public inline fun <R, V> ShortArray.zip(other: Array<out R>, transform: (a: Short, b: R) -> V): List<V> {
    val size = minOf(size, other.size)
    val list = ArrayList<V>(size)
    for (i in 0 until size) {
        list.add(transform(this[i], other[i]))
    }
    return list
}

Returns a list of values built from the elements of `this` array and the [other] array with the same index
using the provided [transform] function applied to each pair of elements.
The returned list has length of the shortest collection.
@sample
samples.collections.Iterables.Operations.zipIterableWithTransform

public inline fun <R, V> IntArray.zip(other: Array<out R>, transform: (a: Int, b: R) -> V): List<V> {
    val size = minOf(size, other.size)
    val list = ArrayList<V>(size)
    for (i in 0 until size) {
        list.add(transform(this[i], other[i]))
    }
    return list
}

Returns a list of values built from the elements of `this` array and the [other] array with the same

```

```

index\n * using the provided [transform] function applied to each pair of elements.\n * The returned list has length
of the shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\npublic inline fun <R, V> LongArray.zip(other: Array<out R>, transform: (a: Long, b: R) -> V): List<V> {\n
val size = minOf(size, other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n
list.add(transform(this[i], other[i]))\n } \n return list\n}\n\n/**\n * Returns a list of values built from the elements
of `this` array and the [other] array with the same index\n * using the provided [transform] function applied to each
pair of elements.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\npublic inline fun <R, V>
FloatArray.zip(other: Array<out R>, transform: (a: Float, b: R) -> V): List<V> {\n val size = minOf(size,
other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i], other[i]))\n
}\n return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array
with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned
list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\npublic inline fun <R, V>
DoubleArray.zip(other: Array<out R>, transform: (a: Double, b: R) -> V): List<V> {\n val size = minOf(size,
other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i], other[i]))\n
}\n return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array
with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned
list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\npublic inline fun <R, V>
BooleanArray.zip(other: Array<out R>, transform: (a: Boolean, b: R) -> V): List<V> {\n val size = minOf(size,
other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i], other[i]))\n
}\n return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array
with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned
list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\npublic inline fun <R, V>
CharArray.zip(other: Array<out R>, transform: (a: Char, b: R) -> V): List<V> {\n val size = minOf(size,
other.size)\n val list = ArrayList<V>(size)\n for (i in 0 until size) {\n list.add(transform(this[i], other[i]))\n
}\n return list\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` collection and [other] array with
the same index.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n
*\npublic infix fun <T, R> Array<out T>.zip(other:
Iterable<R>): List<Pair<T, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built
from the elements of `this` collection and [other] array with the same index.\n * The returned list has length of the
shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n
*\npublic infix fun <R>
ByteArray.zip(other: Iterable<R>): List<Pair<Byte, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n *
Returns a list of pairs built from the elements of `this` collection and [other] array with the same index.\n * The
returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n
*\npublic infix fun <R> ShortArray.zip(other: Iterable<R>):
List<Pair<Short, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from the
elements of `this` collection and [other] array with the same index.\n * The returned list has length of the shortest
collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n
*\npublic infix fun <R>
IntArray.zip(other: Iterable<R>): List<Pair<Int, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n *
Returns a list of pairs built from the elements of `this` collection and [other] array with the same index.\n * The
returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n
*\npublic infix fun <R> LongArray.zip(other: Iterable<R>):
List<Pair<Long, R>> {\n return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from the
elements of `this` collection and [other] array with the same index.\n * The returned list has length of the shortest
collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n
*\npublic infix fun <R>

```

```

FloatArray.zip(other: Iterable<R>): List<Pair<Float, R>> {\n  return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` collection and [other] array with the same index.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n */\npublic infix fun <R> DoubleArray.zip(other:
Iterable<R>): List<Pair<Double, R>> {\n  return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs
built from the elements of `this` collection and [other] array with the same index.\n * The returned list has length of
the shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n */\npublic infix fun
<R> BooleanArray.zip(other: Iterable<R>): List<Pair<Boolean, R>> {\n  return zip(other) { t1, t2 -> t1 to t2
}\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` collection and [other] array with the same
index.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n */\npublic infix fun <R> CharArray.zip(other: Iterable<R>):
List<Pair<Char, R>> {\n  return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of values built from the
elements of `this` array and the [other] collection with the same index\n * using the provided [transform] function
applied to each pair of elements.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n */\npublic inline fun <T, R, V> Array<out
T>.zip(other: Iterable<R>, transform: (a: T, b: R) -> V): List<V> {\n  val arraySize = size\n  val list =
ArrayList<V>(minOf(other.collectionSizeOrDefault(10), arraySize))\n  var i = 0\n  for (element in other) {\n
if (i >= arraySize) break\n    list.add(transform(this[i++], element))\n  }\n  return list\n}\n\n/**\n * Returns a
list of values built from the elements of `this` array and the [other] collection with the same index\n * using the
provided [transform] function applied to each pair of elements.\n * The returned list has length of the shortest
collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n */\npublic inline
fun <R, V> ByteArray.zip(other: Iterable<R>, transform: (a: Byte, b: R) -> V): List<V> {\n  val arraySize = size\n
val list = ArrayList<V>(minOf(other.collectionSizeOrDefault(10), arraySize))\n  var i = 0\n  for (element in
other) {\n    if (i >= arraySize) break\n    list.add(transform(this[i++], element))\n  }\n  return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] collection with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned list has length of the shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n */\npublic inline fun <R, V> ShortArray.zip(other: Iterable<R>, transform: (a: Short, b: R) -> V): List<V> {\n  val arraySize = size\n  val list = ArrayList<V>(minOf(other.collectionSizeOrDefault(10), arraySize))\n  var i = 0\n  for (element in other) {\n    if (i >= arraySize) break\n    list.add(transform(this[i++], element))\n  }\n  return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] collection with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n */\npublic inline fun <R, V>
IntArray.zip(other: Iterable<R>, transform: (a: Int, b: R) -> V): List<V> {\n  val arraySize = size\n  val list =
ArrayList<V>(minOf(other.collectionSizeOrDefault(10), arraySize))\n  var i = 0\n  for (element in other) {\n
if (i >= arraySize) break\n    list.add(transform(this[i++], element))\n  }\n  return list\n}\n\n/**\n * Returns a
list of values built from the elements of `this` array and the [other] collection with the same index\n * using the
provided [transform] function applied to each pair of elements.\n * The returned list has length of the shortest
collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n */\npublic inline
fun <R, V> LongArray.zip(other: Iterable<R>, transform: (a: Long, b: R) -> V): List<V> {\n  val arraySize =
size\n  val list = ArrayList<V>(minOf(other.collectionSizeOrDefault(10), arraySize))\n  var i = 0\n  for (element
in other) {\n    if (i >= arraySize) break\n    list.add(transform(this[i++], element))\n  }\n  return
list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] collection with the
same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned list has
length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n */\npublic inline fun <R, V>
FloatArray.zip(other: Iterable<R>, transform: (a: Float, b: R) -> V): List<V> {\n  val arraySize = size\n  val list =

```

```

ArrayList<V>(minOf(other.collectionSizeOrDefault(10), arraySize))\n  var i = 0\n  for (element in other) {\n
if (i >= arraySize) break\n    list.add(transform(this[i++], element))\n  }\n  return list\n}\n\n/**\n * Returns a
list of values built from the elements of `this` array and the [other] collection with the same index\n * using the
provided [transform] function applied to each pair of elements.\n * The returned list has length of the shortest
collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n */\npublic inline
fun <R, V> DoubleArray.zip(other: Iterable<R>, transform: (a: Double, b: R) -> V): List<V> {\n  val arraySize =
size\n  val list = ArrayList<V>(minOf(other.collectionSizeOrDefault(10), arraySize))\n  var i = 0\n  for (element
in other) {\n    if (i >= arraySize) break\n    list.add(transform(this[i++], element))\n  }\n  return
list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] collection with the
same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned list has
length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n */\npublic inline fun <R, V>
BooleanArray.zip(other: Iterable<R>, transform: (a: Boolean, b: R) -> V): List<V> {\n  val arraySize = size\n  val
list = ArrayList<V>(minOf(other.collectionSizeOrDefault(10), arraySize))\n  var i = 0\n  for (element in other)
{\n    if (i >= arraySize) break\n    list.add(transform(this[i++], element))\n  }\n  return list\n}\n\n/**\n *
Returns a list of values built from the elements of `this` array and the [other] collection with the same index\n *
using the provided [transform] function applied to each pair of elements.\n * The returned list has length of the
shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n */\npublic
inline fun <R, V> CharArray.zip(other: Iterable<R>, transform: (a: Char, b: R) -> V): List<V> {\n  val arraySize =
size\n  val list = ArrayList<V>(minOf(other.collectionSizeOrDefault(10), arraySize))\n  var i = 0\n  for (element
in other) {\n    if (i >= arraySize) break\n    list.add(transform(this[i++], element))\n  }\n  return
list\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` array and the [other] array with the same
index.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n */\npublic infix fun ByteArray.zip(other: ByteArray):
List<Pair<Byte, Byte>> {\n  return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from
the elements of `this` array and the [other] array with the same index.\n * The returned list has length of the
shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n */\npublic infix fun
ShortArray.zip(other: ShortArray): List<Pair<Short, Short>> {\n  return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n
* Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.\n * The
returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n */\npublic infix fun IntArray.zip(other: IntArray):
List<Pair<Int, Int>> {\n  return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from the
elements of `this` array and the [other] array with the same index.\n * The returned list has length of the
shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n */\npublic infix fun
LongArray.zip(other: LongArray): List<Pair<Long, Long>> {\n  return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n
* Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.\n * The
returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n */\npublic infix fun FloatArray.zip(other: FloatArray):
List<Pair<Float, Float>> {\n  return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from
the elements of `this` array and the [other] array with the same index.\n * The returned list has length of the
shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n */\npublic infix fun
DoubleArray.zip(other: DoubleArray): List<Pair<Double, Double>> {\n  return zip(other) { t1, t2 -> t1 to t2
}\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` array and the [other] array with the same
index.\n * The returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n */\npublic infix fun BooleanArray.zip(other: BooleanArray):
List<Pair<Boolean, Boolean>> {\n  return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built
from the elements of `this` array and the [other] array with the same index.\n * The returned list has length of the
shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n */\npublic infix fun

```

```

CharArray.zip(other: CharArray): List<Pair<Char, Char>> {\n  return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n *
Returns a list of values built from the elements of `this` array and the [other] array with the same index\n * using the
provided [transform] function applied to each pair of elements.\n * The returned list has length of the shortest
array.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n *\npublic inline fun
<V> ByteArray.zip(other: ByteArray, transform: (a: Byte, b: Byte) -> V): List<V> {\n  val size = minOf(size,
other.size)\n  val list = ArrayList<V>(size)\n  for (i in 0 until size) {\n    list.add(transform(this[i], other[i]))\n
}\n  return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array
with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned
list has length of the shortest array.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n *\npublic inline fun <V>
ShortArray.zip(other: ShortArray, transform: (a: Short, b: Short) -> V): List<V> {\n  val size = minOf(size,
other.size)\n  val list = ArrayList<V>(size)\n  for (i in 0 until size) {\n    list.add(transform(this[i], other[i]))\n
}\n  return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array
with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned
list has length of the shortest array.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n *\npublic inline fun <V> IntArray.zip(other:
IntArray, transform: (a: Int, b: Int) -> V): List<V> {\n  val size = minOf(size, other.size)\n  val list =
ArrayList<V>(size)\n  for (i in 0 until size) {\n    list.add(transform(this[i], other[i]))\n  }\n  return
list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array with the same
index\n * using the provided [transform] function applied to each pair of elements.\n * The returned list has length
of the shortest array.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\npublic inline fun <V> LongArray.zip(other: LongArray, transform: (a: Long, b: Long) -> V): List<V> {\n  val
size = minOf(size, other.size)\n  val list = ArrayList<V>(size)\n  for (i in 0 until size) {\n
list.add(transform(this[i], other[i]))\n  }\n  return list\n}\n\n/**\n * Returns a list of values built from the elements
of `this` array and the [other] array with the same index\n * using the provided [transform] function applied to each
pair of elements.\n * The returned list has length of the shortest array.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n *\npublic inline fun <V>
FloatArray.zip(other: FloatArray, transform: (a: Float, b: Float) -> V): List<V> {\n  val size = minOf(size,
other.size)\n  val list = ArrayList<V>(size)\n  for (i in 0 until size) {\n    list.add(transform(this[i], other[i]))\n
}\n  return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array
with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned
list has length of the shortest array.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n *\npublic inline fun <V>
DoubleArray.zip(other: DoubleArray, transform: (a: Double, b: Double) -> V): List<V> {\n  val size = minOf(size,
other.size)\n  val list = ArrayList<V>(size)\n  for (i in 0 until size) {\n    list.add(transform(this[i], other[i]))\n
}\n  return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array
with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned
list has length of the shortest array.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n *\npublic inline fun <V>
BooleanArray.zip(other: BooleanArray, transform: (a: Boolean, b: Boolean) -> V): List<V> {\n  val size =
minOf(size, other.size)\n  val list = ArrayList<V>(size)\n  for (i in 0 until size) {\n    list.add(transform(this[i],
other[i]))\n  }\n  return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the
[other] array with the same index\n * using the provided [transform] function applied to each pair of elements.\n *
The returned list has length of the shortest array.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n *\npublic inline fun <V>
CharArray.zip(other: CharArray, transform: (a: Char, b: Char) -> V): List<V> {\n  val size = minOf(size,
other.size)\n  val list = ArrayList<V>(size)\n  for (i in 0 until size) {\n    list.add(transform(this[i], other[i]))\n
}\n  return list\n}\n\n/**\n * Appends the string from all the elements separated using [separator] and using the

```

given [prefix] and [postfix] if supplied. \n * \n * If the collection could be huge, you can specify a non-negative value of [limit], in which case only the first [limit]\n * elements will be appended, followed by the [truncated] string (which defaults to "..."). \n * \n * @sample samples.collections.Collections.Transformations.joinTo\n * /\npublic fun <T, A : Appendable> Array<out T>.joinTo(buffer: A, separator: CharSequence = "\", \"", prefix: CharSequence = "\"", postfix: CharSequence = "\"", limit: Int = -1, truncated: CharSequence = "...\", transform: ((T) -> CharSequence)? = null): A {\n buffer.append(prefix)\n var count = 0\n for (element in this) {\n if (++count > 1) buffer.append(separator)\n if (limit < 0 || count <= limit) {\n buffer.appendElement(element, transform)\n } else break\n }\n if (limit >= 0 && count > limit) buffer.append(truncated)\n buffer.append(postfix)\n return buffer}\n\n/**\n * Appends the string from all the elements separated using [separator] and using the given [prefix] and [postfix] if supplied. \n * \n * If the collection could be huge, you can specify a non-negative value of [limit], in which case only the first [limit]\n * elements will be appended, followed by the [truncated] string (which defaults to "..."). \n * \n * @sample samples.collections.Collections.Transformations.joinTo\n * /\npublic fun <A : Appendable> ByteArray.joinTo(buffer: A, separator: CharSequence = "\", \"", prefix: CharSequence = "\"", postfix: CharSequence = "\"", limit: Int = -1, truncated: CharSequence = "...\", transform: ((Byte) -> CharSequence)? = null): A {\n buffer.append(prefix)\n var count = 0\n for (element in this) {\n if (++count > 1) buffer.append(separator)\n if (limit < 0 || count <= limit) {\n if (transform != null)\n buffer.append(transform(element))\n else\n buffer.append(element.toString())\n } else break\n }\n if (limit >= 0 && count > limit) buffer.append(truncated)\n buffer.append(postfix)\n return buffer}\n\n/**\n * Appends the string from all the elements separated using [separator] and using the given [prefix] and [postfix] if supplied. \n * \n * If the collection could be huge, you can specify a non-negative value of [limit], in which case only the first [limit]\n * elements will be appended, followed by the [truncated] string (which defaults to "..."). \n * \n * @sample samples.collections.Collections.Transformations.joinTo\n * /\npublic fun <A : Appendable> ShortArray.joinTo(buffer: A, separator: CharSequence = "\", \"", prefix: CharSequence = "\"", postfix: CharSequence = "\"", limit: Int = -1, truncated: CharSequence = "...\", transform: ((Short) -> CharSequence)? = null): A {\n buffer.append(prefix)\n var count = 0\n for (element in this) {\n if (++count > 1) buffer.append(separator)\n if (limit < 0 || count <= limit) {\n if (transform != null)\n buffer.append(transform(element))\n else\n buffer.append(element.toString())\n } else break\n }\n if (limit >= 0 && count > limit) buffer.append(truncated)\n buffer.append(postfix)\n return buffer}\n\n/**\n * Appends the string from all the elements separated using [separator] and using the given [prefix] and [postfix] if supplied. \n * \n * If the collection could be huge, you can specify a non-negative value of [limit], in which case only the first [limit]\n * elements will be appended, followed by the [truncated] string (which defaults to "..."). \n * \n * @sample samples.collections.Collections.Transformations.joinTo\n * /\npublic fun <A : Appendable> IntArray.joinTo(buffer: A, separator: CharSequence = "\", \"", prefix: CharSequence = "\"", postfix: CharSequence = "\"", limit: Int = -1, truncated: CharSequence = "...\", transform: ((Int) -> CharSequence)? = null): A {\n buffer.append(prefix)\n var count = 0\n for (element in this) {\n if (++count > 1) buffer.append(separator)\n if (limit < 0 || count <= limit) {\n if (transform != null)\n buffer.append(transform(element))\n else\n buffer.append(element.toString())\n } else break\n }\n if (limit >= 0 && count > limit) buffer.append(truncated)\n buffer.append(postfix)\n return buffer}\n\n/**\n * Appends the string from all the elements separated using [separator] and using the given [prefix] and [postfix] if supplied. \n * \n * If the collection could be huge, you can specify a non-negative value of [limit], in which case only the first [limit]\n * elements will be appended, followed by the [truncated] string (which defaults to "..."). \n * \n * @sample samples.collections.Collections.Transformations.joinTo\n * /\npublic fun <A : Appendable> LongArray.joinTo(buffer: A, separator: CharSequence = "\", \"", prefix: CharSequence = "\"", postfix: CharSequence = "\"", limit: Int = -1, truncated: CharSequence = "...\", transform: ((Long) -> CharSequence)? = null): A {\n buffer.append(prefix)\n var count = 0\n for (element in this) {\n if (++count > 1) buffer.append(separator)\n if (limit < 0 || count <= limit) {\n if (transform != null)\n buffer.append(transform(element))\n else\n buffer.append(element.toString())\n } else break\n }\n if (limit >= 0 && count > limit) buffer.append(truncated)\n buffer.append(postfix)\n return

buffer\n}\n\n/**\n * Appends the string from all the elements separated using [separator] and using the given [prefix] and [postfix] if supplied.\n * \n * If the collection could be huge, you can specify a non-negative value of [limit], in which case only the first [limit]\n * elements will be appended, followed by the [truncated] string (which defaults to \"...\").\n * \n * @sample samples.collections.Collections.Transformations.joinTo\n * /\npublic fun <A : Appendable> FloatArray.joinTo(buffer: A, separator: CharSequence = \", \", prefix: CharSequence = \"\", postfix: CharSequence = \"\", limit: Int = -1, truncated: CharSequence = \"...\", transform: ((Float) -> CharSequence)? = null): A {\n buffer.append(prefix)\n var count = 0\n for (element in this) {\n if (++count > 1)\n buffer.append(separator)\n if (limit < 0 || count <= limit) {\n if (transform != null)\n buffer.append(transform(element))\n else\n buffer.append(element.toString())\n } else break\n }\n if (limit >= 0 && count > limit) buffer.append(truncated)\n buffer.append(postfix)\n return\n}\n\n/**\n * Appends the string from all the elements separated using [separator] and using the given [prefix] and [postfix] if supplied.\n * \n * If the collection could be huge, you can specify a non-negative value of [limit], in which case only the first [limit]\n * elements will be appended, followed by the [truncated] string (which defaults to \"...\").\n * \n * @sample samples.collections.Collections.Transformations.joinTo\n * /\npublic fun <A : Appendable> DoubleArray.joinTo(buffer: A, separator: CharSequence = \", \", prefix: CharSequence = \"\", postfix: CharSequence = \"\", limit: Int = -1, truncated: CharSequence = \"...\", transform: ((Double) -> CharSequence)? = null): A {\n buffer.append(prefix)\n var count = 0\n for (element in this) {\n if (++count > 1)\n buffer.append(separator)\n if (limit < 0 || count <= limit) {\n if (transform != null)\n buffer.append(transform(element))\n else\n buffer.append(element.toString())\n } else break\n }\n if (limit >= 0 && count > limit) buffer.append(truncated)\n buffer.append(postfix)\n return\n}\n\n/**\n * Appends the string from all the elements separated using [separator] and using the given [prefix] and [postfix] if supplied.\n * \n * If the collection could be huge, you can specify a non-negative value of [limit], in which case only the first [limit]\n * elements will be appended, followed by the [truncated] string (which defaults to \"...\").\n * \n * @sample samples.collections.Collections.Transformations.joinTo\n * /\npublic fun <A : Appendable> BooleanArray.joinTo(buffer: A, separator: CharSequence = \", \", prefix: CharSequence = \"\", postfix: CharSequence = \"\", limit: Int = -1, truncated: CharSequence = \"...\", transform: ((Boolean) -> CharSequence)? = null): A {\n buffer.append(prefix)\n var count = 0\n for (element in this) {\n if (++count > 1)\n buffer.append(separator)\n if (limit < 0 || count <= limit) {\n if (transform != null)\n buffer.append(transform(element))\n else\n buffer.append(element.toString())\n } else break\n }\n if (limit >= 0 && count > limit) buffer.append(truncated)\n buffer.append(postfix)\n return\n}\n\n/**\n * Appends the string from all the elements separated using [separator] and using the given [prefix] and [postfix] if supplied.\n * \n * If the collection could be huge, you can specify a non-negative value of [limit], in which case only the first [limit]\n * elements will be appended, followed by the [truncated] string (which defaults to \"...\").\n * \n * @sample samples.collections.Collections.Transformations.joinTo\n * /\npublic fun <A : Appendable> CharArray.joinTo(buffer: A, separator: CharSequence = \", \", prefix: CharSequence = \"\", postfix: CharSequence = \"\", limit: Int = -1, truncated: CharSequence = \"...\", transform: ((Char) -> CharSequence)? = null): A {\n buffer.append(prefix)\n var count = 0\n for (element in this) {\n if (++count > 1)\n buffer.append(separator)\n if (limit < 0 || count <= limit) {\n if (transform != null)\n buffer.append(transform(element))\n else\n buffer.append(element)\n } else break\n }\n if (limit >= 0 && count > limit) buffer.append(truncated)\n buffer.append(postfix)\n return\n}\n\n/**\n * Creates a string from all the elements separated using [separator] and using the given [prefix] and [postfix] if supplied.\n * \n * If the collection could be huge, you can specify a non-negative value of [limit], in which case only the first [limit]\n * elements will be appended, followed by the [truncated] string (which defaults to \"...\").\n * \n * @sample samples.collections.Collections.Transformations.joinToString\n * /\npublic fun <T> Array<out T>.joinToString(separator: CharSequence = \", \", prefix: CharSequence = \"\", postfix: CharSequence = \"\", limit: Int = -1, truncated: CharSequence = \"...\", transform: ((T) -> CharSequence)? = null): String {\n return\n joinTo(StringBuilder(), separator, prefix, postfix, limit, truncated, transform).toString()\n}\n\n/**\n * Creates a string from all the elements separated using [separator] and using the given [prefix] and [postfix] if supplied.\n * \n * \n */

* If the collection could be huge, you can specify a non-negative value of [limit], in which case only the first [limit] elements will be appended, followed by the [truncated] string (which defaults to "...").

```

@sample
samples.collections.Collections.Transformations.joinToString
*/
public fun ByteArray.joinToString(separator:
CharSequence = ", ", prefix: CharSequence = "\n", postfix: CharSequence = "\n", limit: Int = -1, truncated:
CharSequence = "...", transform: ((Byte) -> CharSequence)? = null): String {
return joinTo(StringBuilder(),
separator, prefix, postfix, limit, truncated, transform).toString()
}
*/
Creates a string from all the elements
separated using [separator] and using the given [prefix] and [postfix] if supplied.
*/
If the collection could be
huge, you can specify a non-negative value of [limit], in which case only the first [limit] elements will be
appended, followed by the [truncated] string (which defaults to "...").
*/
@sample
samples.collections.Collections.Transformations.joinToString
*/
public fun ShortArray.joinToString(separator:
CharSequence = ", ", prefix: CharSequence = "\n", postfix: CharSequence = "\n", limit: Int = -1, truncated:
CharSequence = "...", transform: ((Short) -> CharSequence)? = null): String {
return joinTo(StringBuilder(),
separator, prefix, postfix, limit, truncated, transform).toString()
}
*/
Creates a string from all the elements
separated using [separator] and using the given [prefix] and [postfix] if supplied.
*/
If the collection could be
huge, you can specify a non-negative value of [limit], in which case only the first [limit] elements will be
appended, followed by the [truncated] string (which defaults to "...").
*/
@sample
samples.collections.Collections.Transformations.joinToString
*/
public fun IntArray.joinToString(separator:
CharSequence = ", ", prefix: CharSequence = "\n", postfix: CharSequence = "\n", limit: Int = -1, truncated:
CharSequence = "...", transform: ((Int) -> CharSequence)? = null): String {
return joinTo(StringBuilder(),
separator, prefix, postfix, limit, truncated, transform).toString()
}
*/
Creates a string from all the elements
separated using [separator] and using the given [prefix] and [postfix] if supplied.
*/
If the collection could be
huge, you can specify a non-negative value of [limit], in which case only the first [limit] elements will be
appended, followed by the [truncated] string (which defaults to "...").
*/
@sample
samples.collections.Collections.Transformations.joinToString
*/
public fun LongArray.joinToString(separator:
CharSequence = ", ", prefix: CharSequence = "\n", postfix: CharSequence = "\n", limit: Int = -1, truncated:
CharSequence = "...", transform: ((Long) -> CharSequence)? = null): String {
return joinTo(StringBuilder(),
separator, prefix, postfix, limit, truncated, transform).toString()
}
*/
Creates a string from all the elements
separated using [separator] and using the given [prefix] and [postfix] if supplied.
*/
If the collection could be
huge, you can specify a non-negative value of [limit], in which case only the first [limit] elements will be
appended, followed by the [truncated] string (which defaults to "...").
*/
@sample
samples.collections.Collections.Transformations.joinToString
*/
public fun FloatArray.joinToString(separator:
CharSequence = ", ", prefix: CharSequence = "\n", postfix: CharSequence = "\n", limit: Int = -1, truncated:
CharSequence = "...", transform: ((Float) -> CharSequence)? = null): String {
return joinTo(StringBuilder(),
separator, prefix, postfix, limit, truncated, transform).toString()
}
*/
Creates a string from all the elements
separated using [separator] and using the given [prefix] and [postfix] if supplied.
*/
If the collection could be
huge, you can specify a non-negative value of [limit], in which case only the first [limit] elements will be
appended, followed by the [truncated] string (which defaults to "...").
*/
@sample
samples.collections.Collections.Transformations.joinToString
*/
public fun DoubleArray.joinToString(separator:
CharSequence = ", ", prefix: CharSequence = "\n", postfix: CharSequence = "\n", limit: Int = -1, truncated:
CharSequence = "...", transform: ((Double) -> CharSequence)? = null): String {
return joinTo(StringBuilder(),
separator, prefix, postfix, limit, truncated, transform).toString()
}
*/
Creates a string from all the elements
separated using [separator] and using the given [prefix] and [postfix] if supplied.
*/
If the collection could be
huge, you can specify a non-negative value of [limit], in which case only the first [limit] elements will be
appended, followed by the [truncated] string (which defaults to "...").
*/
@sample
samples.collections.Collections.Transformations.joinToString
*/
public fun
BooleanArray.joinToString(separator: CharSequence = ", ", prefix: CharSequence = "\n", postfix: CharSequence =
"\n", limit: Int = -1, truncated: CharSequence = "...", transform: ((Boolean) -> CharSequence)? = null): String {
return joinTo(StringBuilder(), separator, prefix, postfix, limit, truncated, transform).toString()
}
*/
Creates

```


a string from all the elements separated using [separator] and using the given [prefix] and [postfix] if supplied.

```

\n * \n * If the collection could be huge, you can specify a non-negative value of [limit], in which case only the first [limit] \n * elements will be appended, followed by the [truncated] string (which defaults to "...").\n * \n * @sample samples.collections.Collections.Transformations.joinToString\n * \n public fun CharArray.joinToString(separator: CharSequence = "\", \"", prefix: CharSequence = "\", postfix: CharSequence = "\", limit: Int = -1, truncated: CharSequence = "...\", transform: ((Char) -> CharSequence)? = null): String {\n    return joinTo(StringBuilder(), separator, prefix, postfix, limit, truncated, transform).toString()\n}\n\n\n * Creates an [Iterable] instance that wraps the original array returning its elements when being iterated.\n * \n public fun <T> Array<out T>.asIterable(): Iterable<T> {\n    if (isEmpty()) return emptyList()\n    return Iterable { this.iterator() }\n}\n\n\n * Creates an [Iterable] instance that wraps the original array returning its elements when being iterated.\n * \n public fun ByteArray.asIterable(): Iterable<Byte> {\n    if (isEmpty()) return emptyList()\n    return Iterable { this.iterator() }\n}\n\n\n * Creates an [Iterable] instance that wraps the original array returning its elements when being iterated.\n * \n public fun ShortArray.asIterable(): Iterable<Short> {\n    if (isEmpty()) return emptyList()\n    return Iterable { this.iterator() }\n}\n\n\n * Creates an [Iterable] instance that wraps the original array returning its elements when being iterated.\n * \n public fun IntArray.asIterable(): Iterable<Int> {\n    if (isEmpty()) return emptyList()\n    return Iterable { this.iterator() }\n}\n\n\n * Creates an [Iterable] instance that wraps the original array returning its elements when being iterated.\n * \n public fun LongArray.asIterable(): Iterable<Long> {\n    if (isEmpty()) return emptyList()\n    return Iterable { this.iterator() }\n}\n\n\n * Creates an [Iterable] instance that wraps the original array returning its elements when being iterated.\n * \n public fun FloatArray.asIterable(): Iterable<Float> {\n    if (isEmpty()) return emptyList()\n    return Iterable { this.iterator() }\n}\n\n\n * Creates an [Iterable] instance that wraps the original array returning its elements when being iterated.\n * \n public fun DoubleArray.asIterable(): Iterable<Double> {\n    if (isEmpty()) return emptyList()\n    return Iterable { this.iterator() }\n}\n\n\n * Creates an [Iterable] instance that wraps the original array returning its elements when being iterated.\n * \n public fun BooleanArray.asIterable(): Iterable<Boolean> {\n    if (isEmpty()) return emptyList()\n    return Iterable { this.iterator() }\n}\n\n\n * Creates an [Iterable] instance that wraps the original array returning its elements when being iterated.\n * \n public fun CharArray.asIterable(): Iterable<Char> {\n    if (isEmpty()) return emptyList()\n    return Iterable { this.iterator() }\n}\n\n\n * Creates a [Sequence] instance that wraps the original array returning its elements when being iterated.\n * \n * \n * @sample samples.collections.Sequences.Building.sequenceFromArray\n * \n public fun <T> Array<out T>.asSequence(): Sequence<T> {\n    if (isEmpty()) return emptySequence()\n    return Sequence { this.iterator() }\n}\n\n\n * Creates a [Sequence] instance that wraps the original array returning its elements when being iterated.\n * \n * \n * @sample samples.collections.Sequences.Building.sequenceFromArray\n * \n public fun ByteArray.asSequence(): Sequence<Byte> {\n    if (isEmpty()) return emptySequence()\n    return Sequence { this.iterator() }\n}\n\n\n * Creates a [Sequence] instance that wraps the original array returning its elements when being iterated.\n * \n * \n * @sample samples.collections.Sequences.Building.sequenceFromArray\n * \n public fun ShortArray.asSequence(): Sequence<Short> {\n    if (isEmpty()) return emptySequence()\n    return Sequence { this.iterator() }\n}\n\n\n * Creates a [Sequence] instance that wraps the original array returning its elements when being iterated.\n * \n * \n * @sample samples.collections.Sequences.Building.sequenceFromArray\n * \n public fun IntArray.asSequence(): Sequence<Int> {\n    if (isEmpty()) return emptySequence()\n    return Sequence { this.iterator() }\n}\n\n\n * Creates a [Sequence] instance that wraps the original array returning its elements when being iterated.\n * \n * \n * @sample samples.collections.Sequences.Building.sequenceFromArray\n * \n public fun LongArray.asSequence(): Sequence<Long> {\n    if (isEmpty()) return emptySequence()\n    return Sequence { this.iterator() }\n}\n\n\n * Creates a [Sequence] instance that wraps the original array returning its elements when being iterated.\n * \n * \n * @sample samples.collections.Sequences.Building.sequenceFromArray\n * \n public fun FloatArray.asSequence(): Sequence<Float> {\n    if (isEmpty()) return emptySequence()\n    return Sequence { this.iterator() }\n}\n\n\n * Creates a [Sequence] instance that wraps the original array returning its elements when being iterated.\n * \n * \n * @sample samples.collections.Sequences.Building.sequenceFromArray\n * \n public fun DoubleArray.asSequence(): Sequence<Double> {\n    if (isEmpty()) return emptySequence()\n    return Sequence { this.iterator() }\n}\n\n\n\n *

```

```

Creates a [Sequence] instance that wraps the original array returning its elements when being iterated.\n * \n *
@sample samples.collections.Sequences.Building.sequenceFromArray\n *^npublic fun
BooleanArray.asSequence(): Sequence<Boolean> {\n if (isEmpty()) return emptySequence()\n return Sequence
{ this.iterator() }\n}\n\n/**\n * Creates a [Sequence] instance that wraps the original array returning its elements
when being iterated.\n * \n * @sample samples.collections.Sequences.Building.sequenceFromArray\n *^npublic
fun CharArray.asSequence(): Sequence<Char> {\n if (isEmpty()) return emptySequence()\n return Sequence {
this.iterator() }\n}\n\n/**\n * Returns an average value of elements in the array.\n
*^n@kotlin.jvm.JvmName("averageOfByte")\npublic fun Array<out Byte>.average(): Double {\n var sum:
Double = 0.0\n var count: Int = 0\n for (element in this) {\n sum += element\n ++count\n }\n return
if (count == 0) Double.NaN else sum / count\n}\n\n/**\n * Returns an average value of elements in the array.\n
*^n@kotlin.jvm.JvmName("averageOfShort")\npublic fun Array<out Short>.average(): Double {\n var sum:
Double = 0.0\n var count: Int = 0\n for (element in this) {\n sum += element\n ++count\n }\n return
if (count == 0) Double.NaN else sum / count\n}\n\n/**\n * Returns an average value of elements in the array.\n
*^n@kotlin.jvm.JvmName("averageOfInt")\npublic fun Array<out Int>.average(): Double {\n var sum: Double
= 0.0\n var count: Int = 0\n for (element in this) {\n sum += element\n ++count\n }\n return if (count
== 0) Double.NaN else sum / count\n}\n\n/**\n * Returns an average value of elements in the array.\n
*^n@kotlin.jvm.JvmName("averageOfLong")\npublic fun Array<out Long>.average(): Double {\n var sum:
Double = 0.0\n var count: Int = 0\n for (element in this) {\n sum += element\n ++count\n }\n return
if (count == 0) Double.NaN else sum / count\n}\n\n/**\n * Returns an average value of elements in the array.\n
*^n@kotlin.jvm.JvmName("averageOfFloat")\npublic fun Array<out Float>.average(): Double {\n var sum:
Double = 0.0\n var count: Int = 0\n for (element in this) {\n sum += element\n ++count\n }\n return
if (count == 0) Double.NaN else sum / count\n}\n\n/**\n * Returns an average value of elements in the array.\n
*^n@kotlin.jvm.JvmName("averageOfDouble")\npublic fun Array<out Double>.average(): Double {\n var sum:
Double = 0.0\n var count: Int = 0\n for (element in this) {\n sum += element\n ++count\n }\n return
if (count == 0) Double.NaN else sum / count\n}\n\n/**\n * Returns an average value of elements in the array.\n
*^npublic fun ByteArray.average(): Double {\n var sum: Double = 0.0\n var count: Int = 0\n for (element in
this) {\n sum += element\n ++count\n }\n return if (count == 0) Double.NaN else sum /
count\n}\n\n/**\n * Returns an average value of elements in the array.\n *^npublic fun ShortArray.average():
Double {\n var sum: Double = 0.0\n var count: Int = 0\n for (element in this) {\n sum += element\n
++count\n }\n return if (count == 0) Double.NaN else sum / count\n}\n\n/**\n * Returns an average value of
elements in the array.\n *^npublic fun IntArray.average(): Double {\n var sum: Double = 0.0\n var count: Int =
0\n for (element in this) {\n sum += element\n ++count\n }\n return if (count == 0) Double.NaN else
sum / count\n}\n\n/**\n * Returns an average value of elements in the array.\n *^npublic fun LongArray.average():
Double {\n var sum: Double = 0.0\n var count: Int = 0\n for (element in this) {\n sum += element\n
++count\n }\n return if (count == 0) Double.NaN else sum / count\n}\n\n/**\n * Returns an average value of
elements in the array.\n *^npublic fun FloatArray.average(): Double {\n var sum: Double = 0.0\n var count: Int
= 0\n for (element in this) {\n sum += element\n ++count\n }\n return if (count == 0) Double.NaN
else sum / count\n}\n\n/**\n * Returns an average value of elements in the array.\n *^npublic fun
DoubleArray.average(): Double {\n var sum: Double = 0.0\n var count: Int = 0\n for (element in this) {\n
sum += element\n ++count\n }\n return if (count == 0) Double.NaN else sum / count\n}\n\n/**\n * Returns
the sum of all elements in the array.\n *^n@kotlin.jvm.JvmName("sumOfByte")\npublic fun Array<out
Byte>.sum(): Int {\n var sum: Int = 0\n for (element in this) {\n sum += element\n }\n return
sum\n}\n\n/**\n * Returns the sum of all elements in the array.\n
*^n@kotlin.jvm.JvmName("sumOfShort")\npublic fun Array<out Short>.sum(): Int {\n var sum: Int = 0\n for
(element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the
array.\n *^n@kotlin.jvm.JvmName("sumOfInt")\npublic fun Array<out Int>.sum(): Int {\n var sum: Int = 0\n
for (element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in
the array.\n *^n@kotlin.jvm.JvmName("sumOfLong")\npublic fun Array<out Long>.sum(): Long {\n var sum:

```

```

Long = 0L\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of
all elements in the array.\n */\n@kotlin.jvm.JvmName("sumOfFloat")\npublic fun Array<out Float>.sum(): Float
{\n var sum: Float = 0.0f\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n *
Returns the sum of all elements in the array.\n */\n@kotlin.jvm.JvmName("sumOfDouble")\npublic fun Array<out
Double>.sum(): Double {\n var sum: Double = 0.0\n for (element in this) {\n sum += element\n }\n
return sum\n}\n\n/**\n * Returns the sum of all elements in the array.\n */\npublic fun ByteArray.sum(): Int {\n
var sum: Int = 0\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the
sum of all elements in the array.\n */\npublic fun ShortArray.sum(): Int {\n var sum: Int = 0\n for (element in
this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the array.\n
*/\npublic fun IntArray.sum(): Int {\n var sum: Int = 0\n for (element in this) {\n sum += element\n }\n
return sum\n}\n\n/**\n * Returns the sum of all elements in the array.\n */\npublic fun LongArray.sum(): Long {\n
var sum: Long = 0L\n for (element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the
sum of all elements in the array.\n */\npublic fun FloatArray.sum(): Float {\n var sum: Float = 0.0f\n for
(element in this) {\n sum += element\n }\n return sum\n}\n\n/**\n * Returns the sum of all elements in the
array.\n */\npublic fun DoubleArray.sum(): Double {\n var sum: Double = 0.0\n for (element in this) {\n
sum += element\n }\n return sum\n}\n\n"/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n
*/\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("RangesKt")\n\npackage
kotlin.ranges\n\n/\n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\nimport kotlin.random.*\n\n/**\n * Returns a
random element from this range.\n * \n * @throws IllegalArgumentException if this range is empty.\n
*/\n\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun IntRange.random(): Int {\n return
random(Random)\n}\n\n/**\n * Returns a random element from this range.\n * \n * @throws
IllegalArgumentException if this range is empty.\n */\n\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic
inline fun LongRange.random(): Long {\n return random(Random)\n}\n\n/**\n * Returns a random element from
this range.\n * \n * @throws IllegalArgumentException if this range is empty.\n */\n\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun CharRange.random(): Char {\n return
random(Random)\n}\n\n/**\n * Returns a random element from this range using the specified source of
randomness.\n * \n * @throws IllegalArgumentException if this range is empty.\n */\n\n@SinceKotlin("1.3")\npublic fun IntRange.random(random: Random): Int {\n try {\n return
random.nextInt(this)\n } catch (e: IllegalArgumentException) {\n throw
NoSuchElementException(e.message)\n }\n}\n\n/**\n * Returns a random element from this range using the
specified source of randomness.\n * \n * @throws IllegalArgumentException if this range is empty.\n */\n\n@SinceKotlin("1.3")\npublic fun LongRange.random(random: Random): Long {\n try {\n return
random.nextLong(this)\n } catch (e: IllegalArgumentException) {\n throw
NoSuchElementException(e.message)\n }\n}\n\n/**\n * Returns a random element from this range using the
specified source of randomness.\n * \n * @throws IllegalArgumentException if this range is empty.\n */\n\n@SinceKotlin("1.3")\npublic fun CharRange.random(random: Random): Char {\n try {\n return
random.nextInt(first.code, last.code + 1).toChar()\n } catch (e: IllegalArgumentException) {\n throw
NoSuchElementException(e.message)\n }\n}\n\n/**\n * Returns a random element from this range, or `null` if this
range is empty.\n */\n\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
inline fun IntRange.randomOrNull(): Int? {\n return randomOrNull(Random)\n}\n\n/**\n * Returns a random
element from this range, or `null` if this range is empty.\n */\n\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
inline fun LongRange.randomOrNull(): Long? {\n return randomOrNull(Random)\n}\n\n/**\n * Returns a
random element from this range, or `null` if this range is empty.\n */

```

```

*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
c inline fun CharRange.randomOrNull(): Char? {\n    return randomOrNull(Random)\n}\n\n/**\n * Returns a
random element from this range using the specified source of randomness, or `null` if this range is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun
IntRange.randomOrNull(random: Random): Int? {\n    if (isEmpty())\n        return null\n    return
random.nextInt(this)\n}\n\n/**\n * Returns a random element from this range using the specified source of
randomness, or `null` if this range is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun
LongRange.randomOrNull(random: Random): Long? {\n    if (isEmpty())\n        return null\n    return
random.nextLong(this)\n}\n\n/**\n * Returns a random element from this range using the specified source of
randomness, or `null` if this range is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun
CharRange.randomOrNull(random: Random): Char? {\n    if (isEmpty())\n        return null\n    return
random.nextInt(first.code, last.code + 1).toChar()\n}\n\n/**\n * Returns `true` if this range contains the specified
[element].\n * \n * Always returns `false` if the [element] is `null`.\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline operator fun IntRange.contains(element:
Int?): Boolean {\n    return element != null && contains(element)\n}\n\n/**\n * Returns `true` if this range contains
the specified [element].\n * \n * Always returns `false` if the [element] is `null`.\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline operator fun LongRange.contains(element:
Long?): Boolean {\n    return element != null && contains(element)\n}\n\n/**\n * Returns `true` if this range
contains the specified [element].\n * \n * Always returns `false` if the [element] is `null`.\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline operator fun CharRange.contains(element:
Char?): Boolean {\n    return element != null && contains(element)\n}\n\n/**\n * Checks if the specified [value]
belongs to this range.\n *\n@kotlin.jvm.JvmName("intRangeContains")\npublic operator fun
ClosedRange<Int>.contains(value: Byte): Boolean {\n    return contains(value.toInt())\n}\n\n/**\n * Checks if the
specified [value] belongs to this range.\n *\n@kotlin.jvm.JvmName("longRangeContains")\npublic operator fun
ClosedRange<Long>.contains(value: Byte): Boolean {\n    return contains(value.toLong())\n}\n\n/**\n * Checks if
the specified [value] belongs to this range.\n *\n@kotlin.jvm.JvmName("shortRangeContains")\npublic operator
fun ClosedRange<Short>.contains(value: Byte): Boolean {\n    return contains(value.toShort())\n}\n\n/**\n *
Checks if the specified [value] belongs to this range.\n *\n@Deprecated("This `contains` operation mixing integer
and floating point arguments has ambiguous semantics and is going to be
removed.")\n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince =
"1.5")\n@kotlin.jvm.JvmName("doubleRangeContains")\npublic operator fun
ClosedRange<Double>.contains(value: Byte): Boolean {\n    return contains(value.toDouble())\n}\n\n/**\n *
Checks if the specified [value] belongs to this range.\n *\n@Deprecated("This `contains` operation mixing integer
and floating point arguments has ambiguous semantics and is going to be
removed.")\n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince =
"1.5")\n@kotlin.jvm.JvmName("floatRangeContains")\npublic operator fun ClosedRange<Float>.contains(value:
Byte): Boolean {\n    return contains(value.toFloat())\n}\n\n/**\n * Checks if the specified [value] belongs to this
range.\n *\n@Deprecated("This `contains` operation mixing integer and floating point arguments has ambiguous
semantics and is going to be removed.")\n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4",
hiddenSince = "1.5")\n@kotlin.jvm.JvmName("intRangeContains")\npublic operator fun
ClosedRange<Int>.contains(value: Double): Boolean {\n    return value.toIntExactOrNull().let { if (it != null)
contains(it) else false }\n}\n\n/**\n * Checks if the specified [value] belongs to this range.\n
*\n@Deprecated("This `contains` operation mixing integer and floating point arguments has ambiguous semantics
and is going to be removed.")\n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince
= "1.5")\n@kotlin.jvm.JvmName("longRangeContains")\npublic operator fun
ClosedRange<Long>.contains(value: Double): Boolean {\n    return value.toLongExactOrNull().let { if (it != null)

```

contains(it) else false } } } \n\n/**\n * Checks if the specified [value] belongs to this range.\n *\n@Deprecated("This `contains` operation mixing integer and floating point arguments has ambiguous semantics and is going to be removed.")\n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince = "1.5")\n@kotlin.jvm.JvmName("byteRangeContains")\npublic operator fun
ClosedRange<Byte>.contains(value: Double): Boolean { \n return value.toByteExactOrNull().let { if (it != null)
contains(it) else false } } } \n\n/**\n * Checks if the specified [value] belongs to this range.\n *\n@Deprecated("This `contains` operation mixing integer and floating point arguments has ambiguous semantics and is going to be removed.")\n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince = "1.5")\n@kotlin.jvm.JvmName("shortRangeContains")\npublic operator fun
ClosedRange<Short>.contains(value: Double): Boolean { \n return value.toShortExactOrNull().let { if (it != null)
contains(it) else false } } } \n\n/**\n * Checks if the specified [value] belongs to this range.\n *\n@kotlin.jvm.JvmName("floatRangeContains")\npublic operator fun
ClosedRange<Float>.contains(value: Double): Boolean { \n return contains(value.toFloat()) } } } \n\n/**\n * Checks if the specified [value] belongs to this range.\n *\n@Deprecated("This `contains` operation mixing integer and floating point arguments has ambiguous semantics and is going to be removed.")\n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince = "1.5")\n@kotlin.jvm.JvmName("intRangeContains")\npublic operator fun
ClosedRange<Int>.contains(value: Float): Boolean { \n return value.toIntExactOrNull().let { if (it != null)
contains(it) else false } } } \n\n/**\n * Checks if the specified [value] belongs to this range.\n *\n@Deprecated("This `contains` operation mixing integer and floating point arguments has ambiguous semantics and is going to be removed.")\n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince = "1.5")\n@kotlin.jvm.JvmName("longRangeContains")\npublic operator fun
ClosedRange<Long>.contains(value: Float): Boolean { \n return value.toLongExactOrNull().let { if (it != null)
contains(it) else false } } } \n\n/**\n * Checks if the specified [value] belongs to this range.\n *\n@Deprecated("This `contains` operation mixing integer and floating point arguments has ambiguous semantics and is going to be removed.")\n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince = "1.5")\n@kotlin.jvm.JvmName("byteRangeContains")\npublic operator fun
ClosedRange<Byte>.contains(value: Float): Boolean { \n return value.toByteExactOrNull().let { if (it != null)
contains(it) else false } } } \n\n/**\n * Checks if the specified [value] belongs to this range.\n *\n@Deprecated("This `contains` operation mixing integer and floating point arguments has ambiguous semantics and is going to be removed.")\n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince = "1.5")\n@kotlin.jvm.JvmName("shortRangeContains")\npublic operator fun
ClosedRange<Short>.contains(value: Float): Boolean { \n return value.toShortExactOrNull().let { if (it != null)
contains(it) else false } } } \n\n/**\n * Checks if the specified [value] belongs to this range.\n *\n@kotlin.jvm.JvmName("doubleRangeContains")\npublic operator fun
ClosedRange<Double>.contains(value: Float): Boolean { \n return contains(value.toDouble()) } } } \n\n/**\n * Checks if the specified [value] belongs to this range.\n *\n@kotlin.jvm.JvmName("longRangeContains")\npublic operator fun
ClosedRange<Long>.contains(value: Int): Boolean { \n return contains(value.toLong()) } } } \n\n/**\n * Checks if the specified [value] belongs to this range.\n *\n@kotlin.jvm.JvmName("byteRangeContains")\npublic operator fun
ClosedRange<Byte>.contains(value: Int): Boolean { \n return value.toByteExactOrNull().let { if (it != null)
contains(it) else false } } } \n\n/**\n * Checks if the specified [value] belongs to this range.\n *\n@kotlin.jvm.JvmName("shortRangeContains")\npublic operator fun
ClosedRange<Short>.contains(value: Int): Boolean { \n return value.toShortExactOrNull().let { if (it != null)
contains(it) else false } } } \n\n/**\n * Checks if the specified [value] belongs to this range.\n *\n@Deprecated("This `contains` operation mixing integer and floating point arguments has ambiguous semantics and is going to be removed.")\n@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince = "1.5")\n@kotlin.jvm.JvmName("doubleRangeContains")\npublic operator fun
ClosedRange<Double>.contains(value: Int): Boolean { \n return contains(value.toDouble()) } } } \n\n/**\n * Checks if the specified [value] belongs to this range.\n *\n@Deprecated("This `contains` operation mixing integer and

floating point arguments has ambiguous semantics and is going to be

removed.
`@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince = "1.5")`
`@kotlin.jvm.JvmName("floatRangeContains")`
public operator fun ClosedRange<Float>.contains(value: Int): Boolean
{
 return contains(value.toFloat())
}
Checks if the specified [value] belongs to this range.
`@kotlin.jvm.JvmName("intRangeContains")`
public operator fun ClosedRange<Int>.contains(value: Long): Boolean
{
 return value.toIntExactOrNull().let { if (it != null) contains(it) else false }
}
Checks if the specified [value] belongs to this range.
`@kotlin.jvm.JvmName("byteRangeContains")`
public operator fun ClosedRange<Byte>.contains(value: Long): Boolean
{
 return value.toByteExactOrNull().let { if (it != null) contains(it) else false }
}
Checks if the specified [value] belongs to this range.
`@kotlin.jvm.JvmName("shortRangeContains")`
public operator fun ClosedRange<Short>.contains(value: Long): Boolean
{
 return value.toShortExactOrNull().let { if (it != null) contains(it) else false }
}
Checks if the specified [value] belongs to this range.
removed.
`@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince = "1.5")`
`@kotlin.jvm.JvmName("doubleRangeContains")`
public operator fun ClosedRange<Double>.contains(value: Long): Boolean
{
 return contains(value.toDouble())
}
Checks if the specified [value] belongs to this range.
removed.
`@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince = "1.5")`
`@kotlin.jvm.JvmName("floatRangeContains")`
public operator fun ClosedRange<Float>.contains(value: Long): Boolean
{
 return contains(value.toFloat())
}
Checks if the specified [value] belongs to this range.
`@kotlin.jvm.JvmName("intRangeContains")`
public operator fun ClosedRange<Int>.contains(value: Short): Boolean
{
 return contains(value.toInt())
}
Checks if the specified [value] belongs to this range.
`@kotlin.jvm.JvmName("longRangeContains")`
public operator fun ClosedRange<Long>.contains(value: Short): Boolean
{
 return contains(value.toLong())
}
Checks if the specified [value] belongs to this range.
`@kotlin.jvm.JvmName("byteRangeContains")`
public operator fun ClosedRange<Byte>.contains(value: Short): Boolean
{
 return value.toByteExactOrNull().let { if (it != null) contains(it) else false }
}
Checks if the specified [value] belongs to this range.
removed.
`@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince = "1.5")`
`@kotlin.jvm.JvmName("doubleRangeContains")`
public operator fun ClosedRange<Double>.contains(value: Short): Boolean
{
 return contains(value.toDouble())
}
Checks if the specified [value] belongs to this range.
removed.
`@DeprecatedSinceKotlin(warningSince = "1.3", errorSince = "1.4", hiddenSince = "1.5")`
`@kotlin.jvm.JvmName("floatRangeContains")`
public operator fun ClosedRange<Float>.contains(value: Short): Boolean
{
 return contains(value.toFloat())
}
Returns a progression from this value down to the specified [to] value with the step -1.
The [to] value should be less than or equal to this value.
If the [to] value is greater than this value the returned progression is empty.
public infix fun Int.downTo(to: Byte): IntProgression
{
 return IntProgression.fromClosedRange(this, to.toInt(), -1)
}
Returns a progression from this value down to the specified [to] value with the step -1.
The [to] value should be less than or equal to this value.
If the [to] value is greater than this value the returned progression is empty.
public infix fun Long.downTo(to: Byte): LongProgression
{
 return LongProgression.fromClosedRange(this, to.toLong(), -1L)
}
Returns a progression from this value down to the specified [to] value with the step -1.
The [to] value should be less than or equal to this value.
If the [to] value is greater than this value the returned progression is empty.
public infix fun Byte.downTo(to: Byte): IntProgression
{
 return IntProgression.fromClosedRange(this.toInt(), to.toInt(), -1)
}
Returns a progression from this value down to the specified [to] value with the step -1.
The [to] value should be less than or equal to this value.

* If the [to] value is greater than `this` value the returned progression is empty.\n */\npublic infix fun Short.downTo(to: Byte): IntProgression {\n return IntProgression.fromClosedRange(this.toInt(), to.toInt(), -1)\n}\n\n/**\n * Returns a progression from this value down to the specified [to] value with the step -1.\n * \n * The [to] value should be less than or equal to `this` value.\n * If the [to] value is greater than `this` value the returned progression is empty.\n */\npublic infix fun Char.downTo(to: Char): CharProgression {\n return CharProgression.fromClosedRange(this, to, -1)\n}\n\n/**\n * Returns a progression from this value down to the specified [to] value with the step -1.\n * \n * The [to] value should be less than or equal to `this` value.\n * If the [to] value is greater than `this` value the returned progression is empty.\n */\npublic infix fun Int.downTo(to: Int): IntProgression {\n return IntProgression.fromClosedRange(this, to, -1)\n}\n\n/**\n * Returns a progression from this value down to the specified [to] value with the step -1.\n * \n * The [to] value should be less than or equal to `this` value.\n * If the [to] value is greater than `this` value the returned progression is empty.\n */\npublic infix fun Long.downTo(to: Int): LongProgression {\n return LongProgression.fromClosedRange(this, to.toLong(), -1L)\n}\n\n/**\n * Returns a progression from this value down to the specified [to] value with the step -1.\n * \n * The [to] value should be less than or equal to `this` value.\n * If the [to] value is greater than `this` value the returned progression is empty.\n */\npublic infix fun Byte.downTo(to: Int): IntProgression {\n return IntProgression.fromClosedRange(this.toInt(), to, -1)\n}\n\n/**\n * Returns a progression from this value down to the specified [to] value with the step -1.\n * \n * The [to] value should be less than or equal to `this` value.\n * If the [to] value is greater than `this` value the returned progression is empty.\n */\npublic infix fun Short.downTo(to: Int): IntProgression {\n return IntProgression.fromClosedRange(this.toInt(), to, -1)\n}\n\n/**\n * Returns a progression from this value down to the specified [to] value with the step -1.\n * \n * The [to] value should be less than or equal to `this` value.\n * If the [to] value is greater than `this` value the returned progression is empty.\n */\npublic infix fun Int.downTo(to: Long): LongProgression {\n return LongProgression.fromClosedRange(this.toLong(), to, -1L)\n}\n\n/**\n * Returns a progression from this value down to the specified [to] value with the step -1.\n * \n * The [to] value should be less than or equal to `this` value.\n * If the [to] value is greater than `this` value the returned progression is empty.\n */\npublic infix fun Long.downTo(to: Long): LongProgression {\n return LongProgression.fromClosedRange(this, to, -1L)\n}\n\n/**\n * Returns a progression from this value down to the specified [to] value with the step -1.\n * \n * The [to] value should be less than or equal to `this` value.\n * If the [to] value is greater than `this` value the returned progression is empty.\n */\npublic infix fun Byte.downTo(to: Long): LongProgression {\n return LongProgression.fromClosedRange(this.toLong(), to, -1L)\n}\n\n/**\n * Returns a progression from this value down to the specified [to] value with the step -1.\n * \n * The [to] value should be less than or equal to `this` value.\n * If the [to] value is greater than `this` value the returned progression is empty.\n */\npublic infix fun Short.downTo(to: Long): LongProgression {\n return LongProgression.fromClosedRange(this.toLong(), to, -1L)\n}\n\n/**\n * Returns a progression from this value down to the specified [to] value with the step -1.\n * \n * The [to] value should be less than or equal to `this` value.\n * If the [to] value is greater than `this` value the returned progression is empty.\n */\npublic infix fun Int.downTo(to: Short): IntProgression {\n return IntProgression.fromClosedRange(this, to.toInt(), -1)\n}\n\n/**\n * Returns a progression from this value down to the specified [to] value with the step -1.\n * \n * The [to] value should be less than or equal to `this` value.\n * If the [to] value is greater than `this` value the returned progression is empty.\n */\npublic infix fun Long.downTo(to: Short): LongProgression {\n return LongProgression.fromClosedRange(this, to.toLong(), -1L)\n}\n\n/**\n * Returns a progression from this value down to the specified [to] value with the step -1.\n * \n * The [to] value should be less than or equal to `this` value.\n * If the [to] value is greater than `this` value the returned progression is empty.\n */\npublic infix fun Byte.downTo(to: Short): IntProgression {\n return IntProgression.fromClosedRange(this.toInt(), to.toInt(), -1)\n}\n\n/**\n * Returns a progression from this value down to the specified [to] value with the step -1.\n * \n * The [to] value should be less than or equal to `this` value.\n * If the [to] value is greater than `this` value the returned progression is empty.\n */\npublic infix fun Short.downTo(to: Short): IntProgression {\n return IntProgression.fromClosedRange(this.toInt(), to.toInt(), -1)\n}\n\n/**\n * Returns a progression that goes over the same range in the opposite direction with the same step.\n */\npublic fun IntProgression.reversed(): IntProgression {\n return IntProgression.fromClosedRange(last, first, -

```

step)\n}\n\n/**\n * Returns a progression that goes over the same range in the opposite direction with the same
step.\n */\npublic fun LongProgression.reversed(): LongProgression {\n    return
LongProgression.fromClosedRange(last, first, -step)\n}\n\n/**\n * Returns a progression that goes over the same
range in the opposite direction with the same step.\n */\npublic fun CharProgression.reversed(): CharProgression {\n
    return CharProgression.fromClosedRange(last, first, -step)\n}\n\n/**\n * Returns a progression that goes over the
same range with the given step.\n */\npublic infix fun IntProgression.step(step: Int): IntProgression {\n
    checkStepIsPositive(step > 0, step)\n    return IntProgression.fromClosedRange(first, last, if (this.step > 0) step else -
step)\n}\n\n/**\n * Returns a progression that goes over the same range with the given step.\n */\npublic infix fun
LongProgression.step(step: Long): LongProgression {\n    checkStepIsPositive(step > 0, step)\n    return
LongProgression.fromClosedRange(first, last, if (this.step > 0) step else -step)\n}\n\n/**\n * Returns a progression
that goes over the same range with the given step.\n */\npublic infix fun CharProgression.step(step: Int):
CharProgression {\n    checkStepIsPositive(step > 0, step)\n    return CharProgression.fromClosedRange(first, last, if
(this.step > 0) step else -step)\n}\n\ninternal fun Int.toByteExactOrNull(): Byte? {\n    return if (this in
Byte.MIN_VALUE.toInt()..Byte.MAX_VALUE.toInt()) this.toByte() else null\n}\n\ninternal fun
Long.toByteExactOrNull(): Byte? {\n    return if (this in
Byte.MIN_VALUE.toLong()..Byte.MAX_VALUE.toLong()) this.toByte() else null\n}\n\ninternal fun
Short.toByteExactOrNull(): Byte? {\n    return if (this in
Byte.MIN_VALUE.toShort()..Byte.MAX_VALUE.toShort()) this.toByte() else null\n}\n\ninternal fun
Double.toByteExactOrNull(): Byte? {\n    return if (this in
Byte.MIN_VALUE.toDouble()..Byte.MAX_VALUE.toDouble()) this.toInt().toByte() else null\n}\n\ninternal fun
Float.toByteExactOrNull(): Byte? {\n    return if (this in
Byte.MIN_VALUE.toFloat()..Byte.MAX_VALUE.toFloat()) this.toInt().toByte() else null\n}\n\ninternal fun
Long.toIntExactOrNull(): Int? {\n    return if (this in Int.MIN_VALUE.toLong()..Int.MAX_VALUE.toLong())
this.toInt() else null\n}\n\ninternal fun Double.toIntExactOrNull(): Int? {\n    return if (this in
Int.MIN_VALUE.toDouble()..Int.MAX_VALUE.toDouble()) this.toInt() else null\n}\n\ninternal fun
Float.toIntExactOrNull(): Int? {\n    return if (this in Int.MIN_VALUE.toFloat()..Int.MAX_VALUE.toFloat())
this.toInt() else null\n}\n\ninternal fun Double.toLongExactOrNull(): Long? {\n    return if (this in
Long.MIN_VALUE.toDouble()..Long.MAX_VALUE.toDouble()) this.toLong() else null\n}\n\ninternal fun
Float.toLongExactOrNull(): Long? {\n    return if (this in
Long.MIN_VALUE.toFloat()..Long.MAX_VALUE.toFloat()) this.toLong() else null\n}\n\ninternal fun
Int.toShortExactOrNull(): Short? {\n    return if (this in Short.MIN_VALUE.toInt()..Short.MAX_VALUE.toInt())
this.toShort() else null\n}\n\ninternal fun Long.toShortExactOrNull(): Short? {\n    return if (this in
Short.MIN_VALUE.toLong()..Short.MAX_VALUE.toLong()) this.toShort() else null\n}\n\ninternal fun
Double.toShortExactOrNull(): Short? {\n    return if (this in
Short.MIN_VALUE.toDouble()..Short.MAX_VALUE.toDouble()) this.toInt().toShort() else null\n}\n\ninternal fun
Float.toShortExactOrNull(): Short? {\n    return if (this in
Short.MIN_VALUE.toFloat()..Short.MAX_VALUE.toFloat()) this.toInt().toShort() else null\n}\n\n/**\n * Returns
a range from this value up to but excluding the specified [to] value.\n */\n * If the [to] value is less than or equal to
`this` value, then the returned range is empty.\n */\npublic infix fun Int.until(to: Byte): IntRange {\n    return this ..
(to.toInt() - 1).toInt()\n}\n\n/**\n * Returns a range from this value up to but excluding the specified [to] value.\n */
\n * If the [to] value is less than or equal to `this` value, then the returned range is empty.\n */\npublic infix fun
Long.until(to: Byte): LongRange {\n    return this .. (to.toLong() - 1).toLong()\n}\n\n/**\n * Returns a range from
this value up to but excluding the specified [to] value.\n */\n * If the [to] value is less than or equal to `this` value,
then the returned range is empty.\n */\npublic infix fun Byte.until(to: Byte): IntRange {\n    return this.toInt() ..
(to.toInt() - 1).toInt()\n}\n\n/**\n * Returns a range from this value up to but excluding the specified [to] value.\n */
\n * If the [to] value is less than or equal to `this` value, then the returned range is empty.\n */\npublic infix fun
Short.until(to: Byte): IntRange {\n    return this.toInt() .. (to.toInt() - 1).toInt()\n}\n\n/**\n * Returns a range from
this value up to but excluding the specified [to] value.\n */\n * If the [to] value is less than or equal to `this` value,

```


then the returned range is empty.

```

public infix fun Char.until(to: Char): CharRange {
    if (to <= '\u0000')
        return CharRange.EMPTY
    return this .. (to - 1).toChar()
}

```

* Returns a range from this value up to but excluding the specified [to] value. * If the [to] value is less than or equal to `this` value, then the returned range is empty.

```

public infix fun Int.until(to: Int): IntRange {
    if (to <= Int.MIN_VALUE)
        return IntRange.EMPTY
    return this .. (to - 1).toInt()
}

```

* Returns a range from this value up to but excluding the specified [to] value. * If the [to] value is less than or equal to `this` value, then the returned range is empty.

```

public infix fun Long.until(to: Int): LongRange {
    return this .. (to.toLong() - 1).toLong()
}

```

* Returns a range from this value up to but excluding the specified [to] value. * If the [to] value is less than or equal to `this` value, then the returned range is empty.

```

public infix fun Byte.until(to: Int): IntRange {
    if (to <= Int.MIN_VALUE)
        return IntRange.EMPTY
    return this.toInt() .. (to - 1).toInt()
}

```

* Returns a range from this value up to but excluding the specified [to] value. * If the [to] value is less than or equal to `this` value, then the returned range is empty.

```

public infix fun Short.until(to: Int): IntRange {
    if (to <= Int.MIN_VALUE)
        return IntRange.EMPTY
    return this.toInt() .. (to - 1).toInt()
}

```

* Returns a range from this value up to but excluding the specified [to] value. * If the [to] value is less than or equal to `this` value, then the returned range is empty.

```

public infix fun Int.until(to: Long): LongRange {
    if (to <= Long.MIN_VALUE)
        return LongRange.EMPTY
    return this.toLong() .. (to - 1).toLong()
}

```

* Returns a range from this value up to but excluding the specified [to] value. * If the [to] value is less than or equal to `this` value, then the returned range is empty.

```

public infix fun Long.until(to: Long): LongRange {
    if (to <= Long.MIN_VALUE)
        return LongRange.EMPTY
    return this .. (to - 1).toLong()
}

```

* Returns a range from this value up to but excluding the specified [to] value. * If the [to] value is less than or equal to `this` value, then the returned range is empty.

```

public infix fun Byte.until(to: Long): LongRange {
    if (to <= Long.MIN_VALUE)
        return LongRange.EMPTY
    return this.toLong() .. (to - 1).toLong()
}

```

* Returns a range from this value up to but excluding the specified [to] value. * If the [to] value is less than or equal to `this` value, then the returned range is empty.

```

public infix fun Short.until(to: Long): LongRange {
    if (to <= Long.MIN_VALUE)
        return LongRange.EMPTY
    return this.toLong() .. (to - 1).toLong()
}

```

* Returns a range from this value up to but excluding the specified [to] value. * If the [to] value is less than or equal to `this` value, then the returned range is empty.

```

public infix fun Int.until(to: Short): IntRange {
    return this .. (to.toInt() - 1).toInt()
}

```

* Returns a range from this value up to but excluding the specified [to] value. * If the [to] value is less than or equal to `this` value, then the returned range is empty.

```

public infix fun Long.until(to: Short): LongRange {
    return this .. (to.toLong() - 1).toLong()
}

```

* Returns a range from this value up to but excluding the specified [to] value. * If the [to] value is less than or equal to `this` value, then the returned range is empty.

```

public infix fun Byte.until(to: Short): IntRange {
    return this.toInt() .. (to.toInt() - 1).toInt()
}

```

* Ensures that this value is not less than the specified [minimumValue]. * @return this value if it's greater than or equal to the [minimumValue] or the [minimumValue] otherwise. * @sample samples.comparisons.ComparableOps.coerceAtLeast

```

T.coerceAtLeast(minimumValue: T): T {
    return if (this < minimumValue) minimumValue else this
}

```

* Ensures that this value is not less than the specified [minimumValue]. * @return this value if it's greater than or equal to the [minimumValue] or the [minimumValue] otherwise. * @sample samples.comparisons.ComparableOps.coerceAtLeast

```

Byte.coerceAtLeast(minimumValue: Byte): Byte {
    return if (this < minimumValue) minimumValue else this
}

```

* Ensures that this value is not less than the specified [minimumValue]. * @return this value if it's greater than or equal to the [minimumValue] or the [minimumValue] otherwise. * @sample samples.comparisons.ComparableOps.coerceAtLeast

```

Short.coerceAtLeast(minimumValue: Short): Short {
    return if (this < minimumValue) minimumValue else this
}

```

* Ensures that this value is not less than the specified [minimumValue]. * @return this value if it's greater than or equal to the [minimumValue] or the [minimumValue] otherwise.

```

@sample samples.comparisons.ComparableOps.coerceAtLeast\n */\npublic fun Int.coerceAtLeast(minimumValue:
Int): Int {\n    return if (this < minimumValue) minimumValue else this\n}\n\n/**\n * Ensures that this value is not
less than the specified [minimumValue].\n * \n * @return this value if it's greater than or equal to the
[minimumValue] or the [minimumValue] otherwise.\n * \n * @sample
samples.comparisons.ComparableOps.coerceAtLeast\n */\npublic fun Long.coerceAtLeast(minimumValue: Long):
Long {\n    return if (this < minimumValue) minimumValue else this\n}\n\n/**\n * Ensures that this value is not less
than the specified [minimumValue].\n * \n * @return this value if it's greater than or equal to the [minimumValue]
or the [minimumValue] otherwise.\n * \n * @sample samples.comparisons.ComparableOps.coerceAtLeast\n
*/\npublic fun Float.coerceAtLeast(minimumValue: Float): Float {\n    return if (this < minimumValue)
minimumValue else this\n}\n\n/**\n * Ensures that this value is not less than the specified [minimumValue].\n * \n
* @return this value if it's greater than or equal to the [minimumValue] or the [minimumValue] otherwise.\n * \n
* @sample samples.comparisons.ComparableOps.coerceAtLeast\n */\npublic fun
Double.coerceAtLeast(minimumValue: Double): Double {\n    return if (this < minimumValue) minimumValue else
this\n}\n\n/**\n * Ensures that this value is not greater than the specified [maximumValue].\n * \n * @return this
value if it's less than or equal to the [maximumValue] or the [maximumValue] otherwise.\n * \n * @sample
samples.comparisons.ComparableOps.coerceAtMostComparable\n */\npublic fun <T : Comparable<T>>
T.coerceAtMost(maximumValue: T): T {\n    return if (this > maximumValue) maximumValue else this\n}\n\n/**\n
* Ensures that this value is not greater than the specified [maximumValue].\n * \n * @return this value if it's less
than or equal to the [maximumValue] or the [maximumValue] otherwise.\n * \n * @sample
samples.comparisons.ComparableOps.coerceAtMost\n */\npublic fun Byte.coerceAtMost(maximumValue: Byte):
Byte {\n    return if (this > maximumValue) maximumValue else this\n}\n\n/**\n * Ensures that this value is not
greater than the specified [maximumValue].\n * \n * @return this value if it's less than or equal to the
[maximumValue] or the [maximumValue] otherwise.\n * \n * @sample
samples.comparisons.ComparableOps.coerceAtMost\n */\npublic fun Short.coerceAtMost(maximumValue: Short):
Short {\n    return if (this > maximumValue) maximumValue else this\n}\n\n/**\n * Ensures that this value is not
greater than the specified [maximumValue].\n * \n * @return this value if it's less than or equal to the
[maximumValue] or the [maximumValue] otherwise.\n * \n * @sample
samples.comparisons.ComparableOps.coerceAtMost\n */\npublic fun Int.coerceAtMost(maximumValue: Int): Int
{\n    return if (this > maximumValue) maximumValue else this\n}\n\n/**\n * Ensures that this value is not greater
than the specified [maximumValue].\n * \n * @return this value if it's less than or equal to the [maximumValue] or
the [maximumValue] otherwise.\n * \n * @sample samples.comparisons.ComparableOps.coerceAtMost\n
*/\npublic fun Long.coerceAtMost(maximumValue: Long): Long {\n    return if (this > maximumValue)
maximumValue else this\n}\n\n/**\n * Ensures that this value is not greater than the specified [maximumValue].\n *
\n * @return this value if it's less than or equal to the [maximumValue] or the [maximumValue] otherwise.\n * \n
* @sample samples.comparisons.ComparableOps.coerceAtMost\n */\npublic fun
Float.coerceAtMost(maximumValue: Float): Float {\n    return if (this > maximumValue) maximumValue else
this\n}\n\n/**\n * Ensures that this value is not greater than the specified [maximumValue].\n * \n * @return this
value if it's less than or equal to the [maximumValue] or the [maximumValue] otherwise.\n * \n * @sample
samples.comparisons.ComparableOps.coerceAtMost\n */\npublic fun Double.coerceAtMost(maximumValue:
Double): Double {\n    return if (this > maximumValue) maximumValue else this\n}\n\n/**\n * Ensures that this
value lies in the specified range [minimumValue]..[maximumValue].\n * \n * @return this value if it's in the range,
or [minimumValue] if this value is less than [minimumValue], or [maximumValue] if this value is greater than
[maximumValue].\n * \n * @sample samples.comparisons.ComparableOps.coerceInComparable\n */\npublic fun
<T : Comparable<T>> T.coerceIn(minimumValue: T?, maximumValue: T?): T {\n    if (minimumValue !== null
&& maximumValue !== null) {\n        if (minimumValue > maximumValue) throw
IllegalArgumentExcep
tion("Cannot coerce value to an empty range: maximum $maximumValue is less than
minimum $minimumValue.")\n        if (this < minimumValue) return minimumValue\n        if (this >
maximumValue) return maximumValue\n    }\n    else {\n        if (minimumValue !== null && this <

```

```

minimumValue) return minimumValue\n    if (maximumValue != null && this > maximumValue) return
maximumValue\n } \n return this\n}\n\n/**\n * Ensures that this value lies in the specified range
[minimumValue]..[maximumValue].\n * \n * @return this value if it's in the range, or [minimumValue] if this value
is less than [minimumValue], or [maximumValue] if this value is greater than [maximumValue].\n * \n * @sample
samples.comparisons.ComparableOps.coerceIn\n *\npublic fun Byte.coerceIn(minimumValue: Byte,
maximumValue: Byte): Byte {\n    if (minimumValue > maximumValue) throw
IllegalArgumentException("Cannot coerce value to an empty range: maximum $maximumValue is less than
minimum $minimumValue.")\n    if (this < minimumValue) return minimumValue\n    if (this > maximumValue)
return maximumValue\n    return this\n}\n\n/**\n * Ensures that this value lies in the specified range
[minimumValue]..[maximumValue].\n * \n * @return this value if it's in the range, or [minimumValue] if this value
is less than [minimumValue], or [maximumValue] if this value is greater than [maximumValue].\n * \n * @sample
samples.comparisons.ComparableOps.coerceIn\n *\npublic fun Short.coerceIn(minimumValue: Short,
maximumValue: Short): Short {\n    if (minimumValue > maximumValue) throw
IllegalArgumentException("Cannot coerce value to an empty range: maximum $maximumValue is less than
minimum $minimumValue.")\n    if (this < minimumValue) return minimumValue\n    if (this > maximumValue)
return maximumValue\n    return this\n}\n\n/**\n * Ensures that this value lies in the specified range
[minimumValue]..[maximumValue].\n * \n * @return this value if it's in the range, or [minimumValue] if this value
is less than [minimumValue], or [maximumValue] if this value is greater than [maximumValue].\n * \n * @sample
samples.comparisons.ComparableOps.coerceIn\n *\npublic fun Int.coerceIn(minimumValue: Int, maximumValue:
Int): Int {\n    if (minimumValue > maximumValue) throw IllegalArgumentException("Cannot coerce value to an
empty range: maximum $maximumValue is less than minimum $minimumValue.")\n    if (this < minimumValue)
return minimumValue\n    if (this > maximumValue) return maximumValue\n    return this\n}\n\n/**\n * Ensures
that this value lies in the specified range [minimumValue]..[maximumValue].\n * \n * @return this value if it's in
the range, or [minimumValue] if this value is less than [minimumValue], or [maximumValue] if this value is greater
than [maximumValue].\n * \n * @sample samples.comparisons.ComparableOps.coerceIn\n *\npublic fun
Long.coerceIn(minimumValue: Long, maximumValue: Long): Long {\n    if (minimumValue > maximumValue)
throw IllegalArgumentException("Cannot coerce value to an empty range: maximum $maximumValue is less than
minimum $minimumValue.")\n    if (this < minimumValue) return minimumValue\n    if (this > maximumValue)
return maximumValue\n    return this\n}\n\n/**\n * Ensures that this value lies in the specified range
[minimumValue]..[maximumValue].\n * \n * @return this value if it's in the range, or [minimumValue] if this value
is less than [minimumValue], or [maximumValue] if this value is greater than [maximumValue].\n * \n * @sample
samples.comparisons.ComparableOps.coerceIn\n *\npublic fun Float.coerceIn(minimumValue: Float,
maximumValue: Float): Float {\n    if (minimumValue > maximumValue) throw
IllegalArgumentException("Cannot coerce value to an empty range: maximum $maximumValue is less than
minimum $minimumValue.")\n    if (this < minimumValue) return minimumValue\n    if (this > maximumValue)
return maximumValue\n    return this\n}\n\n/**\n * Ensures that this value lies in the specified range
[minimumValue]..[maximumValue].\n * \n * @return this value if it's in the range, or [minimumValue] if this value
is less than [minimumValue], or [maximumValue] if this value is greater than [maximumValue].\n * \n * @sample
samples.comparisons.ComparableOps.coerceIn\n *\npublic fun Double.coerceIn(minimumValue: Double,
maximumValue: Double): Double {\n    if (minimumValue > maximumValue) throw
IllegalArgumentException("Cannot coerce value to an empty range: maximum $maximumValue is less than
minimum $minimumValue.")\n    if (this < minimumValue) return minimumValue\n    if (this > maximumValue)
return maximumValue\n    return this\n}\n\n/**\n * Ensures that this value lies in the specified [range].\n * \n *
@return this value if it's in the [range], or `range.start` if this value is less than `range.start`, or `range.endInclusive`
if this value is greater than `range.endInclusive`.\n * \n * @sample
samples.comparisons.ComparableOps.coerceInFloatingPointRange\n *\n@SinceKotlin("1.1")\npublic fun <T :
Comparable<T>> T.coerceIn(range: ClosedFloatingPointRange<T>): T {\n    if (range.isEmpty()) throw
IllegalArgumentException("Cannot coerce value to an empty range: $range.")\n    return when {\n        // this <

```

```

start equiv to this <= start && !(this >= start)\n    range.lessThanOrEquals(this, range.start) &&
!range.lessThanOrEquals(range.start, this) -> range.start\n    // this > end equiv to this >= end && !(this <= end)\n
    range.lessThanOrEquals(range.endInclusive, this) && !range.lessThanOrEquals(this, range.endInclusive) ->
range.endInclusive\n    else -> this\n    }\n}\n\n/**\n * Ensures that this value lies in the specified [range].\n * \n *
@return this value if it's in the [range], or `range.start` if this value is less than `range.start`, or `range.endInclusive`
if this value is greater than `range.endInclusive`. \n * \n * @sample
samples.comparisons.ComparableOps.coerceInComparable\n *\npublic fun <T> : Comparable<T>>
T.coerceIn(range: ClosedRange<T>): T {\n    if (range is ClosedFloatingPointRange) {\n        return
this.coerceIn<T>(range)\n    }\n    if (range.isEmpty()) throw IllegalArgumentException("Cannot coerce value to an
empty range: $range.\n")\n    return when {\n        this < range.start -> range.start\n        this > range.endInclusive ->
range.endInclusive\n        else -> this\n    }\n}\n\n/**\n * Ensures that this value lies in the specified [range].\n * \n *
@return this value if it's in the [range], or `range.start` if this value is less than `range.start`, or `range.endInclusive`
if this value is greater than `range.endInclusive`. \n * \n * @sample samples.comparisons.ComparableOps.coerceIn\n
*\npublic fun Int.coerceIn(range: ClosedRange<Int>): Int {\n    if (range is ClosedFloatingPointRange) {\n
return this.coerceIn<Int>(range)\n    }\n    if (range.isEmpty()) throw IllegalArgumentException("Cannot coerce
value to an empty range: $range.\n")\n    return when {\n        this < range.start -> range.start\n        this >
range.endInclusive -> range.endInclusive\n        else -> this\n    }\n}\n\n/**\n * Ensures that this value lies in the
specified [range].\n * \n * @return this value if it's in the [range], or `range.start` if this value is less than
`range.start`, or `range.endInclusive` if this value is greater than `range.endInclusive`. \n * \n * @sample
samples.comparisons.ComparableOps.coerceIn\n *\npublic fun Long.coerceIn(range: ClosedRange<Long>): Long
{\n    if (range is ClosedFloatingPointRange) {\n        return this.coerceIn<Long>(range)\n    }\n    if
(range.isEmpty()) throw IllegalArgumentException("Cannot coerce value to an empty range: $range.\n")\n    return
when {\n        this < range.start -> range.start\n        this > range.endInclusive -> range.endInclusive\n        else ->
this\n    }\n}\n\n"/**\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n *
Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n *
\n * \n * // Auto-generated file. DO NOT EDIT!\n * \n * package kotlin\n * \n * import kotlin.experimental.*\n * import
kotlin.jvm.*\n * \n * @SinceKotlin("1.5")\n * @WasExperimental(ExperimentalUnsignedTypes::class)\n * \n * @JvmInline\n * \n *
public value class UByte @PublishedApi internal constructor(@PublishedApi internal val data: Byte) :
Comparable<UByte> {\n    \n    companion object {\n        /**\n         * A constant holding the minimum value an
instance of UByte can have.\n         * \n         * @public\n         * const val MIN_VALUE: UByte = UByte(0)\n         * \n         *
A constant holding the maximum value an instance of UByte can have.\n         * \n         * @public\n         * const val
MAX_VALUE: UByte = UByte(-1)\n         * \n         * The number of bytes used to represent an instance of
UByte in a binary form.\n         * \n         * @public\n         * const val SIZE_BYTES: Int = 1\n         * \n         * The number of
bits used to represent an instance of UByte in a binary form.\n         * \n         * @public\n         * const val SIZE_BITS: Int = 8\n
    }\n    \n    /**\n     * Compares this value with the specified value for order.\n     * Returns zero if this value is equal to
the specified other value, a negative number if it's less than other,\n     * or a positive number if it's greater than
other.\n     * \n     * @kotlin.internal.InlineOnly\n     * @Suppress("OVERRIDE_BY_INLINE")\n     * public override
inline operator fun compareTo(other: UByte): Int = this.toInt().compareTo(other.toInt())\n     * \n     * /**\n      * Compares
this value with the specified value for order.\n      * Returns zero if this value is equal to the specified other value, a
negative number if it's less than other,\n      * or a positive number if it's greater than other.\n      * \n      * @kotlin.internal.InlineOnly\n      * public inline operator fun compareTo(other: UShort): Int =
this.toInt().compareTo(other.toInt())\n      * \n      * /**\n       * Compares this value with the specified value for order.\n       *
Returns zero if this value is equal to the specified other value, a negative number if it's less than other,\n       * or a
positive number if it's greater than other.\n       * \n       * @kotlin.internal.InlineOnly\n       * public inline operator fun
compareTo(other: UInt): Int = this.toUInt().compareTo(other)\n       * \n       * /**\n        * Compares this value with the
specified value for order.\n        * Returns zero if this value is equal to the specified other value, a negative number if
it's less than other,\n        * or a positive number if it's greater than other.\n        * \n        * @kotlin.internal.InlineOnly\n        * public inline operator fun compareTo(other: ULong): Int = this.toULong().compareTo(other)\n        * \n        * /** Adds the

```

```

other value to this value. */n @kotlin.internal.InlineOnly\n public inline operator fun plus(other: UByte): UInt =
this.toUInt().plus(other.toUInt())n /** Adds the other value to this value. */n @kotlin.internal.InlineOnly\n
public inline operator fun plus(other: UShort): UInt = this.toUInt().plus(other.toUInt())n /** Adds the other value
to this value. */n @kotlin.internal.InlineOnly\n public inline operator fun plus(other: UInt): UInt =
this.toUInt().plus(other)n /** Adds the other value to this value. */n @kotlin.internal.InlineOnly\n public
inline operator fun plus(other: ULong): ULong = this.toULong().plus(other)n\n /** Subtracts the other value from
this value. */n @kotlin.internal.InlineOnly\n public inline operator fun minus(other: UByte): UInt =
this.toUInt().minus(other.toUInt())n /** Subtracts the other value from this value. */n
@kotlin.internal.InlineOnly\n public inline operator fun minus(other: UShort): UInt =
this.toUInt().minus(other.toUInt())n /** Subtracts the other value from this value. */n
@kotlin.internal.InlineOnly\n public inline operator fun minus(other: UInt): UInt = this.toUInt().minus(other)n
/** Subtracts the other value from this value. */n @kotlin.internal.InlineOnly\n public inline operator fun
minus(other: ULong): ULong = this.toULong().minus(other)n\n /** Multiplies this value by the other value. */n
@kotlin.internal.InlineOnly\n public inline operator fun times(other: UByte): UInt =
this.toUInt().times(other.toUInt())n /** Multiplies this value by the other value. */n
@kotlin.internal.InlineOnly\n public inline operator fun times(other: UShort): UInt =
this.toUInt().times(other.toUInt())n /** Multiplies this value by the other value. */n
@kotlin.internal.InlineOnly\n public inline operator fun times(other: UInt): UInt = this.toUInt().times(other)n
/** Multiplies this value by the other value. */n @kotlin.internal.InlineOnly\n public inline operator fun
times(other: ULong): ULong = this.toULong().times(other)n\n /** Divides this value by the other value,
truncating the result to an integer that is closer to zero. */n @kotlin.internal.InlineOnly\n public inline operator
fun div(other: UByte): UInt = this.toUInt().div(other.toUInt())n /** Divides this value by the other value,
truncating the result to an integer that is closer to zero. */n @kotlin.internal.InlineOnly\n public inline operator
fun div(other: UShort): UInt = this.toUInt().div(other.toUInt())n /** Divides this value by the other value,
truncating the result to an integer that is closer to zero. */n @kotlin.internal.InlineOnly\n public inline operator
fun div(other: UInt): UInt = this.toUInt().div(other)n /** Divides this value by the other value, truncating the
result to an integer that is closer to zero. */n @kotlin.internal.InlineOnly\n public inline operator fun div(other:
ULong): ULong = this.toULong().div(other)n\n /**\n * Calculates the remainder of truncating division of this
value by the other value.\n * \n * The result is always less than the divisor.\n */n
@kotlin.internal.InlineOnly\n public inline operator fun rem(other: UByte): UInt =
this.toUInt().rem(other.toUInt())n /**\n * Calculates the remainder of truncating division of this value by the
other value.\n * \n * The result is always less than the divisor.\n */n @kotlin.internal.InlineOnly\n public
inline operator fun rem(other: UShort): UInt = this.toUInt().rem(other.toUInt())n /**\n * Calculates the
remainder of truncating division of this value by the other value.\n * \n * The result is always less than the
divisor.\n */n @kotlin.internal.InlineOnly\n public inline operator fun rem(other: UInt): UInt =
this.toUInt().rem(other)n /**\n * Calculates the remainder of truncating division of this value by the other
value.\n * \n * The result is always less than the divisor.\n */n @kotlin.internal.InlineOnly\n public
inline operator fun rem(other: ULong): ULong = this.toULong().rem(other)n\n /**\n * Divides this value by
the other value, flooring the result to an integer that is closer to negative infinity.\n * \n * For unsigned types,
the results of flooring division and truncating division are the same.\n */n @kotlin.internal.InlineOnly\n
public inline fun floorDiv(other: UByte): UInt = this.toUInt().floorDiv(other.toUInt())n /**\n * Divides this
value by the other value, flooring the result to an integer that is closer to negative infinity.\n * \n * For unsigned
types, the results of flooring division and truncating division are the same.\n */n @kotlin.internal.InlineOnly\n
public inline fun floorDiv(other: UShort): UInt = this.toUInt().floorDiv(other.toUInt())n /**\n * Divides this
value by the other value, flooring the result to an integer that is closer to negative infinity.\n * \n * For unsigned
types, the results of flooring division and truncating division are the same.\n */n @kotlin.internal.InlineOnly\n
public inline fun floorDiv(other: UInt): UInt = this.toUInt().floorDiv(other)n /**\n * Divides this value by the
other value, flooring the result to an integer that is closer to negative infinity.\n * \n * For unsigned types, the

```

```

results of flooring division and truncating division are the same.\n
*/\n @kotlin.internal.InlineOnly\n public
inline fun floorDiv(other: ULong): ULong = this.toULong().floorDiv(other)\n\n /**\n * Calculates the
remainder of flooring division of this value by the other value.\n * \n * The result is always less than the
divisor.\n * \n * For unsigned types, the remainders of flooring division and truncating division are the same.\n
*/\n @kotlin.internal.InlineOnly\n public inline fun mod(other: UByte): UByte =
this.toUInt().mod(other.toUInt()).toUByte()\n\n /**\n * Calculates the remainder of flooring division of this value
by the other value.\n * \n * The result is always less than the divisor.\n * \n * For unsigned types, the
remainders of flooring division and truncating division are the same.\n */\n @kotlin.internal.InlineOnly\n
public inline fun mod(other: UShort): UShort = this.toUInt().mod(other.toUInt()).toUShort()\n\n /**\n *
Calculates the remainder of flooring division of this value by the other value.\n * \n * The result is always less
than the divisor.\n * \n * For unsigned types, the remainders of flooring division and truncating division are the
same.\n */\n @kotlin.internal.InlineOnly\n public inline fun mod(other: UInt): UInt =
this.toUInt().mod(other)\n\n /**\n * Calculates the remainder of flooring division of this value by the other
value.\n * \n * The result is always less than the divisor.\n * \n * For unsigned types, the remainders of
flooring division and truncating division are the same.\n */\n @kotlin.internal.InlineOnly\n public inline fun
mod(other: ULong): ULong = this.toULong().mod(other)\n\n /**\n * Returns this value incremented by one.\n
*/\n * @sample samples.misc.Builtins.inc\n */\n @kotlin.internal.InlineOnly\n public inline operator fun
inc(): UByte = UByte(data.inc())\n\n /**\n * Returns this value decremented by one.\n */\n * @sample
samples.misc.Builtins.dec\n */\n @kotlin.internal.InlineOnly\n public inline operator fun dec(): UByte =
UByte(data.dec())\n\n /** Creates a range from this value to the specified [other] value. */\n
@kotlin.internal.InlineOnly\n public inline operator fun rangeTo(other: UByte): UIntRange =
UIntRange(this.toUInt(), other.toUInt())\n\n /** Performs a bitwise AND operation between the two values. */\n
@kotlin.internal.InlineOnly\n public inline infix fun and(other: UByte): UByte = UByte(this.data and other.data)\n
/** Performs a bitwise OR operation between the two values. */\n @kotlin.internal.InlineOnly\n public inline
infix fun or(other: UByte): UByte = UByte(this.data or other.data)\n\n /** Performs a bitwise XOR operation
between the two values. */\n @kotlin.internal.InlineOnly\n public inline infix fun xor(other: UByte): UByte =
UByte(this.data xor other.data)\n\n /** Inverts the bits in this value. */\n @kotlin.internal.InlineOnly\n public
inline fun inv(): UByte = UByte(data.inv())\n\n /**\n * Converts this [UByte] value to [Byte].\n * \n * If
this value is less than or equals to [Byte.MAX_VALUE], the resulting `Byte` value represents\n * the same
numerical value as this `UByte`. Otherwise the result is negative.\n * \n * The resulting `Byte` value has the
same binary representation as this `UByte` value.\n */\n @kotlin.internal.InlineOnly\n public inline fun
toByte(): Byte = data\n\n /**\n * Converts this [UByte] value to [Short].\n * \n * The resulting `Short` value
represents the same numerical value as this `UByte`. \n * \n * The least significant 8 bits of the resulting `Short`
value are the same as the bits of this `UByte` value,\n * whereas the most significant 8 bits are filled with zeros.\n
*/\n @kotlin.internal.InlineOnly\n public inline fun toShort(): Short = data.toShort() and 0xFF\n\n /**\n *
Converts this [UByte] value to [Int].\n * \n * The resulting `Int` value represents the same numerical value as
this `UByte`. \n * \n * The least significant 8 bits of the resulting `Int` value are the same as the bits of this
`UByte` value,\n * whereas the most significant 24 bits are filled with zeros.\n */\n
@kotlin.internal.InlineOnly\n public inline fun toInt(): Int = data.toInt() and 0xFF\n\n /**\n * Converts this
[UByte] value to [Long].\n * \n * The resulting `Long` value represents the same numerical value as this
`UByte`. \n * \n * The least significant 8 bits of the resulting `Long` value are the same as the bits of this
`UByte` value,\n * whereas the most significant 56 bits are filled with zeros.\n */\n
@kotlin.internal.InlineOnly\n public inline fun toLong(): Long = data.toLong() and 0xFF\n\n /** Returns this
value. */\n @kotlin.internal.InlineOnly\n public inline fun toUByte(): UByte = this\n\n /**\n * Converts this
[UByte] value to [UShort].\n * \n * The resulting `UShort` value represents the same numerical value as this
`UByte`. \n * \n * The least significant 8 bits of the resulting `UShort` value are the same as the bits of this
`UByte` value,\n * whereas the most significant 8 bits are filled with zeros.\n */\n
@kotlin.internal.InlineOnly\n public inline fun toUShort(): UShort = UShort(data.toShort() and 0xFF)\n\n /**\n

```

```

* Converts this [UByte] value to [UInt].\n * The resulting `UInt` value represents the same numerical value
as this `UByte`.\n * The least significant 8 bits of the resulting `UInt` value are the same as the bits of this
`UByte` value,\n * whereas the most significant 24 bits are filled with zeros.\n */
@kotlin.internal.InlineOnly\n public inline fun toUInt(): UInt = UInt(data.toInt() and 0xFF)\n /**
* Converts this [UByte] value to [ULong].\n * The resulting `ULong` value represents the same numerical
value as this `UByte`.\n * The least significant 8 bits of the resulting `ULong` value are the same as the bits
of this `UByte` value,\n * whereas the most significant 56 bits are filled with zeros.\n */
@kotlin.internal.InlineOnly\n public inline fun toULong(): ULong = ULong(data.toLong() and 0xFF)\n /**
* Converts this [UByte] value to [Float].\n * The resulting `Float` value represents the same numerical
value as this `UByte`.\n */
@kotlin.internal.InlineOnly\n public inline fun toFloat(): Float =
this.toInt().toFloat()\n /**
* Converts this [UByte] value to [Double].\n * The resulting `Double`
value represents the same numerical value as this `UByte`.\n */
@kotlin.internal.InlineOnly\n public inline
fun toDouble(): Double = this.toInt().toDouble()\n public override fun toString(): String =
toInt().toString()\n}\n\n/**
* Converts this [Byte] value to [UByte].\n * If this value is positive, the resulting
`UByte` value represents the same numerical value as this `Byte`.\n * The resulting `UByte` value has the same
binary representation as this `Byte` value.\n
*/
@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\n
public inline fun Byte.toUByte(): UByte = UByte(this)\n/**
* Converts this [Short] value to [UByte].\n * If
this value is positive and less than or equals to [UByte.MAX_VALUE], the resulting `UByte` value represents\n *
the same numerical value as this `Short`.\n * The resulting `UByte` value is represented by the least significant 8
bits of this `Short` value.\n
*/
@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\n
public inline fun Short.toUByte(): UByte = UByte(this.toByte())\n/**
* Converts this [Int] value to [UByte].\n
*\n * If this value is positive and less than or equals to [UByte.MAX_VALUE], the resulting `UByte` value
represents\n * the same numerical value as this `Int`.\n * The resulting `UByte` value is represented by the least
significant 8 bits of this `Int` value.\n
*/
@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\n
public inline fun Int.toUByte(): UByte = UByte(this.toByte())\n/**
* Converts this [Long] value to [UByte].\n
*\n * If this value is positive and less than or equals to [UByte.MAX_VALUE], the resulting `UByte` value
represents\n * the same numerical value as this `Long`.\n * The resulting `UByte` value is represented by the
least significant 8 bits of this `Long` value.\n
*/
@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\n
public inline fun Long.toUByte(): UByte = UByte(this.toByte())\n","/**
* Copyright 2010-2021 JetBrains s.r.o.
and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license
that can be found in the license/LICENSE.txt file.\n */\n\n// Auto-generated file. DO NOT EDIT!\n\npackage
kotlin\n\nimport kotlin.experimental.*\nimport
kotlin.jvm.*\n\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@JvmInline\npu
blic value class UInt @PublishedApi internal constructor(@PublishedApi internal val data: Int) :
Comparable<UInt> {\n\n companion object {\n\n /**
* A constant holding the minimum value an
instance of UInt can have.\n */
public const val MIN_VALUE: UInt = UInt(0)\n\n /**
* A
constant holding the maximum value an instance of UInt can have.\n */
public const val MAX_VALUE:
UInt = UInt(-1)\n\n /**
* The number of bytes used to represent an instance of UInt in a binary form.\n
*/
public const val SIZE_BYTES: Int = 4\n\n /**
* The number of bits used to represent an
instance of UInt in a binary form.\n */
public const val SIZE_BITS: Int = 32\n }\n\n /**
*
Compares this value with the specified value for order.\n * Returns zero if this value is equal to the specified other
value, a negative number if it's less than other,\n * or a positive number if it's greater than other.\n */
@kotlin.internal.InlineOnly\n public inline operator fun compareTo(other: UByte): Int =
this.compareTo(other.toUInt())\n\n /**
* Compares this value with the specified value for order.\n
*/

```

```

Returns zero if this value is equal to the specified other value, a negative number if it's less than other,\n * or a
positive number if it's greater than other.\n */\n @kotlin.internal.InlineOnly\n public inline operator fun
compareTo(other: UShort): Int = this.compareTo(other.toUInt())\n /**\n * Compares this value with the
specified value for order.\n * Returns zero if this value is equal to the specified other value, a negative number if
it's less than other,\n * or a positive number if it's greater than other.\n */\n @kotlin.internal.InlineOnly\n
@Suppress("OVERRIDE_BY_INLINE")\n public override inline operator fun compareTo(other: UInt): Int =
uintCompare(this.data, other.data)\n /**\n * Compares this value with the specified value for order.\n *
Returns zero if this value is equal to the specified other value, a negative number if it's less than other,\n * or a
positive number if it's greater than other.\n */\n @kotlin.internal.InlineOnly\n public inline operator fun
compareTo(other: ULong): Int = this.toULong().compareTo(other)\n /** Adds the other value to this value. */\n
@kotlin.internal.InlineOnly\n public inline operator fun plus(other: UByte): UInt = this.plus(other.toUInt())\n
/** Adds the other value to this value. */\n @kotlin.internal.InlineOnly\n public inline operator fun plus(other:
UShort): UInt = this.plus(other.toUInt())\n /** Adds the other value to this value. */\n
@kotlin.internal.InlineOnly\n public inline operator fun plus(other: UInt): UInt = UInt(this.data.plus(other.data))\n
/** Adds the other value to this value. */\n @kotlin.internal.InlineOnly\n public inline operator fun plus(other:
ULong): ULong = this.toULong().plus(other)\n /** Subtracts the other value from this value. */\n
@kotlin.internal.InlineOnly\n public inline operator fun minus(other: UByte): UInt = this.minus(other.toUInt())\n
/** Subtracts the other value from this value. */\n @kotlin.internal.InlineOnly\n public inline operator fun
minus(other: UShort): UInt = this.minus(other.toUInt())\n /** Subtracts the other value from this value. */\n
@kotlin.internal.InlineOnly\n public inline operator fun minus(other: UInt): UInt =
UInt(this.data.minus(other.data))\n /** Subtracts the other value from this value. */\n
@kotlin.internal.InlineOnly\n public inline operator fun minus(other: ULong): ULong =
this.toULong().minus(other)\n /** Multiplies this value by the other value. */\n @kotlin.internal.InlineOnly\n
public inline operator fun times(other: UByte): UInt = this.times(other.toUInt())\n /** Multiplies this value by the
other value. */\n @kotlin.internal.InlineOnly\n public inline operator fun times(other: UShort): UInt =
this.times(other.toUInt())\n /** Multiplies this value by the other value. */\n @kotlin.internal.InlineOnly\n
public inline operator fun times(other: UInt): UInt = UInt(this.data.times(other.data))\n /** Multiplies this value
by the other value. */\n @kotlin.internal.InlineOnly\n public inline operator fun times(other: ULong): ULong =
this.toULong().times(other)\n /** Divides this value by the other value, truncating the result to an integer that is
closer to zero. */\n @kotlin.internal.InlineOnly\n public inline operator fun div(other: UByte): UInt =
this.div(other.toUInt())\n /** Divides this value by the other value, truncating the result to an integer that is closer
to zero. */\n @kotlin.internal.InlineOnly\n public inline operator fun div(other: UShort): UInt =
this.div(other.toUInt())\n /** Divides this value by the other value, truncating the result to an integer that is closer
to zero. */\n @kotlin.internal.InlineOnly\n public inline operator fun div(other: UInt): UInt = uintDivide(this,
other)\n /** Divides this value by the other value, truncating the result to an integer that is closer to zero. */\n
@kotlin.internal.InlineOnly\n public inline operator fun div(other: ULong): ULong =
this.toULong().div(other)\n /**\n * Calculates the remainder of truncating division of this value by the other
value.\n * \n * The result is always less than the divisor.\n */\n @kotlin.internal.InlineOnly\n public
inline operator fun rem(other: UByte): UInt = this.rem(other.toUInt())\n /**\n * Calculates the remainder of
truncating division of this value by the other value.\n * \n * The result is always less than the divisor.\n */\n
@kotlin.internal.InlineOnly\n public inline operator fun rem(other: UShort): UInt = this.rem(other.toUInt())\n
/**\n * Calculates the remainder of truncating division of this value by the other value.\n * \n * The result is
always less than the divisor.\n */\n @kotlin.internal.InlineOnly\n public inline operator fun rem(other: UInt):
UInt = uintRemainder(this, other)\n /**\n * Calculates the remainder of truncating division of this value by the
other value.\n * \n * The result is always less than the divisor.\n */\n @kotlin.internal.InlineOnly\n public
inline operator fun rem(other: ULong): ULong = this.toULong().rem(other)\n /**\n * Divides this value by
the other value, flooring the result to an integer that is closer to negative infinity.\n * \n * For unsigned types,
the results of flooring division and truncating division are the same.\n */\n @kotlin.internal.InlineOnly\n

```



```

public inline fun floorDiv(other: UByte): UInt = this.floorDiv(other.toUInt())\n /**\n * Divides this value by the
other value, flooring the result to an integer that is closer to negative infinity.\n * \n * For unsigned types, the
results of flooring division and truncating division are the same.\n * \n @kotlin.internal.InlineOnly\n public
inline fun floorDiv(other: UShort): UInt = this.floorDiv(other.toUInt())\n /**\n * Divides this value by the other
value, flooring the result to an integer that is closer to negative infinity.\n * \n * For unsigned types, the results
of flooring division and truncating division are the same.\n * \n @kotlin.internal.InlineOnly\n public inline
fun floorDiv(other: UInt): UInt = div(other)\n /**\n * Divides this value by the other value, flooring the result to
an integer that is closer to negative infinity.\n * \n * For unsigned types, the results of flooring division and
truncating division are the same.\n * \n @kotlin.internal.InlineOnly\n public inline fun floorDiv(other:
ULong): ULong = this.toULong().floorDiv(other)\n\n /**\n * Calculates the remainder of flooring division of
this value by the other value.\n * \n * The result is always less than the divisor.\n * \n * For unsigned
types, the remainders of flooring division and truncating division are the same.\n * \n
@kotlin.internal.InlineOnly\n public inline fun mod(other: UByte): UByte = this.mod(other.toUInt()).toUByte()\n
/**\n * Calculates the remainder of flooring division of this value by the other value.\n * \n * The result is
always less than the divisor.\n * \n * For unsigned types, the remainders of flooring division and truncating
division are the same.\n * \n @kotlin.internal.InlineOnly\n public inline fun mod(other: UShort): UShort =
this.mod(other.toUInt()).toUShort()\n /**\n * Calculates the remainder of flooring division of this value by the
other value.\n * \n * The result is always less than the divisor.\n * \n * For unsigned types, the remainders
of flooring division and truncating division are the same.\n * \n @kotlin.internal.InlineOnly\n public inline
fun mod(other: UInt): UInt = rem(other)\n /**\n * Calculates the remainder of flooring division of this value by
the other value.\n * \n * The result is always less than the divisor.\n * \n * For unsigned types, the
remainders of flooring division and truncating division are the same.\n * \n @kotlin.internal.InlineOnly\n
public inline fun mod(other: ULong): ULong = this.toULong().mod(other)\n\n /**\n * Returns this value
incremented by one.\n * \n * @sample samples.misc.Builtins.inc\n * \n @kotlin.internal.InlineOnly\n
public inline operator fun inc(): UInt = UInt(data.inc())\n\n /**\n * Returns this value decremented by one.\n
*\n * @sample samples.misc.Builtins.dec\n * \n @kotlin.internal.InlineOnly\n public inline operator fun
dec(): UInt = UInt(data.dec())\n\n /**\n * Creates a range from this value to the specified [other] value. *\n
@kotlin.internal.InlineOnly\n public inline operator fun rangeTo(other: UInt): UIntRange = UIntRange(this,
other)\n\n /**\n * Shifts this value left by the [bitCount] number of bits.\n * \n * Note that only the five
lowest-order bits of the [bitCount] are used as the shift distance.\n * \n * The shift distance actually used is therefore
always in the range `0..31`.\n * \n @kotlin.internal.InlineOnly\n public inline infix fun shl(bitCount: Int): UInt
= UInt(data shl bitCount)\n\n /**\n * Shifts this value right by the [bitCount] number of bits, filling the leftmost
bits with zeros.\n * \n * Note that only the five lowest-order bits of the [bitCount] are used as the shift
distance.\n * \n * The shift distance actually used is therefore always in the range `0..31`.\n * \n
@kotlin.internal.InlineOnly\n public inline infix fun shr(bitCount: Int): UInt = UInt(data ushr bitCount)\n\n /**
Performs a bitwise AND operation between the two values. *\n @kotlin.internal.InlineOnly\n public inline infix
fun and(other: UInt): UInt = UInt(this.data and other.data)\n\n /**\n * Performs a bitwise OR operation between the two
values. *\n @kotlin.internal.InlineOnly\n public inline infix fun or(other: UInt): UInt = UInt(this.data or
other.data)\n\n /**\n * Performs a bitwise XOR operation between the two values. *\n @kotlin.internal.InlineOnly\n
public inline infix fun xor(other: UInt): UInt = UInt(this.data xor other.data)\n\n /**\n * Inverts the bits in this value.
*\n @kotlin.internal.InlineOnly\n public inline fun inv(): UInt = UInt(data.inv())\n\n /**\n * Converts this
[UInt] value to [Byte].\n * \n * If this value is less than or equals to [Byte.MAX_VALUE], the resulting `Byte`
value represents\n * the same numerical value as this `UInt`.\n * \n * The resulting `Byte` value is
represented by the least significant 8 bits of this `UInt` value.\n * \n * Note that the resulting `Byte` value may be
negative.\n * \n @kotlin.internal.InlineOnly\n public inline fun toByte(): Byte = data.toByte()\n\n /**\n *
Converts this [UInt] value to [Short].\n * \n * If this value is less than or equals to [Short.MAX_VALUE], the
resulting `Short` value represents\n * the same numerical value as this `UInt`.\n * \n * The resulting `Short`
value is represented by the least significant 16 bits of this `UInt` value.\n * \n * Note that the resulting `Short`
value

```

```

may be negative.\n    *\n    @kotlin.internal.InlineOnly\n    public inline fun toShort(): Short = data.toShort()\n    /**\n     * Converts this [UInt] value to [Int].\n     *\n     * If this value is less than or equals to [Int.MAX_VALUE],\n     the resulting `Int` value represents\n     * the same numerical value as this `UInt`. Otherwise the result is negative.\n     *\n     * The resulting `Int` value has the same binary representation as this `UInt` value.\n     *\n    @kotlin.internal.InlineOnly\n    public inline fun toInt(): Int = data\n    /**\n     * Converts this [UInt] value to\n    [Long].\n     *\n     * The resulting `Long` value represents the same numerical value as this `UInt`. \n     *\n     * The\n     least significant 32 bits of the resulting `Long` value are the same as the bits of this `UInt` value,\n     * whereas the\n     most significant 32 bits are filled with zeros.\n     *\n    @kotlin.internal.InlineOnly\n    public inline fun toLong():\n    Long = data.toLong() and 0xFFFF_FFFF\n    /**\n     * Converts this [UInt] value to [UByte].\n     *\n     * If this\n     value is less than or equals to [UByte.MAX_VALUE], the resulting `UByte` value represents\n     * the same\n     numerical value as this `UInt`. \n     *\n     * The resulting `UByte` value is represented by the least significant 8 bits\n     of this `UInt` value.\n     *\n    @kotlin.internal.InlineOnly\n    public inline fun toUByte(): UByte =\n    data.toUByte()\n    /**\n     * Converts this [UInt] value to [UShort].\n     *\n     * If this value is less than or equals\n     to [UShort.MAX_VALUE], the resulting `UShort` value represents\n     * the same numerical value as this `UInt`. \n     *\n     * The resulting `UShort` value is represented by the least significant 16 bits of this `UInt` value.\n     *\n    @kotlin.internal.InlineOnly\n    public inline fun toUShort(): UShort = data.toUShort()\n    /** Returns this value.\n     *\n    @kotlin.internal.InlineOnly\n    public inline fun toUInt(): UInt = this\n    /**\n     * Converts this [UInt] value\n     to [ULong].\n     *\n     * The resulting `ULong` value represents the same numerical value as this `UInt`. \n     *\n     *\n     * The least significant 32 bits of the resulting `ULong` value are the same as the bits of this `UInt` value,\n     * whereas the most significant 32 bits are filled with zeros.\n     *\n    @kotlin.internal.InlineOnly\n    public inline\n    fun toULong(): ULong = ULong(data.toLong() and 0xFFFF_FFFF)\n    /**\n     * Converts this [UInt] value to\n    [Float].\n     *\n     * The resulting value is the closest `Float` to this `UInt` value. \n     *\n     * In case when this `UInt`\n     value is exactly between two `Float`s,\n     * the one with zero at least significant bit of mantissa is selected.\n     *\n    @kotlin.internal.InlineOnly\n    public inline fun toFloat(): Float = this.toDouble().toFloat()\n    /**\n     * Converts\n     this [UInt] value to [Double].\n     *\n     * The resulting `Double` value represents the same numerical value as this\n     `UInt`. \n     *\n    @kotlin.internal.InlineOnly\n    public inline fun toDouble(): Double = UInt.toDouble(data)\n    public override fun toString(): String = toLong().toString()\n    /**\n     * Converts this [Byte] value to [UInt].\n     *\n     * If this value is positive, the resulting `UInt` value represents the same numerical value as this `Byte`. \n     *\n     *\n     * The least significant 8 bits of the resulting `UInt` value are the same as the bits of this `Byte` value,\n     * whereas the\n     most significant 24 bits are filled with the sign bit of this value.\n     *\n    @SinceKotlin("1.5")\n    @WasExperimental(ExperimentalUnsignedTypes::class)\n    @kotlin.internal.InlineOnly\n    public inline fun Byte.toUInt(): UInt = UInt(this.toInt())\n    /**\n     * Converts this [Short] value to [UInt].\n     *\n     * If\n     this value is positive, the resulting `UInt` value represents the same numerical value as this `Short`. \n     *\n     *\n     * The least\n     significant 16 bits of the resulting `UInt` value are the same as the bits of this `Short` value,\n     * whereas the most\n     significant 16 bits are filled with the sign bit of this value.\n     *\n    @SinceKotlin("1.5")\n    @WasExperimental(ExperimentalUnsignedTypes::class)\n    @kotlin.internal.InlineOnly\n    public inline fun Short.toUInt(): UInt = UInt(this.toInt())\n    /**\n     * Converts this [Int] value to [UInt].\n     *\n     * If this\n     value is positive, the resulting `UInt` value represents the same numerical value as this `Int`. \n     *\n     *\n     * The resulting\n     `UInt` value has the same binary representation as this `Int` value.\n     *\n    @SinceKotlin("1.5")\n    @WasExperimental(ExperimentalUnsignedTypes::class)\n    @kotlin.internal.InlineOnly\n    public inline fun Int.toUInt(): UInt = UInt(this)\n    /**\n     * Converts this [Long] value to [UInt].\n     *\n     * If this value\n     is positive and less than or equals to [UInt.MAX_VALUE], the resulting `UInt` value represents\n     * the same\n     numerical value as this `Long`. \n     *\n     * The resulting `UInt` value is represented by the least significant 32 bits of\n     this `Long` value.\n     *\n    @SinceKotlin("1.5")\n    @WasExperimental(ExperimentalUnsignedTypes::class)\n    @kotlin.internal.InlineOnly\n    public inline fun Long.toUInt(): UInt = UInt(this.toInt())\n    /**\n     * Converts this [Float] value to [UInt].\n     *\n     *\n     * The fractional part, if any, is rounded down towards zero. \n     *\n     * Returns zero if this `Float` value is negative or `NaN`,\n     [UInt.MAX_VALUE] if it's bigger than `UInt.MAX_VALUE`. \n     *\n
```

```

*^@SinceKotlin("1.5")^@WasExperimental(ExperimentalUnsignedTypes::class)^@kotlin.internal.InlineOnly^
npublic inline fun Float.toUInt(): UInt = doubleToUInt(this.toDouble())^/**^
 * Converts this [Double] value to
 [UInt].^
 *^
 * The fractional part, if any, is rounded down towards zero.^
 * Returns zero if this `Double` value is
 negative or `NaN`, [UInt.MAX_VALUE] if it's bigger than `UInt.MAX_VALUE`.^
^
*^@SinceKotlin("1.5")^@WasExperimental(ExperimentalUnsignedTypes::class)^@kotlin.internal.InlineOnly^
npublic inline fun Double.toUInt(): UInt = doubleToUInt(this)^,"/^**^
 * Copyright 2010-2021 JetBrains s.r.o. and
 Kotlin Programming Language contributors.^
 * Use of this source code is governed by the Apache 2.0 license that
 can be found in the license/LICENSE.txt file.^
 *^
^// Auto-generated file. DO NOT EDIT!^
^
package
kotlin^
^import kotlin.experimental.^
^import
kotlin.jvm.^
^@SinceKotlin("1.5")^@WasExperimental(ExperimentalUnsignedTypes::class)^@JvmInline^
npublic value class UShort @PublishedApi internal constructor(@PublishedApi internal val data: Short) :
Comparable<UShort> {^
^
^    companion object {^
^
^        /**^
^         * A constant holding the minimum value an
 instance of UShort can have.^
^
^        public const val MIN_VALUE: UShort = UShort(0)^
^
^        /**^
^         * A constant holding the maximum value an instance of UShort can have.^
^
^        public const val
 MAX_VALUE: UShort = UShort(-1)^
^
^        /**^
^         * The number of bytes used to represent an instance of
 UShort in a binary form.^
^
^        public const val SIZE_BYTES: Int = 2^
^
^        /**^
^         * The number of
 bits used to represent an instance of UShort in a binary form.^
^
^        public const val SIZE_BITS: Int =
 16^
^    }^
^
^    /**^
^     * Compares this value with the specified value for order.^
^     * Returns zero if this value is
 equal to the specified other value, a negative number if it's less than other,^
^     * or a positive number if it's greater
 than other.^
^
^    @kotlin.internal.InlineOnly^
^    public inline operator fun compareTo(other: UByte): Int =
 this.toInt().compareTo(other.toInt())^
^
^    /**^
^     * Compares this value with the specified value for order.^
^     *
 Returns zero if this value is equal to the specified other value, a negative number if it's less than other,^
^     * or a
 positive number if it's greater than other.^
^
^    @kotlin.internal.InlineOnly^
^
^    @Suppress("OVERRIDE_BY_INLINE")^
^    public override inline operator fun compareTo(other: UShort): Int =
 this.toInt().compareTo(other.toInt())^
^
^    /**^
^     * Compares this value with the specified value for order.^
^     *
 Returns zero if this value is equal to the specified other value, a negative number if it's less than other,^
^     * or a
 positive number if it's greater than other.^
^
^    @kotlin.internal.InlineOnly^
^
^    public inline operator fun compareTo(other: UInt): Int = this.toUInt().compareTo(other)^
^
^    /**^
^     * Compares this value with the
 specified value for order.^
^     * Returns zero if this value is equal to the specified other value, a negative number if
 it's less than other,^
^     * or a positive number if it's greater than other.^
^
^    @kotlin.internal.InlineOnly^
^
^    public inline operator fun compareTo(other: ULong): Int = this.toULong().compareTo(other)^
^
^    /**^
^     * Adds the
 other value to this value.^
^
^    @kotlin.internal.InlineOnly^
^
^    public inline operator fun plus(other: UByte): UInt =
 this.toUInt().plus(other.toUInt())^
^
^    /**^
^     * Adds the other value to this value.^
^
^    @kotlin.internal.InlineOnly^
^
^    public inline operator fun plus(other: UShort): UInt = this.toUInt().plus(other.toUInt())^
^
^    /**^
^     * Adds the other value
 to this value.^
^
^    @kotlin.internal.InlineOnly^
^
^    public inline operator fun plus(other: UInt): UInt =
 this.toUInt().plus(other)^
^
^    /**^
^     * Adds the other value to this value.^
^
^    @kotlin.internal.InlineOnly^
^
^    public
 inline operator fun plus(other: ULong): ULong = this.toULong().plus(other)^
^
^    /**^
^     * Subtracts the other value from
 this value.^
^
^    @kotlin.internal.InlineOnly^
^
^    public inline operator fun minus(other: UByte): UInt =
 this.toUInt().minus(other.toUInt())^
^
^    /**^
^     * Subtracts the other value from this value.^
^
^    @kotlin.internal.InlineOnly^
^
^    public inline operator fun minus(other: UShort): UInt =
 this.toUInt().minus(other.toUInt())^
^
^    /**^
^     * Subtracts the other value from this value.^
^
^    @kotlin.internal.InlineOnly^
^
^    public inline operator fun minus(other: UInt): UInt = this.toUInt().minus(other)^
^
^    /**^
^     * Subtracts the other value from this value.^
^
^    @kotlin.internal.InlineOnly^
^
^    public inline operator fun
 minus(other: ULong): ULong = this.toULong().minus(other)^
^
^    /**^
^     * Multiplies this value by the other value.^
^
^    @kotlin.internal.InlineOnly^
^
^    public inline operator fun times(other: UByte): UInt =
 this.toUInt().times(other.toUInt())^
^
^    /**^
^     * Multiplies this value by the other value.^
^
^    @kotlin.internal.InlineOnly^
^
^    public inline operator fun times(other: UShort): UInt =
 this.toUInt().times(other.toUInt())^
^
^    /**^
^     * Multiplies this value by the other value.^
^
^

```

```

@kotlin.internal.InlineOnly\n public inline operator fun times(other: UInt): UInt = this.toUInt().times(other)\n
/** Multiplies this value by the other value. */\n @kotlin.internal.InlineOnly\n public inline operator fun
times(other: ULong): ULong = this.toULong().times(other)\n\n /** Divides this value by the other value,
truncating the result to an integer that is closer to zero. */\n @kotlin.internal.InlineOnly\n public inline operator
fun div(other: UByte): UInt = this.toUInt().div(other.toUInt())\n /** Divides this value by the other value,
truncating the result to an integer that is closer to zero. */\n @kotlin.internal.InlineOnly\n public inline operator
fun div(other: UShort): UInt = this.toUInt().div(other.toUInt())\n /** Divides this value by the other value,
truncating the result to an integer that is closer to zero. */\n @kotlin.internal.InlineOnly\n public inline operator
fun div(other: UInt): UInt = this.toUInt().div(other)\n /** Divides this value by the other value, truncating the
result to an integer that is closer to zero. */\n @kotlin.internal.InlineOnly\n public inline operator fun div(other:
ULong): ULong = this.toULong().div(other)\n\n /**\n * Calculates the remainder of truncating division of this
value by the other value.\n * \n * The result is always less than the divisor.\n */\n
@kotlin.internal.InlineOnly\n public inline operator fun rem(other: UByte): UInt =
this.toUInt().rem(other.toUInt())\n /**\n * Calculates the remainder of truncating division of this value by the
other value.\n * \n * The result is always less than the divisor.\n */\n @kotlin.internal.InlineOnly\n public
inline operator fun rem(other: UShort): UInt = this.toUInt().rem(other.toUInt())\n /**\n * Calculates the
remainder of truncating division of this value by the other value.\n * \n * The result is always less than the
divisor.\n */\n @kotlin.internal.InlineOnly\n public inline operator fun rem(other: UInt): UInt =
this.toUInt().rem(other)\n /**\n * Calculates the remainder of truncating division of this value by the other
value.\n * \n * The result is always less than the divisor.\n */\n @kotlin.internal.InlineOnly\n public
inline operator fun rem(other: ULong): ULong = this.toULong().rem(other)\n\n /**\n * Divides this value by
the other value, flooring the result to an integer that is closer to negative infinity.\n * \n * For unsigned types,
the results of flooring division and truncating division are the same.\n */\n @kotlin.internal.InlineOnly\n
public inline fun floorDiv(other: UByte): UInt = this.toUInt().floorDiv(other.toUInt())\n /**\n * Divides this
value by the other value, flooring the result to an integer that is closer to negative infinity.\n * \n * For unsigned
types, the results of flooring division and truncating division are the same.\n */\n @kotlin.internal.InlineOnly\n
public inline fun floorDiv(other: UShort): UInt = this.toUInt().floorDiv(other.toUInt())\n /**\n * Divides this
value by the other value, flooring the result to an integer that is closer to negative infinity.\n * \n * For unsigned
types, the results of flooring division and truncating division are the same.\n */\n @kotlin.internal.InlineOnly\n
public inline fun floorDiv(other: UInt): UInt = this.toUInt().floorDiv(other)\n /**\n * Divides this value by the
other value, flooring the result to an integer that is closer to negative infinity.\n * \n * For unsigned types, the
results of flooring division and truncating division are the same.\n */\n @kotlin.internal.InlineOnly\n public
inline fun floorDiv(other: ULong): ULong = this.toULong().floorDiv(other)\n\n /**\n * Calculates the
remainder of flooring division of this value by the other value.\n * \n * The result is always less than the
divisor.\n * \n * For unsigned types, the remainders of flooring division and truncating division are the same.\n
*/\n @kotlin.internal.InlineOnly\n public inline fun mod(other: UByte): UByte =
this.toUInt().mod(other.toUInt()).toUByte()\n /**\n * Calculates the remainder of flooring division of this value
by the other value.\n * \n * The result is always less than the divisor.\n * \n * For unsigned types, the
remainders of flooring division and truncating division are the same.\n */\n @kotlin.internal.InlineOnly\n
public inline fun mod(other: UShort): UShort = this.toUInt().mod(other.toUInt()).toUShort()\n /**\n *
Calculates the remainder of flooring division of this value by the other value.\n * \n * The result is always less
than the divisor.\n * \n * For unsigned types, the remainders of flooring division and truncating division are the
same.\n */\n @kotlin.internal.InlineOnly\n public inline fun mod(other: UInt): UInt =
this.toUInt().mod(other)\n /**\n * Calculates the remainder of flooring division of this value by the other
value.\n * \n * The result is always less than the divisor.\n * \n * For unsigned types, the remainders of
flooring division and truncating division are the same.\n */\n @kotlin.internal.InlineOnly\n public inline fun
mod(other: ULong): ULong = this.toULong().mod(other)\n\n /**\n * Returns this value incremented by one.\n
*/\n * @sample samples.misc.Builtins.inc\n */\n @kotlin.internal.InlineOnly\n public inline operator fun

```

```

inc(): UShort = UShort(data.inc())\n\n /**\n * Returns this value decremented by one.\n *\n * @sample
samples.misc.Builtins.dec\n *\n @kotlin.internal.InlineOnly\n public inline operator fun dec(): UShort =
UShort(data.dec())\n\n /** Creates a range from this value to the specified [other] value. *\n
@kotlin.internal.InlineOnly\n public inline operator fun rangeTo(other: UShort): UIntRange =
UIntRange(this.toUInt(), other.toUInt())\n\n /** Performs a bitwise AND operation between the two values. *\n
@kotlin.internal.InlineOnly\n public inline infix fun and(other: UShort): UShort = UShort(this.data and
other.data)\n\n /** Performs a bitwise OR operation between the two values. *\n @kotlin.internal.InlineOnly\n
public inline infix fun or(other: UShort): UShort = UShort(this.data or other.data)\n\n /** Performs a bitwise XOR
operation between the two values. *\n @kotlin.internal.InlineOnly\n public inline infix fun xor(other: UShort):
UShort = UShort(this.data xor other.data)\n\n /** Inverts the bits in this value. *\n @kotlin.internal.InlineOnly\n
public inline fun inv(): UShort = UShort(data.inv())\n\n /**\n * Converts this [UShort] value to [Byte].\n *\n * If this value is less than or equals to [Byte.MAX_VALUE], the resulting `Byte` value represents\n * the same
numerical value as this `UShort`.\n *\n * The resulting `Byte` value is represented by the least significant 8 bits
of this `UShort` value.\n * Note that the resulting `Byte` value may be negative.\n *\n
@kotlin.internal.InlineOnly\n public inline fun toByte(): Byte = data.toByte()\n\n /**\n * Converts this [UShort]
value to [Short].\n *\n * If this value is less than or equals to [Short.MAX_VALUE], the resulting `Short` value
represents\n * the same numerical value as this `UShort`. Otherwise the result is negative.\n *\n * The
resulting `Short` value has the same binary representation as this `UShort` value.\n *\n
@kotlin.internal.InlineOnly\n public inline fun toShort(): Short = data\n\n /**\n * Converts this [UShort] value
to [Int].\n *\n * The resulting `Int` value represents the same numerical value as this `UShort`.\n *\n * The
least significant 16 bits of the resulting `Int` value are the same as the bits of this `UShort` value,\n * whereas the
most significant 16 bits are filled with zeros.\n *\n @kotlin.internal.InlineOnly\n public inline fun toInt(): Int
= data.toInt() and 0xFFFF\n\n /**\n * Converts this [UShort] value to [Long].\n *\n * The resulting `Long`
value represents the same numerical value as this `UShort`.\n *\n * The least significant 16 bits of the resulting
`Long` value are the same as the bits of this `UShort` value,\n * whereas the most significant 48 bits are filled
with zeros.\n *\n @kotlin.internal.InlineOnly\n public inline fun toLong(): Long = data.toLong() and
0xFFFF\n\n /**\n * Converts this [UShort] value to [UByte].\n *\n * If this value is less than or equals to
[UByte.MAX_VALUE], the resulting `UByte` value represents\n * the same numerical value as this `UShort`.\n
*\n * The resulting `UByte` value is represented by the least significant 8 bits of this `UShort` value.\n *\n
@kotlin.internal.InlineOnly\n public inline fun toUByte(): UByte = data.toUByte()\n\n /** Returns this value. *\n
@kotlin.internal.InlineOnly\n public inline fun toUShort(): UShort = this\n\n /**\n * Converts this [UShort]
value to [UInt].\n *\n * The resulting `UInt` value represents the same numerical value as this `UShort`.\n
*\n * The least significant 16 bits of the resulting `UInt` value are the same as the bits of this `UShort` value,\n
*\n * whereas the most significant 16 bits are filled with zeros.\n *\n @kotlin.internal.InlineOnly\n public inline
fun toUInt(): UInt = UInt(data.toInt() and 0xFFFF)\n\n /**\n * Converts this [UShort] value to [ULong].\n *\n
* The resulting `ULong` value represents the same numerical value as this `UShort`.\n *\n * The least
significant 16 bits of the resulting `ULong` value are the same as the bits of this `UShort` value,\n * whereas the
most significant 48 bits are filled with zeros.\n *\n @kotlin.internal.InlineOnly\n public inline fun toULong():
ULong = ULong(data.toLong() and 0xFFFF)\n\n /**\n * Converts this [UShort] value to [Float].\n *\n *
The resulting `Float` value represents the same numerical value as this `UShort`.\n *\n
@kotlin.internal.InlineOnly\n public inline fun toFloat(): Float = this.toInt().toFloat()\n\n /**\n * Converts this
[UShort] value to [Double].\n *\n * The resulting `Double` value represents the same numerical value as this
`UShort`.\n *\n @kotlin.internal.InlineOnly\n public inline fun toDouble(): Double =
this.toInt().toDouble()\n\n public override fun toString(): String = toInt().toString()\n\n}\n\n/**\n * Converts this
[Byte] value to [UShort].\n *\n * If this value is positive, the resulting `UShort` value represents the same numerical
value as this `Byte`.\n *\n * The least significant 8 bits of the resulting `UShort` value are the same as the bits of this
`Byte` value,\n * whereas the most significant 8 bits are filled with the sign bit of this value.\n
*\n @SinceKotlin("1.5")\n @WasExperimental(ExperimentalUnsignedTypes::class)\n @kotlin.internal.InlineOnly

```

```

public inline fun Byte.toUShort(): UShort = UShort(this.toShort())\n/**\n * Converts this [Short] value to [UShort].\n * If this value is positive, the resulting `UShort` value represents the same numerical value as this `Short`.\n * The resulting `UShort` value has the same binary representation as this `Short` value.\n */\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\npublic inline fun Short.toUShort(): UShort = UShort(this)\n/**\n * Converts this [Int] value to [UShort].\n * If this value is positive and less than or equals to [UShort.MAX_VALUE], the resulting `UShort` value represents\n * the same numerical value as this `Int`.\n * The resulting `UShort` value is represented by the least significant 16 bits of this `Int` value.\n */\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\npublic inline fun Int.toUShort(): UShort = UShort(this.toShort())\n/**\n * Converts this [Long] value to [UShort].\n * If this value is positive and less than or equals to [UShort.MAX_VALUE], the resulting `UShort` value represents\n * the same numerical value as this `Long`.\n * The resulting `UShort` value is represented by the least significant 16 bits of this `Long` value.\n */\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\npublic inline fun Long.toUShort(): UShort = UShort(this.toShort())\n"/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n// Auto-generated file. DO NOT EDIT!\n\npackage kotlin.ranges\n\n/**\n * A range of values of type `Char`.\n */\npublic class CharRange(start: Char, endInclusive: Char) : CharProgression(start, endInclusive, 1), ClosedRange<Char> {\n    override val start: Char get() = first\n    override val endInclusive: Char get() = last\n    override fun contains(value: Char): Boolean = first <= value && value <= last\n    /**\n     * Checks whether the range is empty.\n     *\n     * The range is empty if its start value is greater than the end value.\n     */\n    override fun isEmpty(): Boolean = first > last\n    override fun equals(other: Any?): Boolean =\n        other is CharRange && (isEmpty() && other.isEmpty()) ||\n        first == other.first && last == other.last\n    override fun hashCode(): Int =\n        if (isEmpty()) -1 else (31 * first.code + last.code)\n    override fun toString(): String = \"$first..$last"\n    companion object {\n        /** An empty range of values of type Char. */\n        public val EMPTY: CharRange = CharRange(1.toChar(), 0.toChar())\n    }\n}\n\n/**\n * A range of values of type `Int`.\n */\npublic class IntRange(start: Int, endInclusive: Int) : IntProgression(start, endInclusive, 1), ClosedRange<Int> {\n    override val start: Int get() = first\n    override val endInclusive: Int get() = last\n    override fun contains(value: Int): Boolean = first <= value && value <= last\n    /**\n     * Checks whether the range is empty.\n     *\n     * The range is empty if its start value is greater than the end value.\n     */\n    override fun isEmpty(): Boolean = first > last\n    override fun equals(other: Any?): Boolean =\n        other is IntRange && (isEmpty() && other.isEmpty()) ||\n        first == other.first && last == other.last\n    override fun hashCode(): Int =\n        if (isEmpty()) -1 else (31 * first + last)\n    override fun toString(): String = \"$first..$last"\n    companion object {\n        /** An empty range of values of type Int. */\n        public val EMPTY: IntRange = IntRange(1, 0)\n    }\n}\n\n/**\n * A range of values of type `Long`.\n */\npublic class LongRange(start: Long, endInclusive: Long) : LongProgression(start, endInclusive, 1), ClosedRange<Long> {\n    override val start: Long get() = first\n    override val endInclusive: Long get() = last\n    override fun contains(value: Long): Boolean = first <= value && value <= last\n    /**\n     * Checks whether the range is empty.\n     *\n     * The range is empty if its start value is greater than the end value.\n     */\n    override fun isEmpty(): Boolean = first > last\n    override fun equals(other: Any?): Boolean =\n        other is LongRange && (isEmpty() && other.isEmpty()) ||\n        first == other.first && last == other.last\n    override fun hashCode(): Int =\n        if (isEmpty()) -1 else (31 * (first xor (first ushr 32)) + (last xor (last ushr 32))).toInt()\n    override fun toString(): String = \"$first..$last"\n    companion object {\n        /** An empty range of values of type Long. */\n        public val EMPTY: LongRange = LongRange(1, 0)\n    }\n}\n\n"/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("CollectionsKt")\n@file:OptIn(kotlin.experimental.ExperimentalTypeInference::class)\npackage kotlin.collections\n\nimport kotlin.contracts.*\nimport

```

```

kotlin.random.Random\n\ninternal object EmptyIterator : ListIterator<Nothing> {\n  override fun hasNext():
Boolean = false\n  override fun hasPrevious(): Boolean = false\n  override fun nextIndex(): Int = 0\n  override
fun previousIndex(): Int = -1\n  override fun next(): Nothing = throw NoSuchElementException()\n  override fun
previous(): Nothing = throw NoSuchElementException()\n}\n\ninternal object EmptyList : List<Nothing>,
Serializable, RandomAccess {\n  private const val serialVersionUID: Long = -7390468764508069838L\n\n  override fun equals(other: Any?): Boolean = other is List<*> && other.isEmpty()\n  override fun hashCode(): Int
= 1\n  override fun toString(): String = \"[]\"\n\n  override val size: Int get() = 0\n  override fun isEmpty():
Boolean = true\n  override fun contains(element: Nothing): Boolean = false\n  override fun containsAll(elements:
Collection<Nothing>): Boolean = elements.isEmpty()\n\n  override fun get(index: Int): Nothing = throw
IndexOutOfBoundsException(\"Empty list doesn't contain element at index $index.\")\n\n  override fun
indexOf(element: Nothing): Int = -1\n  override fun lastIndexOf(element: Nothing): Int = -1\n\n  override fun
iterator(): Iterator<Nothing> = EmptyIterator\n  override fun listIterator(): ListIterator<Nothing> = EmptyIterator\n\n  override fun listIterator(index: Int): ListIterator<Nothing> {\n    if (index != 0) throw
IndexOutOfBoundsException(\"Index: $index\")\n    return EmptyIterator\n  }\n\n  override fun
subList(fromIndex: Int, toIndex: Int): List<Nothing> {\n    if (fromIndex == 0 && toIndex == 0) return this\n    throw IndexOutOfBoundsException(\"fromIndex: $fromIndex, toIndex: $toIndex\")\n  }\n\n  private fun
readResolve(): Any = EmptyList\n}\n\ninternal fun <T> Array<out T>.asCollection(): Collection<T> =
ArrayAsCollection(this, isVarargs = false)\n\nprivate class ArrayAsCollection<T>(val values: Array<out T>, val
isVarargs: Boolean) : Collection<T> {\n  override val size: Int get() = values.size\n  override fun isEmpty():
Boolean = values.isEmpty()\n  override fun contains(element: T): Boolean = values.contains(element)\n  override
fun containsAll(elements: Collection<T>): Boolean = elements.all { contains(it) }\n  override fun iterator():
Iterator<T> = values.iterator()\n  // override hidden toArray implementation to prevent copying of values array\n
public fun toArray(): Array<out Any?> = values.copyToArrayOfAny(isVarargs)\n}\n\n/**\n * Returns an empty
read-only list. The returned list is serializable (JVM).\n * @sample
samples.collections.Collections.Lists.emptyReadOnlyList\n */\npublic fun <T> emptyList(): List<T> =
EmptyList\n\n/**\n * Returns a new read-only list of given elements. The returned list is serializable (JVM).\n *
@sample samples.collections.Collections.Lists.readOnlyList\n */\npublic fun <T> listOf(vararg elements: T):
List<T> = if (elements.size > 0) elements.asList() else emptyList()\n\n/**\n * Returns an empty read-only list. The
returned list is serializable (JVM).\n * @sample samples.collections.Collections.Lists.emptyReadOnlyList\n */\n@kotlin.internal.InlineOnly\npublic inline fun <T> listOf(): List<T> = emptyList()\n\n/**\n * Returns an empty
new [MutableList].\n * @sample samples.collections.Collections.Lists.emptyMutableList\n */\n@SinceKotlin(\"1.1\")\n@kotlin.internal.InlineOnly\npublic inline fun <T> mutableListOf(): MutableList<T> =
ArrayList()\n\n/**\n * Returns an empty new [ArrayList].\n * @sample
samples.collections.Collections.Lists.emptyArrayList\n */\n@SinceKotlin(\"1.1\")\n@kotlin.internal.InlineOnly\npublic inline fun <T> arrayListOf(): ArrayList<T> =
ArrayList()\n\n/**\n * Returns a new [MutableList] with the given elements.\n * @sample
samples.collections.Collections.Lists.mutableList\n */\npublic fun <T> mutableListOf(vararg elements: T):
MutableList<T> =\n  if (elements.size == 0) ArrayList() else ArrayList(ArrayAsCollection(elements, isVarargs =
true))\n\n/**\n * Returns a new [ArrayList] with the given elements.\n * @sample
samples.collections.Collections.Lists.arrayList\n */\npublic fun <T> arrayListOf(vararg elements: T): ArrayList<T>
=\n  if (elements.size == 0) ArrayList() else ArrayList(ArrayAsCollection(elements, isVarargs = true))\n\n/**\n * Returns a new read-only list either of single given element, if it is not null, or empty list if the element is null. The
returned list is serializable (JVM).\n * @sample samples.collections.Collections.Lists.listOfNotNull\n */\npublic fun
<T : Any> listOfNotNull(element: T?): List<T> = if (element != null) listOf(element) else emptyList()\n\n/**\n * Returns a new read-only list only of those given elements, that are not null. The returned list is serializable
(JVM).\n * @sample samples.collections.Collections.Lists.listOfNotNull\n */\npublic fun <T : Any>
listOfNotNull(vararg elements: T?): List<T> = elements.filterNotNull()\n\n/**\n * Creates a new read-only list with
the specified [size], where each element is calculated by calling the specified\n * [init] function.\n * @sample

```

```

function [init] is called for each list element sequentially starting from the first one.\n * It should return the value for
a list element given its index.\n *\n * @sample samples.collections.Collections.Lists.readOnlyListFromInitializer\n
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic inline fun <T> List(size: Int, init: (index: Int) -> T):
List<T> = MutableList(size, init)\n\n/**\n * Creates a new mutable list with the specified [size], where each element
is calculated by calling the specified\n * [init] function.\n *\n * The function [init] is called for each list element
sequentially starting from the first one.\n * It should return the value for a list element given its index.\n *\n *
@sample samples.collections.Collections.Lists.mutableListFromInitializer\n
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic inline fun <T> MutableList(size: Int, init: (index:
Int) -> T): MutableList<T> {\n    val list = ArrayList<T>(size)\n    repeat(size) { index -> list.add(init(index)) }\n
return list}\n\n/**\n * Builds a new read-only [List] by populating a [MutableList] using the given
[builderAction]\n * and returning a read-only list with the same elements.\n *\n * The list passed as a receiver to the
[builderAction] is valid only inside that function.\n * Using it outside of the function produces an unspecified
behavior.\n *\n * The returned list is serializable (JVM).\n *\n * @sample
samples.collections.Builders.Lists.buildListSample\n
*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
inline fun <E> buildList(@BuilderInference builderAction: MutableList<E>().->Unit): List<E> {\n    contract {
callsInPlace(builderAction, InvocationKind.EXACTLY_ONCE) }\n    return
buildListInternal(builderAction)\n}\n\n@PublishedApi\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\ninternal
expect inline fun <E> buildListInternal(builderAction: MutableList<E>().->Unit): List<E>\n\n/**\n * Builds a
new read-only [List] by populating a [MutableList] using the given [builderAction]\n * and returning a read-only list
with the same elements.\n *\n * The list passed as a receiver to the [builderAction] is valid only inside that
function.\n * Using it outside of the function produces an unspecified behavior.\n *\n * The returned list is
serializable (JVM).\n *\n * [capacity] is used to hint the expected number of elements added in the
[builderAction].\n *\n * @throws IllegalArgumentException if the given [capacity] is negative.\n *\n * @sample
samples.collections.Builders.Lists.buildListSampleWithCapacity\n
*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
inline fun <E> buildList(capacity: Int, @BuilderInference builderAction: MutableList<E>().->Unit): List<E> {\n
contract { callsInPlace(builderAction, InvocationKind.EXACTLY_ONCE) }\n    return buildListInternal(capacity,
builderAction)\n}\n\n@PublishedApi\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\ninternal expect inline
fun <E> buildListInternal(capacity: Int, builderAction: MutableList<E>().->Unit): List<E>\n\n/**\n * Returns an
[IntRange] of the valid indices for this collection.\n * @sample
samples.collections.Collections.Collections.indicesOfCollection\n *\npublic val Collection<*>.indices: IntRange\n
get() = 0..size - 1\n\n/**\n * Returns the index of the last item in the list or -1 if the list is empty.\n *\n * @sample
samples.collections.Collections.Lists.lastIndexOfList\n *\npublic val <T> List<T>.lastIndex: Int\n    get() =
this.size - 1\n\n/**\n * Returns `true` if the collection is not empty.\n * @sample
samples.collections.Collections.Collections.collectionIsNotEmpty\n *\n@kotlin.internal.InlineOnly\npublic inline
fun <T> Collection<T>.isNotEmpty(): Boolean = !isEmpty()\n\n/**\n * Returns `true` if this nullable collection is
either null or empty.\n * @sample samples.collections.Collections.Collections.collectionIsNullOrEmpty\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun <T> Collection<T>?.isNullOrEmpty():
Boolean {\n    contract {\n        returns(false) implies (this@isNullOrEmpty != null)\n    }\n    return this == null ||
this.isEmpty()\n}\n\n/**\n * Returns this Collection if it's not `null` and the empty list otherwise.\n * @sample
samples.collections.Collections.Collections.collectionOrElse\n *\n@kotlin.internal.InlineOnly\npublic inline fun
<T> Collection<T>?.orElse(): Collection<T> = this ?: emptyList()\n\n/**\n * Returns this List if it's not `null` and
the empty list otherwise.\n * @sample samples.collections.Collections.Lists.listOrElse\n
*\n@kotlin.internal.InlineOnly\npublic inline fun <T> List<T>?.orElse(): List<T> = this ?: emptyList()\n\n/**\n *
Returns this collection if it's not empty\n * or the result of calling [defaultValue] function if the collection is
empty.\n *\n * @sample samples.collections.Collections.Collections.collectionIfEmpty\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun <C, R> C.ifEmpty(defaultValue: () ->

```



```

R): R where C : Collection<*>, C : R => Boolean {
    if (isEmpty()) defaultFalse() else this.containsAll(elements)
}
// Checks if all elements in the specified collection are contained in this collection.
// Allows to overcome type-safety restriction of `containsAll` that requires to pass a collection of type `Collection<E>`.
// @sample samples.collections.Collections.Collections.collectionContainsAll

* \n @Suppress("EXTENSION_SHADOWED_BY_MEMBER") // false warning, extension takes precedence in some cases
* \n @kotlin.internal.InlineOnly
public inline fun <@kotlin.internal.OnlyInputTypes T> Collection<T>.containsAll(elements: Collection<T>): Boolean = this.containsAll(elements)
// Returns a new list with the elements of this list randomly shuffled
// using the specified [random] instance as the source of randomness.
* \n @SinceKotlin("1.3")
public fun <T> Iterable<T>.shuffled(random: Random): List<T> = toMutableList().apply { shuffle(random) }
// internal fun <T> List<T>.optimizeReadOnlyList() = when (size) {
//     0 -> emptyList()
//     1 -> listOf(this[0])
//     else -> this
// }
// Searches this list or its range for the provided [element] using the binary search algorithm.
// The list is expected to be sorted into ascending order according to the Comparable natural ordering of its elements,
// otherwise the result is undefined.
// If the list contains multiple elements equal to the specified [element], there is no guarantee which one will be found.
// `null` value is considered to be less than any non-null value.
// @return the index of the element, if it is contained in the list within the specified range;
// otherwise, the inverted insertion point `(-insertion point - 1)`.
// The insertion point is defined as the index at which the element should be inserted,
// so that the list (or the specified subrange of list) still remains sorted.
// @sample samples.collections.Collections.Lists.binarySearchOnComparable
// @sample samples.collections.Collections.Lists.binarySearchWithBoundaries
public fun <T : Comparable<T>> List<T>.binarySearch(element: T?, fromIndex: Int = 0, toIndex: Int = size): Int {
    rangeCheck(size, fromIndex, toIndex)
    var low = fromIndex
    var high = toIndex - 1
    while (low <= high) {
        val mid = (low + high).ushr(1) // safe from overflows
        val midVal = get(mid)
        val cmp = compareValues(midVal, element)
        if (cmp < 0) low = mid + 1
        else if (cmp > 0) high = mid - 1
        else return mid // key found
    }
    return -(low + 1) // key not found
}
// Searches this list or its range for the provided [element] using the binary search algorithm.
// The list is expected to be sorted into ascending order according to the specified [comparator],
// otherwise the result is undefined.
// If the list contains multiple elements equal to the specified [element], there is no guarantee which one will be found.
// `null` value is considered to be less than any non-null value.
// @return the index of the element, if it is contained in the list within the specified range;
// otherwise, the inverted insertion point `(-insertion point - 1)`.
// The insertion point is defined as the index at which the element should be inserted,
// so that the list (or the specified subrange of list) still remains sorted according to the specified [comparator].
// @sample samples.collections.Collections.Lists.binarySearchWithComparator
public fun <T> List<T>.binarySearch(element: T, comparator: Comparator<in T>, fromIndex: Int = 0, toIndex: Int = size): Int {
    rangeCheck(size, fromIndex, toIndex)
    var low = fromIndex
    var high = toIndex - 1
    while (low <= high) {
        val mid = (low + high).ushr(1) // safe from overflows
        val midVal = get(mid)
        val cmp = comparator.compare(midVal, element)
        if (cmp < 0) low = mid + 1
        else if (cmp > 0) high = mid - 1
        else return mid // key found
    }
    return -(low + 1) // key not found
}
// Searches this list or its range for an element having the key returned by the specified [selector] function
// equal to the provided [key] value using the binary search algorithm.
// The list is expected to be sorted into ascending order according to the Comparable natural ordering of keys of its elements.
// otherwise the result is undefined.
// If the list contains multiple elements with the specified [key], there is no guarantee which one will be found.
// `null` value is considered to be less than any non-null value.
// @return the index of the element with the specified [key], if it is contained in the list within the specified range;
// otherwise, the inverted insertion point `(-insertion point - 1)`.
// The insertion point is defined as the index at which the element should be inserted,
// so that the list (or the specified subrange of list) still remains sorted.
// @sample samples.collections.Collections.Lists.binarySearchByKey
public inline fun <T, K : Comparable<K>> List<T>.binarySearchBy(
    key: K?,
    fromIndex: Int = 0,
    toIndex: Int = size,
    crossinline selector: (T) ->

```

```

K?Int = Int binarySearch(fromIndex, toIndex) { compareValues(selector(it), key) }
// do not introduce this overload --- too rare
public fun <T, K> List<T>.binarySearchBy(key: K, comparator: Comparator<K>,
fromIndex: Int = 0, toIndex: Int = size(), selector: (T) -> K): Int =
    binarySearch(fromIndex, toIndex) {
        comparator.compare(selector(it), key)
    }
    * Searches this list or its range for an element for which the
    given [comparison] function returns zero using the binary search algorithm.
    * The list is expected to be sorted so that the signs of the [comparison]
    function's return values ascend on the list elements, i.e. negative values
    come before zero and zeroes come before positive values.
    * Otherwise, the result is undefined.
    * If the list contains multiple elements for which [comparison] returns zero,
    there is no guarantee which one will be found.
    * @param comparison function that returns zero when called on the list
    element being searched.
    * On the elements coming before the target element, the function must
    return negative values; on the elements coming after the target element,
    the function must return positive values.
    * @return the index of the found element, if it is contained in the list
    within the specified range; otherwise, the inverted insertion point
    `(-insertion point - 1)`.
    * The insertion point is defined as the index at which the element should
    be inserted, so that the list (or the specified subrange of list) still
    remains sorted.
    * @sample
    samples.collections.Collections.Lists.binarySearchWithComparisonFunction
public fun <T> List<T>.binarySearch(fromIndex: Int = 0, toIndex: Int = size,
comparison: (T) -> Int): Int {
    rangeCheck(size, fromIndex, toIndex)
    var low = fromIndex
    var high = toIndex - 1
    while (low <= high) {
        val mid = (low + high).ushr(1) // safe from overflows
        val midVal = get(mid)
        val cmp = comparison(midVal)
        if (cmp < 0) low = mid + 1
        else if (cmp > 0) high = mid - 1
        else return mid // key found
    }
    return -(low + 1) // key not found
}
    * Checks that `from` and `to` are in the range of [0..size] and throws
    an appropriate exception, if they aren't.
private fun rangeCheck(size: Int, fromIndex: Int, toIndex: Int) {
    when {
        fromIndex > toIndex -> throw IllegalArgumentException("fromIndex ($fromIndex)
is greater than toIndex ($toIndex).")
        fromIndex < 0 -> throw IndexOutOfBoundsException("fromIndex ($fromIndex)
is less than zero.")
        toIndex > size -> throw IndexOutOfBoundsException("toIndex ($toIndex)
is greater than size ($size).")
    }
}
@PublishedApi
@SinceKotlin("1.3")
internal expect fun checkIndexOverflow(index: Int): Int
@PublishedApi
@SinceKotlin("1.3")
internal expect fun checkCountOverflow(count: Int): Int
@PublishedApi
@SinceKotlin("1.3")
internal fun throwIndexOverflow() {
    throw ArithmeticException("Index overflow has happened.")
}
@PublishedApi
@SinceKotlin("1.3")
internal fun throwCountOverflow() {
    throw ArithmeticException("Count overflow has happened.")
}
    * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.
    * Use of this source code is governed by the Apache 2.0 license that can
    be found in the license/LICENSE.txt file.
@file:kotlin.jvm.JvmMultifileClass
@file:kotlin.jvm.JvmName("MapsKt")
@file:OptIn(kotlin.experimental.ExperimentalTypeInference::class)
package kotlin.collections
import kotlin.contracts.*
private object EmptyMap : Map<Any?, Nothing>, Serializable {
    private const val serialVersionUID: Long = 8246714829545688274
    override fun equals(other: Any?): Boolean = other is Map<*, *> &&
        other.isEmpty()
    override fun hashCode(): Int = 0
    override fun toString(): String = "{}"
    override val size: Int get() = 0
    override fun isEmpty(): Boolean = true
    override fun containsKey(key: Any?): Boolean = false
    override fun containsValue(value: Nothing): Boolean = false
    override fun get(key: Any?): Nothing? = null
    override val entries: Set<Map.Entry<Any?, Nothing>> get() = EmptySet
    override val keys: Set<Any?> get() = EmptySet
    override val values: Collection<Nothing> get() = EmptyList
    private fun readResolve(): Any = EmptyMap
}
    * Returns an empty read-only map of specified type.
    * The returned map is serializable (JVM).
    * @sample samples.collections.Maps.Instantiation.emptyReadOnlyMap
public fun <K, V> emptyMap(): Map<K, V> = @Suppress("UNCHECKED_CAST")
    (EmptyMap as Map<K, V>)
    * Returns a new read-only map with the specified contents, given as a list
    of pairs where the first value is the key and the second is the value.
    * If multiple pairs have the same key, the resulting map will contain the
    value from the last of those pairs.
    * Entries of the map are iterated in the order they were specified.
    * The returned map is serializable (JVM).
    * @sample samples.collections.Maps.Instantiation.mapFromPairs

```

```

* public fun <K, V> mapOf(vararg pairs: Pair<K, V>): Map<K, V> = if (pairs.size > 0)
pairs.toMap(LinkedHashMap(mapCapacity(pairs.size))) else emptyMap()
* Returns an empty read-only map.
* The returned map is serializable (JVM).
@sample
samples.collections.Maps.Instantiation.emptyReadOnlyMap
* @kotlin.internal.InlineOnly
public inline fun <K, V> mapOf(): Map<K, V> = emptyMap()
* Returns an empty new [MutableMap].
* The returned map preserves the entry iteration order.
@sample
samples.collections.Maps.Instantiation.emptyMutableMap
* @SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public inline fun <K, V> mutableMapOf():
MutableMap<K, V> = LinkedHashMap()
* Returns a new [MutableMap] with the specified contents, given
as a list of pairs
* where the first component is the key and the second is the value.
* If multiple pairs have the same key, the resulting map will contain the value from the last of those pairs.
* Entries of the map are iterated in the order they were specified.
* @sample
samples.collections.Maps.Instantiation.mutableMapFromPairs
* @sample
samples.collections.Maps.Instantiation.emptyMutableMap
* public fun <K, V> mutableMapOf(vararg pairs:
Pair<K, V>): MutableMap<K, V> = LinkedHashMap<K, V>(mapCapacity(pairs.size)).apply { putAll(pairs) }
* Returns an empty new [HashMap].
* @sample
samples.collections.Maps.Instantiation.emptyHashMap
* @SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public inline fun <K, V> hashMapOf(): HashMap<K, V>
= HashMap<K, V>()
* Returns a new [HashMap] with the specified contents, given as a list of pairs
* where the first component is the key and the second is the value.
* @sample
samples.collections.Maps.Instantiation.hashMapFromPairs
* public fun <K, V> hashMapOf(vararg pairs:
Pair<K, V>): HashMap<K, V> = HashMap<K, V>(mapCapacity(pairs.size)).apply { putAll(pairs) }
* Returns an empty new [LinkedHashMap].
* @SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public inline fun <K, V> linkedMapOf(): LinkedHashMap<K, V> = LinkedHashMap<K, V>()
* Returns a new
[LinkedHashMap] with the specified contents, given as a list of pairs
* where the first component is the key and
the second is the value.
* If multiple pairs have the same key, the resulting map will contain the value from the
last of those pairs.
* Entries of the map are iterated in the order they were specified.
* @sample
samples.collections.Maps.Instantiation.linkedMapFromPairs
* public fun <K, V> linkedMapOf(vararg pairs:
Pair<K, V>): LinkedHashMap<K, V> = pairs.toMap(LinkedHashMap(mapCapacity(pairs.size)))
* Builds
a new read-only [Map] by populating a [MutableMap] using the given [builderAction]
* and returning a read-only
map with the same key-value pairs.
* The map passed as a receiver to the [builderAction] is valid only inside
that function.
* Using it outside of the function produces an unspecified behavior.
* Entries of the map are
iterated in the order they were added by the [builderAction].
* The returned map is serializable (JVM).
* @sample
samples.collections.Builders.Maps.buildMapSample
* @SinceKotlin("1.6")
@WasExperimental(ExperimentalStdlibApi::class)
@kotlin.internal.InlineOnly
public inline fun <K, V> buildMap(@BuilderInference builderAction: MutableMap<K, V>().->Unit): Map<K, V> {
    contract { callsInPlace(builderAction, InvocationKind.EXACTLY_ONCE) }
    return
buildMapInternal(builderAction)
}
* @PublishedApi
* @SinceKotlin("1.3")
@kotlin.internal.InlineOnly
internal expect inline fun <K, V> buildMapInternal(builderAction: MutableMap<K, V>().->Unit): Map<K,
V>
* Builds a new read-only [Map] by populating a [MutableMap] using the given [builderAction]
* and
returning a read-only map with the same key-value pairs.
* The map passed as a receiver to the
[builderAction] is valid only inside that function.
* Using it outside of the function produces an unspecified
behavior.
* [capacity] is used to hint the expected number of pairs added in the [builderAction].
* Entries
of the map are iterated in the order they were added by the [builderAction].
* The returned map is serializable
(JVM).
* @throws IllegalArgumentException if the given [capacity] is negative.
* @sample
samples.collections.Builders.Maps.buildMapSample
* @SinceKotlin("1.6")
@WasExperimental(ExperimentalStdlibApi::class)
@kotlin.internal.InlineOnly
public inline fun <K, V> buildMap(capacity: Int, @BuilderInference builderAction: MutableMap<K, V>().->Unit):
Map<K, V> {
    contract { callsInPlace(builderAction, InvocationKind.EXACTLY_ONCE) }
    return

```

```

buildMapInternal(capacity,
builderAction)\n}\n\n@PublishedApi\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\ninternal expect inline
fun <K, V> buildMapInternal(capacity: Int, builderAction: MutableMap<K, V>().->Unit): Map<K, V>\n\n/**\n *
Calculate the initial capacity of a map.\n *^\n@PublishedApi\ninternal expect fun mapCapacity(expectedSize: Int):
Int\n\n/**\n * Returns `true` if this map is not empty.\n * @sample
samples.collections.Maps.Usage.mapIsNotEmpty\n *^\n@kotlin.internal.InlineOnly\npublic inline fun <K, V>
Map<out K, V>.isEmpty(): Boolean = !isEmpty()\n\n/**\n * Returns `true` if this nullable map is either null or
empty.\n * @sample samples.collections.Maps.Usage.mapIsNullOrEmpty\n
*^\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun <K, V> Map<out K,
V>?.isNullOrEmpty(): Boolean {\n    contract {\n        returns(false) implies (this@isNullOrEmpty != null)\n    }\n\n    return this == null || isEmpty()\n}\n\n/**\n * Returns the [Map] if its not `null`, or the empty [Map] otherwise.\n
*^\n * @sample samples.collections.Maps.Usage.mapOrElse\n *^\n@kotlin.internal.InlineOnly\npublic inline fun
<K, V> Map<K, V>?.orElse(): Map<K, V> = this ?: emptyMap()\n\n/**\n * Returns this map if it's not empty\n *
or the result of calling [defaultValue] function if the map is empty.\n *^\n * @sample
samples.collections.Maps.Usage.mapIfEmpty\n *^\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic
inline fun <M, R> M.isEmpty(defaultValue: () -> R): R where M : Map<*, *>, M : R =\n    if (isEmpty())
defaultValue() else this\n\n/**\n * Checks if the map contains the given key.\n *^\n * This method allows to use the
`x in map` syntax for checking whether an object is contained in the map.\n *^\n * @sample
samples.collections.Maps.Usage.containsKey\n *^\n@kotlin.internal.InlineOnly\npublic inline operator fun
<@kotlin.internal.OnlyInputTypes K, V> Map<out K, V>.contains(key: K): Boolean = containsKey(key)\n\n/**\n *
Returns the value corresponding to the given [key], or `null` if such a key is not present in the map.\n
*^\n@kotlin.internal.InlineOnly\npublic inline operator fun <@kotlin.internal.OnlyInputTypes K, V> Map<out K,
V>.get(key: K): V? =\n    @Suppress("UNCHECKED_CAST") (this as Map<K, V>).get(key)\n\n/**\n * Allows
to use the index operator for storing values in a mutable map.\n *^\n@kotlin.internal.InlineOnly\npublic inline
operator fun <K, V> MutableMap<K, V>.set(key: K, value: V): Unit {\n    put(key, value)\n}\n\n/**\n * Returns
`true` if the map contains the specified [key].\n *^\n * Allows to overcome type-safety restriction of `containsKey`
that requires to pass a key of type `K`.\n *^\n@kotlin.internal.InlineOnly\npublic inline fun
<@kotlin.internal.OnlyInputTypes K> Map<out K, *>.containsKey(key: K): Boolean =\n    @Suppress("UNCHECKED_CAST") (this as Map<K, *>).containsKey(key)\n\n/**\n * Returns `true` if the map
maps one or more keys to the specified [value].\n *^\n * Allows to overcome type-safety restriction of
`containsValue` that requires to pass a value of type `V`.\n *^\n * @sample
samples.collections.Maps.Usage.containsValue\n *^\n@Suppress("EXTENSION_SHADOWED_BY_MEMBER")
// false warning, extension takes precedence in some cases\n@kotlin.internal.InlineOnly\npublic inline fun <K,
@kotlin.internal.OnlyInputTypes V> Map<K, V>.containsValue(value: V): Boolean =
this.containsValue(value)\n\n/**\n * Removes the specified key and its corresponding value from this map.\n *^\n
* @return the previous value associated with the key, or `null` if the key was not present in the map.\n\n * Allows to
overcome type-safety restriction of `remove` that requires to pass a key of type `K`.\n
*^\n@kotlin.internal.InlineOnly\npublic inline fun <@kotlin.internal.OnlyInputTypes K, V> MutableMap<out K,
V>.remove(key: K): V? =\n    @Suppress("UNCHECKED_CAST") (this as MutableMap<K,
V>).remove(key)\n\n/**\n * Returns the key component of the map entry.\n *^\n * This method allows to use
destructuring declarations when working with maps, for example:\n * ` `*\n * for ((key, value) in map) {\n *     // do
something with the key and the value\n * }\n * ` `*\n *^\n@kotlin.internal.InlineOnly\npublic inline operator fun <K,
V> Map.Entry<K, V>.component1(): K = key\n\n/**\n * Returns the value component of the map entry.\n *^\n *
This method allows to use destructuring declarations when working with maps, for example:\n * ` `*\n * for ((key,
value) in map) {\n *     // do something with the key and the value\n * }\n * ` `*\n
*^\n@kotlin.internal.InlineOnly\npublic inline operator fun <K, V> Map.Entry<K, V>.component2(): V =
value\n\n/**\n * Converts entry to [Pair] with key being first component and value being second.\n
*^\n@kotlin.internal.InlineOnly\npublic inline fun <K, V> Map.Entry<K, V>.toPair(): Pair<K, V> = Pair(key,

```

value)\n\n/**\n * Returns the value for the given key, or the result of the [defaultValue] function if there was no entry for the given key.\n * \n * @sample samples.collections.Maps.Usage.getOrElse\n *\n * \n @kotlin.internal.InlineOnly\n public inline fun <K, V> Map<K, V>.getOrElse(key: K, defaultValue: () -> V): V = get(key) ?: defaultValue()\n\n\ninternal inline fun <K, V> Map<K, V>.getOrElseNullable(key: K, defaultValue: () -> V): V {\n val value = get(key)\n if (value == null && !containsKey(key)) {\n return defaultValue()\n } else {\n @Suppress("UNCHECKED_CAST")\n return value as V\n }\n}\n\n/**\n * Returns the value for the given [key] or throws an exception if there is no such key in the map.\n * \n * If the map was created by [withDefault], resorts to its `defaultValue` provider function\n * instead of throwing an exception.\n * \n * @throws NoSuchElementException when the map doesn't contain a value for the specified key and\n * no implicit default value was provided for that map.\n * \n * \n @SinceKotlin("1.1")\n public fun <K, V> Map<K, V>.getValue(key: K): V = getOrImplicitDefault(key)\n\n\n/**\n * Returns the value for the given key. If the key is not found in the map, calls the [defaultValue] function,\n * puts its result into the map under the given key and returns it.\n * \n * Note that the operation is not guaranteed to be atomic if the map is being modified concurrently.\n * \n * \n @sample samples.collections.Maps.Usage.getOrPut\n *\n * \n public inline fun <K, V> MutableMap<K, V>.getOrPut(key: K, defaultValue: () -> V): V {\n val value = get(key)\n return if (value == null) {\n val answer = defaultValue()\n put(key, answer)\n answer\n } else {\n value\n }\n}\n\n\n/**\n * Returns an [Iterator] over the entries in the [Map].\n * \n * \n @sample samples.collections.Maps.Usage.forOverEntries\n *\n * \n @kotlin.internal.InlineOnly\n public inline operator fun <K, V> Map<out K, V>.iterator(): Iterator<Map.Entry<K, V>> = entries.iterator()\n\n\n\n/**\n * Returns a [MutableIterator] over the mutable entries in the [MutableMap].\n * \n * \n @kotlin.jvm.JvmName("mutableIterator")\n @kotlin.internal.InlineOnly\n public inline operator fun <K, V> MutableMap<K, V>.iterator(): MutableIterator<MutableMap.MutableEntry<K, V>> = entries.iterator()\n\n\n\n/**\n * Populates the given [destination] map with entries having the keys of this map and the values obtained\n * by applying the [transform] function to each entry in this [Map].\n * \n * \n public inline fun <K, V, R, M : MutableMap<in K, in R>> Map<out K, V>.mapValuesTo(destination: M, transform: (Map.Entry<K, V>) -> R): M {\n return entries.associateByTo(destination, { it.key }, transform)\n}\n\n\n\n/**\n * Populates the given [destination] map with entries having the keys obtained\n * by applying the [transform] function to each entry in this [Map] and the values of this map.\n * \n * In case if any two entries are mapped to the equal keys, the value of the latter one will overwrite\n * the value associated with the former one.\n * \n * \n public inline fun <K, V, R, M : MutableMap<in R, in V>> Map<out K, V>.mapKeysTo(destination: M, transform: (Map.Entry<K, V>) -> R): M {\n return entries.associateByTo(destination, transform, { it.value })\n}\n\n\n\n/**\n * Puts all the given [pairs] into this [MutableMap] with the first component in the pair being the key and the second the value.\n * \n * \n public fun <K, V> MutableMap<in K, in V>.putAll(pairs: Array<out Pair<K, V>>): Unit {\n for ((key, value) in pairs) {\n put(key, value)\n }\n}\n\n\n\n/**\n * Puts all the elements of the given collection into this [MutableMap] with the first component in the pair being the key and the second the value.\n * \n * \n public fun <K, V> MutableMap<in K, in V>.putAll(pairs: Iterable<Pair<K, V>>): Unit {\n for ((key, value) in pairs) {\n put(key, value)\n }\n}\n\n\n\n/**\n * Puts all the elements of the given sequence into this [MutableMap] with the first component in the pair being the key and the second the value.\n * \n * \n public fun <K, V> MutableMap<in K, in V>.putAll(pairs: Sequence<Pair<K, V>>): Unit {\n for ((key, value) in pairs) {\n put(key, value)\n }\n}\n\n\n\n\n/**\n * Returns a new map with entries having the keys of this map and the values obtained by applying the [transform]\n * function to each entry in this [Map].\n * \n * The returned map preserves the entry iteration order of the original map.\n * \n * \n @sample samples.collections.Maps.Transformations.mapValues\n *\n * \n public inline fun <K, V, R> Map<out K, V>.mapValues(transform: (Map.Entry<K, V>) -> R): Map<K, R> {\n return mapValuesTo(LinkedHashMap<K, R>(mapCapacity(size)), transform) // .optimizeReadOnlyMap()\n}\n\n\n\n\n/**\n * Returns a new Map with entries having the keys obtained by applying the [transform] function to each entry in this\n * [Map] and the values of this map.\n * \n * In case if any two entries are mapped to the equal keys, the value of the latter one will overwrite\n * the value associated with the former one.\n * \n * The returned map preserves the entry iteration order of the original map.\n * \n * \n @sample samples.collections.Maps.Transformations.mapKeys\n *\n * \n public inline fun <K, V, R> Map<out K, V>.mapKeys(transform: (Map.Entry<K, V>) -> R): Map<R, V> {\n return

```

mapKeysTo(LinkedHashMap<R, V>(mapCapacity(size)), transform) // .optimizeReadOnlyMap()\n\n/**\n *
Returns a map containing all key-value pairs with keys matching the given [predicate].\n *\n * The returned map
preserves the entry iteration order of the original map.\n * @sample samples.collections.Maps.Filtering.filterKeys\n
*/\npublic inline fun <K, V> Map<out K, V>.filterKeys(predicate: (K) -> Boolean): Map<K, V> {\n    val result =
LinkedHashMap<K, V>()\n    for (entry in this) {\n        if (predicate(entry.key)) {\n            result.put(entry.key,
entry.value)\n        }\n    }\n    return result\n}\n\n/**\n * Returns a map containing all key-value pairs with values
matching the given [predicate].\n *\n * The returned map preserves the entry iteration order of the original map.\n *
@sample samples.collections.Maps.Filtering.filterValues\n
*/\npublic inline fun <K, V> Map<out K,
V>.filterValues(predicate: (V) -> Boolean): Map<K, V> {\n    val result = LinkedHashMap<K, V>()\n    for (entry
in this) {\n        if (predicate(entry.value)) {\n            result.put(entry.key, entry.value)\n        }\n    }\n    return
result\n}\n\n/**\n * Appends all entries matching the given [predicate] into the mutable map given as [destination]
parameter.\n *\n * @return the destination map.\n * @sample samples.collections.Maps.Filtering.filterTo\n
*/\npublic inline fun <K, V, M : MutableMap<in K, in V>> Map<out K, V>.filterTo(destination: M, predicate:
(Map.Entry<K, V>) -> Boolean): M {\n    for (element in this) {\n        if (predicate(element)) {\n
destination.put(element.key, element.value)\n        }\n    }\n    return destination\n}\n\n/**\n * Returns a new map
containing all key-value pairs matching the given [predicate].\n *\n * The returned map preserves the entry iteration
order of the original map.\n * @sample samples.collections.Maps.Filtering.filter\n
*/\npublic inline fun <K, V>
Map<out K, V>.filter(predicate: (Map.Entry<K, V>) -> Boolean): Map<K, V> {\n    return
filterTo(LinkedHashMap<K, V>(), predicate)\n}\n\n/**\n * Appends all entries not matching the given [predicate]
into the given [destination].\n *\n * @return the destination map.\n * @sample
samples.collections.Maps.Filtering.filterNotTo\n
*/\npublic inline fun <K, V, M : MutableMap<in K, in V>>
Map<out K, V>.filterNotTo(destination: M, predicate: (Map.Entry<K, V>) -> Boolean): M {\n    for (element in
this) {\n        if (!predicate(element)) {\n            destination.put(element.key, element.value)\n        }\n    }\n    return
destination\n}\n\n/**\n * Returns a new map containing all key-value pairs not matching the given [predicate].\n *\n *
The returned map preserves the entry iteration order of the original map.\n * @sample
samples.collections.Maps.Filtering.filterNot\n
*/\npublic inline fun <K, V> Map<out K, V>.filterNot(predicate:
(Map.Entry<K, V>) -> Boolean): Map<K, V> {\n    return filterNotTo(LinkedHashMap<K, V>(),
predicate)\n}\n\n/**\n * Returns a new map containing all key-value pairs from the given collection of pairs.\n *\n *
The returned map preserves the entry iteration order of the original collection.\n * If any of two pairs would have the
same key the last one gets added to the map.\n * @public fun <K, V> Iterable<Pair<K, V>>.toMap(): Map<K, V>
{\n    if (this is Collection) {\n        return when (size) {\n            0 -> emptyMap()\n            1 -> mapOf(if (this is
List) this[0] else iterator().next())\n            else -> toMap(LinkedHashMap<K, V>(mapCapacity(size)))\n        }\n    }\n    return toMap(LinkedHashMap<K, V>()).optimizeReadOnlyMap()\n}\n\n/**\n * Populates and returns the
[destination] mutable map with key-value pairs from the given collection of pairs.\n * @public fun <K, V, M :
MutableMap<in K, in V>> Iterable<Pair<K, V>>.toMap(destination: M): M =\n    destination.apply {
putAll(this@toMap) }\n}\n\n/**\n * Returns a new map containing all key-value pairs from the given array of pairs.\n *
*\n * The returned map preserves the entry iteration order of the original array.\n * If any of two pairs would have
the same key the last one gets added to the map.\n * @public fun <K, V> Array<out Pair<K, V>>.toMap(): Map<K,
V> = when (size) {\n    0 -> emptyMap()\n    1 -> mapOf(this[0])\n    else -> toMap(LinkedHashMap<K,
V>(mapCapacity(size)))\n}\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs
from the given array of pairs.\n * @public fun <K, V, M : MutableMap<in K, in V>> Array<out Pair<K,
V>>.toMap(destination: M): M =\n    destination.apply { putAll(this@toMap) }\n}\n\n/**\n * Returns a new map
containing all key-value pairs from the given sequence of pairs.\n *\n * The returned map preserves the entry
iteration order of the original sequence.\n * If any of two pairs would have the same key the last one gets added to
the map.\n * @public fun <K, V> Sequence<Pair<K, V>>.toMap(): Map<K, V> = toMap(LinkedHashMap<K,
V>()).optimizeReadOnlyMap()\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs
from the given sequence of pairs.\n * @public fun <K, V, M : MutableMap<in K, in V>> Sequence<Pair<K,
V>>.toMap(destination: M): M =\n    destination.apply { putAll(this@toMap) }\n}\n\n/**\n * Returns a new read-only

```

map containing all key-value pairs from the original map.

`toMap(): Map<K, V> = when (size) { 0 -> emptyMap() 1 -> toSingletonMap() else -> toMutableMap() }`

`toMutableMap(): MutableMap<K, V> = LinkedHashMap(this)`

`toMutableMap(destination: M): M = destination.apply { putAll(this@toMap) }`

`plus(pair: Pair<K, V>): Map<K, V> = if (this.isEmpty()) mapOf(pair) else LinkedHashMap(this).apply { put(pair.first, pair.second) }`

`plus(pairs: Iterable<Pair<K, V>>): Map<K, V> = if (this.isEmpty()) pairs.toMap() else LinkedHashMap(this).apply { putAll(pairs) }`

`plus(pairs: Array<out Pair<K, V>>): Map<K, V> = if (this.isEmpty()) pairs.toMap() else LinkedHashMap(this).apply { putAll(pairs) }`

`plus(pairs: Sequence<Pair<K, V>>): Map<K, V> = LinkedHashMap(this).apply { putAll(pairs) }.optimizeReadOnlyMap()`

`plus(map: Map<out K, V>): Map<K, V> = LinkedHashMap(this).apply { putAll(map) }`

`plusAssign(pair: Pair<K, V>) { put(pair.first, pair.second) }`

`plusAssign(pairs: Iterable<Pair<K, V>>) { putAll(pairs) }`

`plusAssign(pairs: Array<out Pair<K, V>>) { putAll(pairs) }`

`plusAssign(pairs: Sequence<Pair<K, V>>) { putAll(pairs) }`

`plusAssign(map: Map<K, V>) { putAll(map) }`

`minus(key: K): Map<K, V> = this.toMutableMap().apply { minusAssign(key) }.optimizeReadOnlyMap()`

`minus(keys: Iterable<K>): Map<K, V> = this.toMutableMap().apply { minusAssign(keys) }.optimizeReadOnlyMap()`

```

* the keys of which are contained in the given [keys] array.\n * The returned map preserves the entry iteration
order of the original map.\n *\n@SinceKotlin("1.1")\npublic operator fun <K, V> Map<out K, V>.minus(keys:
Array<out K>): Map<K, V> =\n    this.toMutableMap().apply { minusAssign(keys)
}.optimizeReadOnlyMap()\n\n/**\n * Returns a map containing all entries of the original map except those entries\n
* the keys of which are contained in the given [keys] sequence.\n * The returned map preserves the entry
iteration order of the original map.\n *\n@SinceKotlin("1.1")\npublic operator fun <K, V> Map<out K,
V>.minus(keys: Sequence<K>): Map<K, V> =\n    this.toMutableMap().apply { minusAssign(keys)
}.optimizeReadOnlyMap()\n\n/**\n * Removes the entry with the given [key] from this mutable map.\n
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic inline operator fun <K, V> MutableMap<K,
V>.minusAssign(key: K) {\n    remove(key)\n}\n\n/**\n * Removes all entries the keys of which are contained in
the given [keys] collection from this mutable map.\n
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic inline operator fun <K, V> MutableMap<K,
V>.minusAssign(keys: Iterable<K>) {\n    this.keys.removeAll(keys)\n}\n\n/**\n * Removes all entries the keys of
which are contained in the given [keys] array from this mutable map.\n
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic inline operator fun <K, V> MutableMap<K,
V>.minusAssign(keys: Array<out K>) {\n    this.keys.removeAll(keys)\n}\n\n/**\n * Removes all entries from the
keys of which are contained in the given [keys] sequence from this mutable map.\n
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic inline operator fun <K, V> MutableMap<K,
V>.minusAssign(keys: Sequence<K>) {\n    this.keys.removeAll(keys)\n}\n\n// do not expose for now
@PublishedApi\ninternal fun <K, V> Map<K, V>.optimizeReadOnlyMap() = when (size) {\n    0 -> emptyMap()\n    1 -> toSingletonMapOrSelf()\n    else -> this\n}\n\n"/\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n
*\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("SetsKt")\n@file:OptIn(kotlin.experimental.
l.ExperimentalTypeInference::class)\n\npackage kotlin.collections\n\nimport kotlin.contracts.*\n\ninternal object
EmptySet : Set<Nothing>, Serializable {\n    private const val serialVersionUID: Long =
3406603774387020532\n\n    override fun equals(other: Any?): Boolean = other is Set<*> && other.isEmpty()\n
    override fun hashCode(): Int = 0\n    override fun toString(): String = "[]"\n\n    override val size: Int get() = 0\n
    override fun isEmpty(): Boolean = true\n    override fun contains(element: Nothing): Boolean = false\n    override
fun containsAll(elements: Collection<Nothing>): Boolean = elements.isEmpty()\n\n    override fun iterator():
Iterator<Nothing> = EmptyIterator\n\n    private fun readResolve(): Any = EmptySet\n}\n\n/**\n * Returns an
empty read-only set. The returned set is serializable (JVM).\n * @sample
samples.collections.Collections.Sets.emptyReadOnlySet\n *\npublic fun <T> emptySet(): Set<T> =
EmptySet\n\n/**\n * Returns a new read-only set with the given elements.\n * Elements of the set are iterated in the
order they were specified.\n * The returned set is serializable (JVM).\n * @sample
samples.collections.Collections.Sets.readOnlySet\n *\npublic fun <T> setOf(vararg elements: T): Set<T> = if
(elements.size > 0) elements.toSet() else emptySet()\n\n/**\n * Returns an empty read-only set. The returned set is
serializable (JVM).\n * @sample samples.collections.Collections.Sets.emptyReadOnlySet\n
*\n@kotlin.internal.InlineOnly\npublic inline fun <T> setOf(): Set<T> = emptySet()\n\n/**\n * Returns an empty
new [MutableSet].\n * The returned set preserves the element iteration order.\n * @sample
samples.collections.Collections.Sets.emptyMutableSet\n
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic inline fun <T> mutableSetOf(): MutableSet<T> =
LinkedHashSet()\n\n/**\n * Returns a new [MutableSet] with the given elements.\n * Elements of the set are
iterated in the order they were specified.\n * @sample samples.collections.Collections.Sets.mutableSet\n *\npublic
fun <T> mutableSetOf(vararg elements: T): MutableSet<T> =
elements.toCollection(LinkedHashSet(mapCapacity(elements.size)))\n\n/**\n * Returns an empty new [HashSet].
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic inline fun <T> hashSetOf(): HashSet<T> =
HashSet()\n\n/**\n * Returns a new [HashSet] with the given elements. *\npublic fun <T> hashSetOf(vararg elements:

```



```

T): HashSet<T> = elements.toCollection(HashSet(mapCapacity(elements.size)))\n\n/**\n * Returns an empty new
[LinkedHashSet].\n * @sample samples.collections.Collections.Sets.emptyLinkedHashSet\n
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic inline fun <T> linkedSetOf(): LinkedHashSet<T>
= LinkedHashSet()\n\n/**\n * Returns a new [LinkedHashSet] with the given elements.\n * Elements of the set are
iterated in the order they were specified.\n * @sample samples.collections.Collections.Sets.linkedHashSet\n
*\npublic fun <T> linkedSetOf(vararg elements: T): LinkedHashSet<T> =
elements.toCollection(LinkedHashSet(mapCapacity(elements.size)))\n\n/**\n * Returns a new read-only set either
with single given element, if it is not null, or empty set if the element is null.\n * The returned set is serializable
(JVM).\n * @sample samples.collections.Collections.Sets.setOfNotNull\n *\n@SinceKotlin("1.4")\npublic fun <T
: Any> setOfNotNull(element: T?): Set<T> = if (element != null) setOf(element) else emptySet()\n\n/**\n * Returns
a new read-only set only with those given elements, that are not null.\n * Elements of the set are iterated in the order
they were specified.\n * The returned set is serializable (JVM).\n * @sample
samples.collections.Collections.Sets.setOfNotNull\n *\n@SinceKotlin("1.4")\npublic fun <T : Any>
setOfNotNull(vararg elements: T?): Set<T> {\n    return elements.filterNotNullTo(LinkedHashSet())\n}\n\n/**\n *
Builds a new read-only [Set] by populating a [MutableSet] using the given [builderAction]\n * and returning a read-
only set with the same elements.\n * \n * The set passed as a receiver to the [builderAction] is valid only inside that
function.\n * Using it outside of the function produces an unspecified behavior.\n * \n * Elements of the set are
iterated in the order they were added by the [builderAction].\n * \n * The returned set is serializable (JVM).\n * \n *
@sample samples.collections.Builders.Sets.buildSetSample\n
*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npubli
c inline fun <E> buildSet(@BuilderInference builderAction: MutableSet<E>().->Unit): Set<E> {\n    contract {
callsInPlace(builderAction, InvocationKind.EXACTLY_ONCE) }\n    return
buildSetInternal(builderAction)\n}\n\n@PublishedApi\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\nintern
al expect inline fun <E> buildSetInternal(builderAction: MutableSet<E>().->Unit): Set<E>\n\n/**\n * Builds a
new read-only [Set] by populating a [MutableSet] using the given [builderAction]\n * and returning a read-only set
with the same elements.\n * \n * The set passed as a receiver to the [builderAction] is valid only inside that
function.\n * Using it outside of the function produces an unspecified behavior.\n * \n * [capacity] is used to hint the
expected number of elements added in the [builderAction].\n * \n * Elements of the set are iterated in the order they
were added by the [builderAction].\n * \n * The returned set is serializable (JVM).\n * \n * @throws
IllegalArgumentExcepion if the given [capacity] is negative.\n * \n * @sample
samples.collections.Builders.Sets.buildSetSample\n
*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npubli
c inline fun <E> buildSet(capacity: Int, @BuilderInference builderAction: MutableSet<E>().->Unit): Set<E> {\n
contract { callsInPlace(builderAction, InvocationKind.EXACTLY_ONCE) }\n    return buildSetInternal(capacity,
builderAction)\n}\n\n@PublishedApi\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\ninternal expect inline
fun <E> buildSetInternal(capacity: Int, builderAction: MutableSet<E>().->Unit): Set<E>\n\n/**\n * Returns this Set
if it's not `null` and the empty set otherwise. *\n@kotlin.internal.InlineOnly\npublic inline fun <T>
Set<T>?.orEmpty(): Set<T> = this ?: emptySet()\n\ninternal fun <T> Set<T>.optimizeReadOnlySet() = when (size)
{\n    0 -> emptySet()\n    1 -> setOf(iterator().next())\n    else -> this\n}\n\n"/*\n * Copyright 2010-2018 JetBrains
s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0
license that can be found in the license/LICENSE.txt file.\n
*\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("StringsKt")\n@file:Suppress("PLATFOR
M_CLASS_MAPPED_TO_KOTLIN")\n\npackage kotlin.text\n\n/**\n * Parses the string as a signed [Byte]
number and returns the result\n * or `null` if the string is not a valid representation of a number.\n
*\n@SinceKotlin("1.1")\npublic fun String.toByteArrayOrNull(): Byte? = toByteOrNull(radix = 10)\n\n/**\n * Parses
the string as a signed [Byte] number and returns the result\n * or `null` if the string is not a valid representation of a
number.\n * \n * @throws IllegalArgumentException when [radix] is not a valid radix for string to number
conversion.\n * \n@SinceKotlin("1.1")\npublic fun String.toByteArrayOrNull(radix: Int): Byte? {\n    val int =

```

```

this.toIntOrNull(radix) ?: return null\n    if (int < Byte.MIN_VALUE || int > Byte.MAX_VALUE) return null\n
return int.toByte()\n}\n\n/**\n * Parses the string as a [Short] number and returns the result\n * or `null` if the string
is not a valid representation of a number.\n */\n@SinceKotlin("1.1")\npublic fun String.toShortOrNull(): Short? =
toShortOrNull(radix = 10)\n\n/**\n * Parses the string as a [Short] number and returns the result\n * or `null` if the
string is not a valid representation of a number.\n */\n * @throws IllegalArgumentException when [radix] is not a
valid radix for string to number conversion.\n */\n@SinceKotlin("1.1")\npublic fun String.toShortOrNull(radix:
Int): Short? {\n    val int = this.toIntOrNull(radix) ?: return null\n    if (int < Short.MIN_VALUE || int >
Short.MAX_VALUE) return null\n    return int.toShort()\n}\n\n/**\n * Parses the string as an [Int] number and
returns the result\n * or `null` if the string is not a valid representation of a number.\n
*/\n@SinceKotlin("1.1")\npublic fun String.toIntOrNull(): Int? = toIntOrNull(radix = 10)\n\n/**\n * Parses the
string as an [Int] number and returns the result\n * or `null` if the string is not a valid representation of a number.\n
*/\n * @throws IllegalArgumentException when [radix] is not a valid radix for string to number conversion.\n
*/\n@SinceKotlin("1.1")\npublic fun String.toIntOrNull(radix: Int): Int? {\n    checkRadix(radix)\n\n    val length
= this.length\n    if (length == 0) return null\n\n    val start: Int\n    val isNegative: Boolean\n    val limit: Int\n    val
firstChar = this[0]\n    if (firstChar < '0') { // Possible leading sign\n        if (length == 1) return null // non-digit
(possible sign) only, no digits after\n\n        start = 1\n        if (firstChar == '-') {\n            isNegative = true\n
limit = Int.MIN_VALUE\n        } else if (firstChar == '+') {\n            isNegative = false\n            limit = -
Int.MAX_VALUE\n        } else\n            return null\n    } else {\n        start = 0\n        isNegative = false\n        limit
= -Int.MAX_VALUE\n    }\n\n    val limitForMaxRadix = (-Int.MAX_VALUE) / 36\n\n    var limitBeforeMul =
limitForMaxRadix\n    var result = 0\n    for (i in start until length) {\n        val digit = digitOf(this[i], radix)\n
if (digit < 0) return null\n        if (result < limitBeforeMul) {\n            if (limitBeforeMul == limitForMaxRadix) {\n
                limitBeforeMul = limit / radix\n            }\n            if (result < limitBeforeMul) {\n                return null\n
            }\n        } else {\n            return null\n        }\n    }\n\n    result *= radix\n\n    if (result < limit + digit)
return null\n\n    result -= digit\n}\n\n    return if (isNegative) result else -result\n}\n\n\n/**\n * Parses the string
as a [Long] number and returns the result\n * or `null` if the string is not a valid representation of a number.\n
*/\n@SinceKotlin("1.1")\npublic fun String.toLongOrNull(): Long? = toLongOrNull(radix = 10)\n\n/**\n * Parses the
string as a [Long] number and returns the result\n * or `null` if the string is not a valid representation of a
number.\n */\n * @throws IllegalArgumentException when [radix] is not a valid radix for string to number
conversion.\n */\n@SinceKotlin("1.1")\npublic fun String.toLongOrNull(radix: Int): Long? {\n    checkRadix(radix)\n\n    val length = this.length\n    if (length == 0) return null\n\n    val start: Int\n    val isNegative:
Boolean\n    val limit: Long\n\n    val firstChar = this[0]\n    if (firstChar < '0') { // Possible leading sign\n        if
(length == 1) return null // non-digit (possible sign) only, no digits after\n\n        start = 1\n        if (firstChar == '-')
{\n            isNegative = true\n            limit = Long.MIN_VALUE\n        } else if (firstChar == '+') {\n           
isNegative = false\n            limit = -Long.MAX_VALUE\n        } else\n            return null\n    } else {\n        start =
0\n        isNegative = false\n        limit = -Long.MAX_VALUE\n    }\n\n    val limitForMaxRadix = (-
Long.MAX_VALUE) / 36\n\n    var limitBeforeMul = limitForMaxRadix\n    var result = 0L\n    for (i in start until
length) {\n        val digit = digitOf(this[i], radix)\n\n        if (digit < 0) return null\n        if (result < limitBeforeMul)
{\n            if (limitBeforeMul == limitForMaxRadix) {\n                limitBeforeMul = limit / radix\n            }\n            if
(result < limitBeforeMul) {\n                return null\n            }\n        } else {\n            return null\n        }\n    }\n\n    result *= radix\n\n    if (result < limit + digit) return null\n\n    result -= digit\n}\n\n    return if (isNegative) result else -result\n}\n\n\ninternal fun numberFormatException(input: String): Nothing = throw
NumberFormatException("Invalid number format: '$input')\n", "/*\n * Copyright 2010-2021 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.time\n\nimport kotlin.contracts.*\nimport
kotlin.jvm.JvmInline\nimport kotlin.math.*\n\n/**\n * Represents the amount of time one instant of time is away
from another instant.\n */\n * A negative duration is possible in a situation when the second instant is earlier than the
first one.\n */\n * The type can store duration values up to \u00b1146 years with nanosecond precision,\n * and up to
\u00b1146 million years with millisecond precision.\n * If a duration-returning operation provided in `kotlin.time`

```

produces a duration value that doesn't fit into the above range, the returned `Duration` is infinite. An infinite duration value [Duration.INFINITE] can be used to represent infinite timeouts. To construct a duration use either the extension function [toDuration], or the extension properties [hours], [minutes], [seconds], and so on, available on [Int], [Long], and [Double] numeric types. To get the value of this duration expressed in a particular [duration units][DurationUnit] use the functions [toInt], [toLong], and [toDouble] or the properties [inWholeHours], [inWholeMinutes], [inWholeSeconds], [inWholeNanoseconds], and so on.

```

@SinceKotlin("1.6")
@WasExperimental(ExperimentalTime::class)
@JvmInline
public value class
Duration internal constructor(private val rawValue: Long) : Comparable<Duration> {
    private val value: Long
    get() = rawValue shr 1
    private inline val unitDiscriminator: Int
    get() = rawValue.toInt() and 1
    private fun
    isInNanos() = unitDiscriminator == 0
    private fun
    isInMillis() = unitDiscriminator == 1
    private val
    storageUnit
    get() = if (isInNanos()) DurationUnit.NANOSECONDS else DurationUnit.MILLISECONDS
    init {
        if (durationAssertionsEnabled) {
            if (isInNanos()) {
                if (value !in -
                MAX_NANOS..MAX_NANOS) throw AssertionError("\$value ns is out of nanoseconds range")
            } else {
                if (value !in -MAX_MILLIS..MAX_MILLIS) throw AssertionError("\$value ms is out of milliseconds
                range")
                if (value in -MAX_NANOS_IN_MILLIS..MAX_NANOS_IN_MILLIS) throw
                AssertionError("\$value ms is denormalized")
            }
        }
    }
    companion object {
        /** The
        duration equal to exactly 0 seconds.
        public val ZERO: Duration = Duration(0L)
        /** The duration
        whose value is positive infinity. It is useful for representing timeouts that should never expire.
        public val
        INFINITE: Duration = durationOfMillis(MAX_MILLIS)
        internal val NEG_INFINITE: Duration =
        durationOfMillis(-MAX_MILLIS)
        /** Converts the given time duration [value] expressed in the specified
        [sourceUnit] into the specified [targetUnit].
        @ExperimentalTime
        public fun convert(value: Double,
        sourceUnit: DurationUnit, targetUnit: DurationUnit): Double =
        convertDurationUnit(value, sourceUnit,
        targetUnit)
        // Duration construction extension properties in Duration companion scope
        /** Returns a
        [Duration] equal to this [Int] number of nanoseconds.
        @kotlin.internal.InlineOnly
        public inline val
        Int.nanoseconds
        get() = toDuration(DurationUnit.NANOSECONDS)
        /** Returns a [Duration] equal to this
        [Long] number of nanoseconds.
        @kotlin.internal.InlineOnly
        public inline val Long.nanoseconds
        get() = toDuration(DurationUnit.NANOSECONDS)
        /**
        * Returns a [Duration] equal to this
        [Double] number of nanoseconds.
        *
        * Depending on its magnitude, the value is rounded to an integer
        number of nanoseconds or milliseconds.
        *
        * @throws IllegalArgumentException if this [Double]
        value is `NaN`.
        @kotlin.internal.InlineOnly
        public inline val Double.nanoseconds
        get() =
        toDuration(DurationUnit.NANOSECONDS)
        /** Returns a [Duration] equal to this [Int] number of
        microseconds.
        @kotlin.internal.InlineOnly
        public inline val Int.microseconds
        get() =
        toDuration(DurationUnit.MICROSECONDS)
        /** Returns a [Duration] equal to this [Long] number of
        microseconds.
        @kotlin.internal.InlineOnly
        public inline val Long.microseconds
        get() =
        toDuration(DurationUnit.MICROSECONDS)
        /**
        * Returns a [Duration] equal to this [Double]
        number of microseconds.
        *
        * Depending on its magnitude, the value is rounded to an integer
        number of nanoseconds or milliseconds.
        *
        * @throws IllegalArgumentException if this [Double] value is
        `NaN`.
        @kotlin.internal.InlineOnly
        public inline val Double.microseconds
        get() =
        toDuration(DurationUnit.MICROSECONDS)
        /** Returns a [Duration] equal to this [Int] number of
        milliseconds.
        @kotlin.internal.InlineOnly
        public inline val Int.milliseconds
        get() =
        toDuration(DurationUnit.MILLISECONDS)
        /** Returns a [Duration] equal to this [Long] number of
        milliseconds.
        @kotlin.internal.InlineOnly
        public inline val Long.milliseconds
        get() =
        toDuration(DurationUnit.MILLISECONDS)
        /**
        * Returns a [Duration] equal to this [Double]
        number of milliseconds.
        *
        * Depending on its magnitude, the value is rounded to an integer
        number of nanoseconds or milliseconds.
        *
        * @throws IllegalArgumentException if this [Double] value is
        `NaN`.
        @kotlin.internal.InlineOnly
        public inline val Double.milliseconds
        get() =
        toDuration(DurationUnit.MILLISECONDS)
        /** Returns a [Duration] equal to this [Int] number of
        seconds.
        @kotlin.internal.InlineOnly
        public inline val Int.seconds
        get() =

```

```

toDuration(DurationUnit.SECONDS)\n\n    /** Returns a [Duration] equal to this [Long] number of seconds. */\n
    @kotlin.internal.InlineOnly\n    public inline val Long.seconds get() =
toDuration(DurationUnit.SECONDS)\n\n    /**\n    * Returns a [Duration] equal to this [Double] number of\n
seconds.\n    * Depending on its magnitude, the value is rounded to an integer number of nanoseconds or\n
milliseconds.\n    * @throws IllegalArgumentException if this [Double] value is `NaN`. */\n
    @kotlin.internal.InlineOnly\n    public inline val Double.seconds get() =
toDuration(DurationUnit.SECONDS)\n\n    /** Returns a [Duration] equal to this [Int] number of minutes. */\n
    @kotlin.internal.InlineOnly\n    public inline val Int.minutes get() = toDuration(DurationUnit.MINUTES)\n\n
    /** Returns a [Duration] equal to this [Long] number of minutes. */\n    @kotlin.internal.InlineOnly\n
public inline val Long.minutes get() = toDuration(DurationUnit.MINUTES)\n\n    /**\n    * Returns a\n
[Duration] equal to this [Double] number of minutes.\n    * Depending on its magnitude, the value is\n
rounded to an integer number of nanoseconds or milliseconds.\n    * @throws IllegalArgumentException\n
if this [Double] value is `NaN`. */\n    @kotlin.internal.InlineOnly\n    public inline val Double.minutes\n
get() = toDuration(DurationUnit.MINUTES)\n\n    /** Returns a [Duration] equal to this [Int] number of hours.\n
*/\n    @kotlin.internal.InlineOnly\n    public inline val Int.hours get() = toDuration(DurationUnit.HOURS)\n\n
    /** Returns a [Duration] equal to this [Long] number of hours. */\n    @kotlin.internal.InlineOnly\n    public\n
inline val Long.hours get() = toDuration(DurationUnit.HOURS)\n\n    /**\n    * Returns a [Duration] equal to\n
this [Double] number of hours.\n    * Depending on its magnitude, the value is rounded to an integer\n
number of nanoseconds or milliseconds.\n    * @throws IllegalArgumentException if this [Double]\n
value is `NaN`. */\n    @kotlin.internal.InlineOnly\n    public inline val Double.hours get() =
toDuration(DurationUnit.HOURS)\n\n\n    /** Returns a [Duration] equal to this [Int] number of days. */\n
    @kotlin.internal.InlineOnly\n    public inline val Int.days get() = toDuration(DurationUnit.DAYS)\n\n\n    /**\n
Returns a [Duration] equal to this [Long] number of days. */\n    @kotlin.internal.InlineOnly\n    public inline\n
val Long.days get() = toDuration(DurationUnit.DAYS)\n\n    /**\n    * Returns a [Duration] equal to this\n
[Double] number of days.\n    * Depending on its magnitude, the value is rounded to an integer number\n
of nanoseconds or milliseconds.\n    * @throws IllegalArgumentException if this [Double] value is\n
`NaN`. */\n    @kotlin.internal.InlineOnly\n    public inline val Double.days get() =
toDuration(DurationUnit.DAYS)\n\n\n    // deprecated static factory functions\n\n    /** Returns a [Duration]\n
representing the specified [value] number of nanoseconds. */\n    @SinceKotlin("1.5")\n
    @ExperimentalTime\n    @Deprecated("Use 'Int.nanoseconds' extension property from Duration.Companion\n
instead.", ReplaceWith("value.nanoseconds", "kotlin.time.Duration.Companion.nanoseconds"))\n
    @DeprecatedSinceKotlin(warningSince = "1.6")\n    public fun nanoseconds(value: Int): Duration =
value.toDuration(DurationUnit.NANOSECONDS)\n\n    /** Returns a [Duration] representing the specified\n
[value] number of nanoseconds. */\n    @SinceKotlin("1.5")\n    @ExperimentalTime\n
    @Deprecated("Use 'Long.nanoseconds' extension property from Duration.Companion instead.",\n
ReplaceWith("value.nanoseconds", "kotlin.time.Duration.Companion.nanoseconds"))\n
    @DeprecatedSinceKotlin(warningSince = "1.6")\n    public fun nanoseconds(value: Long): Duration =
value.toDuration(DurationUnit.NANOSECONDS)\n\n    /**\n    * Returns a [Duration] representing the\n
specified [value] number of nanoseconds.\n    * @throws IllegalArgumentException if the provided\n
`Double` [value] is `NaN`. */\n    @SinceKotlin("1.5")\n    @ExperimentalTime\n
    @Deprecated("Use 'Double.nanoseconds' extension property from Duration.Companion instead.",\n
ReplaceWith("value.nanoseconds", "kotlin.time.Duration.Companion.nanoseconds"))\n
    @DeprecatedSinceKotlin(warningSince = "1.6")\n    public fun nanoseconds(value: Double): Duration =
value.toDuration(DurationUnit.NANOSECONDS)\n\n\n    /** Returns a [Duration] representing the specified\n
[value] number of microseconds. */\n    @SinceKotlin("1.5")\n    @ExperimentalTime\n
    @Deprecated("Use 'Int.microseconds' extension property from Duration.Companion instead.",\n
ReplaceWith("value.microseconds", "kotlin.time.Duration.Companion.microseconds"))\n
    @DeprecatedSinceKotlin(warningSince = "1.6")\n    public fun microseconds(value: Int): Duration =

```

```

value.toDuration(DurationUnit.MICROSECONDS)\n\n    /** Returns a [Duration] representing the specified
[value] number of microseconds. */\n    @SinceKotlin("1.5")\n    @ExperimentalTime\n    @Deprecated("Use 'Long.microseconds' extension property from Duration.Companion instead."),
ReplaceWith("value.microseconds", "kotlin.time.Duration.Companion.microseconds"))\n
@DeprecatedSinceKotlin(warningSince = "1.6")\n    public fun microseconds(value: Long): Duration =
value.toDuration(DurationUnit.MICROSECONDS)\n\n    /**\n    * Returns a [Duration] representing the
specified [value] number of microseconds.\n    */\n    * @throws IllegalArgumentException if the provided
`Double` [value] is `NaN`.\n    */\n    @SinceKotlin("1.5")\n    @ExperimentalTime\n    @Deprecated("Use 'Double.microseconds' extension property from Duration.Companion instead."),
ReplaceWith("value.microseconds", "kotlin.time.Duration.Companion.microseconds"))\n
@DeprecatedSinceKotlin(warningSince = "1.6")\n    public fun microseconds(value: Double): Duration =
value.toDuration(DurationUnit.MICROSECONDS)\n\n    /** Returns a [Duration] representing the specified
[value] number of milliseconds. */\n    @SinceKotlin("1.5")\n    @ExperimentalTime\n    @Deprecated("Use 'Int.milliseconds' extension property from Duration.Companion instead."),
ReplaceWith("value.milliseconds", "kotlin.time.Duration.Companion.milliseconds"))\n
@DeprecatedSinceKotlin(warningSince = "1.6")\n    public fun milliseconds(value: Int): Duration =
value.toDuration(DurationUnit.MILLISECONDS)\n\n    /** Returns a [Duration] representing the specified
[value] number of milliseconds. */\n    @SinceKotlin("1.5")\n    @ExperimentalTime\n    @Deprecated("Use 'Long.milliseconds' extension property from Duration.Companion instead."),
ReplaceWith("value.milliseconds", "kotlin.time.Duration.Companion.milliseconds"))\n
@DeprecatedSinceKotlin(warningSince = "1.6")\n    public fun milliseconds(value: Long): Duration =
value.toDuration(DurationUnit.MILLISECONDS)\n\n    /**\n    * Returns a [Duration] representing the
specified [value] number of milliseconds.\n    */\n    * @throws IllegalArgumentException if the provided
`Double` [value] is `NaN`.\n    */\n    @SinceKotlin("1.5")\n    @ExperimentalTime\n    @Deprecated("Use 'Double.milliseconds' extension property from Duration.Companion instead."),
ReplaceWith("value.milliseconds", "kotlin.time.Duration.Companion.milliseconds"))\n
@DeprecatedSinceKotlin(warningSince = "1.6")\n    public fun milliseconds(value: Double): Duration =
value.toDuration(DurationUnit.MILLISECONDS)\n\n    /** Returns a [Duration] representing the specified
[value] number of seconds. */\n    @SinceKotlin("1.5")\n    @ExperimentalTime\n    @Deprecated("Use
'Int.seconds' extension property from Duration.Companion instead.", ReplaceWith("value.seconds",
"kotlin.time.Duration.Companion.seconds"))\n    @DeprecatedSinceKotlin(warningSince = "1.6")\n    public
fun seconds(value: Int): Duration = value.toDuration(DurationUnit.SECONDS)\n\n    /** Returns a [Duration]
representing the specified [value] number of seconds. */\n    @SinceKotlin("1.5")\n    @ExperimentalTime\n    @Deprecated("Use 'Long.seconds' extension property from Duration.Companion instead."),
ReplaceWith("value.seconds", "kotlin.time.Duration.Companion.seconds"))\n
@DeprecatedSinceKotlin(warningSince = "1.6")\n    public fun seconds(value: Long): Duration =
value.toDuration(DurationUnit.SECONDS)\n\n    /**\n    * Returns a [Duration] representing the specified
[value] number of seconds.\n    */\n    * @throws IllegalArgumentException if the provided `Double` [value] is
`NaN`.\n    */\n    @SinceKotlin("1.5")\n    @ExperimentalTime\n    @Deprecated("Use
'Double.seconds' extension property from Duration.Companion instead.", ReplaceWith("value.seconds",
"kotlin.time.Duration.Companion.seconds"))\n    @DeprecatedSinceKotlin(warningSince = "1.6")\n    public
fun seconds(value: Double): Duration = value.toDuration(DurationUnit.SECONDS)\n\n    /** Returns a
[Duration] representing the specified [value] number of minutes. */\n    @SinceKotlin("1.5")\n    @ExperimentalTime\n    @Deprecated("Use 'Int.minutes' extension property from Duration.Companion
instead.", ReplaceWith("value.minutes", "kotlin.time.Duration.Companion.minutes"))\n
@DeprecatedSinceKotlin(warningSince = "1.6")\n    public fun minutes(value: Int): Duration =
value.toDuration(DurationUnit.MINUTES)\n\n    /** Returns a [Duration] representing the specified [value]
number of minutes. */\n    @SinceKotlin("1.5")\n    @ExperimentalTime\n    @Deprecated("Use

```

```

'Long.minutes' extension property from Duration.Companion instead.', ReplaceWith("value.minutes",
"kotlin.time.Duration.Companion.minutes"))\n    @DeprecatedSinceKotlin(warningSince = "1.6")\n    public
fun minutes(value: Long): Duration = value.toDuration(DurationUnit.MINUTES)\n\n    /**\n     * Returns a
[Duration] representing the specified [value] number of minutes.\n     *\n     * @throws
IllegalArgumentException if the provided `Double` [value] is `NaN`.\n     */\n    @SinceKotlin("1.5")\n    @ExperimentalTime\n    @Deprecated("Use 'Double.minutes' extension property from Duration.Companion
instead.", ReplaceWith("value.minutes", "kotlin.time.Duration.Companion.minutes"))\n
@DeprecatedSinceKotlin(warningSince = "1.6")\n    public fun minutes(value: Double): Duration =
value.toDuration(DurationUnit.MINUTES)\n\n    /** Returns a [Duration] representing the specified [value]
number of hours. *\n    @SinceKotlin("1.5")\n    @ExperimentalTime\n    @Deprecated("Use 'Int.hours'
extension property from Duration.Companion instead.", ReplaceWith("value.hours",
"kotlin.time.Duration.Companion.hours"))\n    @DeprecatedSinceKotlin(warningSince = "1.6")\n    public
fun hours(value: Int): Duration = value.toDuration(DurationUnit.HOURS)\n\n    /** Returns a [Duration]
representing the specified [value] number of hours. *\n    @SinceKotlin("1.5")\n    @ExperimentalTime\n
@Deprecated("Use 'Long.hours' extension property from Duration.Companion instead.",
ReplaceWith("value.hours", "kotlin.time.Duration.Companion.hours"))\n
@DeprecatedSinceKotlin(warningSince = "1.6")\n    public fun hours(value: Long): Duration =
value.toDuration(DurationUnit.HOURS)\n\n    /**\n     * Returns a [Duration] representing the specified
[value] number of hours.\n     *\n     * @throws IllegalArgumentException if the provided `Double` [value] is
`NaN`.\n     */\n    @SinceKotlin("1.5")\n    @ExperimentalTime\n    @Deprecated("Use 'Double.hours'
extension property from Duration.Companion instead.", ReplaceWith("value.hours",
"kotlin.time.Duration.Companion.hours"))\n    @DeprecatedSinceKotlin(warningSince = "1.6")\n    public
fun hours(value: Double): Duration = value.toDuration(DurationUnit.HOURS)\n\n    /** Returns a [Duration]
representing the specified [value] number of days. *\n    @SinceKotlin("1.5")\n    @ExperimentalTime\n
@Deprecated("Use 'Int.days' extension property from Duration.Companion instead.", ReplaceWith("value.days",
"kotlin.time.Duration.Companion.days"))\n    @DeprecatedSinceKotlin(warningSince = "1.6")\n    public
fun days(value: Int): Duration = value.toDuration(DurationUnit.DAYS)\n\n    /** Returns a [Duration]
representing the specified [value] number of days. *\n    @SinceKotlin("1.5")\n    @ExperimentalTime\n
@Deprecated("Use 'Long.days' extension property from Duration.Companion instead.",
ReplaceWith("value.days", "kotlin.time.Duration.Companion.days"))\n
@DeprecatedSinceKotlin(warningSince = "1.6")\n    public fun days(value: Long): Duration =
value.toDuration(DurationUnit.DAYS)\n\n    /**\n     * Returns a [Duration] representing the specified [value]
number of days.\n     *\n     * @throws IllegalArgumentException if the provided `Double` [value] is `NaN`.\n
     */\n    @SinceKotlin("1.5")\n    @ExperimentalTime\n    @Deprecated("Use 'Double.days' extension
property from Duration.Companion instead.", ReplaceWith("value.days",
"kotlin.time.Duration.Companion.days"))\n    @DeprecatedSinceKotlin(warningSince = "1.6")\n    public
fun days(value: Double): Duration = value.toDuration(DurationUnit.DAYS)\n\n    /**\n     * Parses a string that
represents a duration and returns the parsed [Duration] value.\n     *\n     * The following formats are
accepted:\n     *\n     * - ISO-8601 Duration format, e.g. `P1DT2H3M4.058S`, see [toIsoString] and
[parseIsoString].\n     * - The format of string returned by the default [Duration.toString] and `toString` in a
specific unit,\n     * e.g. `10s`, `1h 30m` or `-(1h 30m)`.\n     *\n     * @throws IllegalArgumentException if
the string doesn't represent a duration in any of the supported formats.\n     * @sample
samples.time.Durations.parse\n     */\n    public fun parse(value: String): Duration = try {\n
parseDuration(value, strictIso = false)\n    } catch (e: IllegalArgumentException) {\n        throw
IllegalArgumentException("Invalid duration string format: '$value'.", e)\n    }\n\n    /**\n     * Parses a
string that represents a duration in ISO-8601 format and returns the parsed [Duration] value.\n     *\n     *
@throws IllegalArgumentException if the string doesn't represent a duration in ISO-8601 format.\n     * @sample
samples.time.Durations.parseIsoString\n     */\n    public fun parseIsoString(value: String): Duration = try {\n

```

```

    parseDuration(value, strictIso = true)\n    } catch (e: IllegalArgumentException) {\n        throw
IllegalArgumentException("Invalid ISO duration string format: '$value'.", e)\n    }\n    /**\n     * Parses a
string that represents a duration and returns the parsed [Duration] value,\n     * or `null` if the string doesn't
represent a duration in any of the supported formats.\n     *\n     * The following formats are accepted:\n
*\n     * - ISO-8601 Duration format, e.g. `P1DT2H3M4.058S`, see [toISOString] and [parseIsoString].\n     * -
The format of string returned by the default [Duration.toString] and `toString` in a specific unit,\n     * e.g. `10s`,
`1h 30m` or `-(1h 30m)`.\n     * @sample samples.time.Durations.parse\n     */\n    public fun
parseOrNull(value: String): Duration? = try {\n        parseDuration(value, strictIso = false)\n    } catch (e:
IllegalArgumentException) {\n        null\n    }\n    /**\n     * Parses a string that represents a duration in
ISO-8601 format and returns the parsed [Duration] value,\n     * or `null` if the string doesn't represent a duration
in ISO-8601 format.\n     * @sample samples.time.Durations.parseIsoString\n     */\n    public fun
parseIsoStringOrNull(value: String): Duration? = try {\n        parseDuration(value, strictIso = true)\n    } catch
(e: IllegalArgumentException) {\n        null\n    }\n    }\n    // arithmetic operators\n    /** Returns the
negative of this value. */\n    public operator fun unaryMinus(): Duration = durationOf(-value,
unitDiscriminator)\n    /**\n     * Returns a duration whose value is the sum of this and [other] duration values.\n
*\n     * @throws IllegalArgumentException if the operation results in an undefined value for the given arguments,\n
* e.g. when adding infinite durations of different sign.\n     */\n    public operator fun plus(other: Duration):
Duration {\n        when {\n            this.isInfinite() -> {\n                if (other.isFinite() || (this.rawValue xor
other.rawValue >= 0))\n                    return this\n                else\n                    throw
IllegalArgumentException("Summing infinite durations of different signs yields an undefined result.")\n            }\n
            other.isInfinite() -> return other\n        }\n        return when {\n            this.unitDiscriminator ==
other.unitDiscriminator -> {\n                val result = this.value + other.value // never overflows long, but can
overflow long63\n                when {\n                    isInNanos() ->\n
                    durationOfNanosNormalized(result)\n                } else ->\n                    durationOfMillisNormalized(result)\n
                }\n                this.isInMillis() ->\n                    addValuesMixedRanges(this.value, other.value)\n
            } else ->\n                addValuesMixedRanges(other.value, this.value)\n        }\n    }\n    private fun
addValuesMixedRanges(thisMillis: Long, otherNanos: Long): Duration {\n        val otherMillis =
nanosToMillis(otherNanos)\n        val resultMillis = thisMillis + otherMillis\n        return if (resultMillis in -
MAX_NANOS_IN_MILLIS..MAX_NANOS_IN_MILLIS) {\n            val otherNanoRemainder = otherNanos -
millisToNanos(otherMillis)\n            durationOfNanos(millisToNanos(resultMillis) + otherNanoRemainder)\n        }
else {\n            durationOfMillis(resultMillis.coerceIn(-MAX_MILLIS, MAX_MILLIS))\n        }\n    }\n    /**\n
     * Returns a duration whose value is the difference between this and [other] duration values.\n     *\n     * @throws
IllegalArgumentException if the operation results in an undefined value for the given arguments,\n     * e.g. when
subtracting infinite durations of the same sign.\n     */\n    public operator fun minus(other: Duration): Duration =
this + (-other)\n    /**\n     * Returns a duration whose value is this duration value multiplied by the given [scale]
number.\n     *\n     * @throws IllegalArgumentException if the operation results in an undefined value for the given
arguments,\n     * e.g. when multiplying an infinite duration by zero.\n     */\n    public operator fun times(scale: Int):
Duration {\n        if (isInfinite()) {\n            return when {\n                scale == 0 -> throw
IllegalArgumentException("Multiplying infinite duration by zero yields an undefined result.")\n                scale > 0
-> this\n                else -> -this\n            }\n        }\n        if (scale == 0) return ZERO\n        val value = value\n
        val result = value * scale\n        return if (isInNanos()) {\n            if (value in (MAX_NANOS /
Int.MIN_VALUE)..(-MAX_NANOS / Int.MIN_VALUE)) {\n                // can't overflow nanos range for any
scale\n                durationOfNanos(result)\n            } else {\n                if (result / scale == value) {\n
                    durationOfNanosNormalized(result)\n                } else {\n                    val millis = nanosToMillis(value)\n
                    val remNanos = value - millisToNanos(millis)\n                    val resultMillis = millis * scale\n
                    val totalMillis = resultMillis + nanosToMillis(remNanos * scale)\n                    if (resultMillis / scale == millis &&
totalMillis xor resultMillis >= 0) {\n                        durationOfMillis(totalMillis.coerceIn(-
MAX_MILLIS..MAX_MILLIS))\n                    } else {\n                        if (value.sign * scale.sign > 0) INFINITE

```

```

else NEG_INFINITE\n          }\n          }\n          } else {\n          if (result / scale == value) {\n          durationOfMillis(result.coerceIn(-MAX_MILLIS..MAX_MILLIS))\n          } else {\n          if (value.sign\n          * scale.sign > 0) INFINITE else NEG_INFINITE\n          }\n          }\n          }\n          /**\n          * Returns a duration whose\n          value is this duration value multiplied by the given [scale] number.\n          *\n          * The operation may involve rounding\n          when the result cannot be represented exactly with a [Double] number.\n          *\n          * @throws\n          IllegalArgumentException if the operation results in an undefined value for the given arguments,\n          * e.g. when\n          multiplying an infinite duration by zero.\n          *\n          public operator fun times(scale: Double): Duration {\n          val\n          intScale = scale.roundToInt()\n          if (intScale.toDouble() == scale) {\n          return times(intScale)\n          }\n          val unit = storageUnit\n          val result = toDouble(unit) * scale\n          return result.toDuration(unit)\n          }\n          /**\n          * Returns a duration whose value is this duration value divided by the given [scale] number.\n          *\n          * @throws\n          IllegalArgumentException if the operation results in an undefined value for the given arguments,\n          * e.g. when\n          dividing zero duration by zero.\n          *\n          public operator fun div(scale: Int): Duration {\n          if (scale ==\n          0) {\n          return when {\n          isPositive() -> INFINITE\n          isNegative() -> NEG_INFINITE\n          else -> throw IllegalArgumentException("Dividing zero duration by zero yields an undefined result.")\n          }\n          }\n          if (isInNanos()) {\n          return durationOfNanos(value / scale)\n          } else {\n          if\n          (isInfinite())\n          return this * scale.sign\n          val result = value / scale\n          if (result in -\n          MAX_NANOS_IN_MILLIS..MAX_NANOS_IN_MILLIS) {\n          val rem = millisToNanos(value - (result *\n          scale)) / scale\n          return durationOfNanos(millisToNanos(result) + rem)\n          }\n          return\n          durationOfMillis(result)\n          }\n          }\n          /**\n          * Returns a duration whose value is this duration value divided\n          by the given [scale] number.\n          *\n          * @throws\n          IllegalArgumentException if the operation results in an\n          undefined value for the given arguments,\n          * e.g. when\n          dividing an infinite duration by infinity or zero duration\n          by zero.\n          *\n          public operator fun div(scale: Double): Duration {\n          val intScale = scale.roundToInt()\n          if (intScale.toDouble() == scale && intScale != 0) {\n          return div(intScale)\n          }\n          val unit =\n          storageUnit\n          val result = toDouble(unit) / scale\n          return result.toDuration(unit)\n          }\n          /** Returns a\n          number that is the ratio of this and [other] duration values. *\n          public operator fun div(other: Duration): Double\n          {\n          val coarserUnit = maxOf(this.storageUnit, other.storageUnit)\n          return this.toDouble(coarserUnit) /\n          other.toDouble(coarserUnit)\n          }\n          /** Returns true, if the duration value is less than zero. *\n          public fun\n          isNegative(): Boolean = rawValue < 0\n          /** Returns true, if the duration value is greater than zero. *\n          public\n          fun isPositive(): Boolean = rawValue > 0\n          /** Returns true, if the duration value is infinite. *\n          public fun\n          isInfinite(): Boolean = rawValue == INFINITE.rawValue || rawValue == NEG_INFINITE.rawValue\n          /**\n          Returns true, if the duration value is finite. *\n          public fun isFinite(): Boolean = !isInfinite()\n          /** Returns the\n          absolute value of this value. The returned value is always non-negative. *\n          public val absoluteValue: Duration\n          get() = if (isNegative()) -this else this\n          override fun compareTo(other: Duration): Int {\n          val compareBits =\n          this.rawValue xor other.rawValue\n          if (compareBits < 0 || compareBits.toInt() and 1 == 0) // different signs or\n          same sign/same range\n          return this.rawValue.compareTo(other.rawValue) // same sign/different\n          ranges\n          val r = this.unitDiscriminator - other.unitDiscriminator // compare ranges\n          return if (isNegative())\n          -r else r\n          }\n          /**\n          * Splits this duration into days, hours, minutes,\n          seconds, and nanoseconds and executes the given [action] with these components.\n          * The result of [action] is\n          returned as the result of this function.\n          *\n          * - `nanoseconds` represents the whole number of nanoseconds in\n          this duration, and its absolute value is less than 1_000_000_000;\n          * - `seconds` represents the whole number of\n          seconds in this duration, and its absolute value is less than 60;\n          * - `minutes` represents the whole number of\n          minutes in this duration, and its absolute value is less than 60;\n          * - `hours` represents the whole number of hours\n          in this duration, and its absolute value is less than 24;\n          * - `days` represents the whole number of days in this\n          duration.\n          *\n          * Infinite durations are represented as either [Long.MAX_VALUE] days, or\n          [Long.MIN_VALUE] days (depending on the sign of infinity),\n          * and zeroes in the lower components.\n          *\n          public inline fun <T> toComponents(action: (days: Long, hours: Int, minutes: Int, seconds: Int, nanoseconds: Int) -\n          > T): T {\n          contract { callsInPlace(action, InvocationKind.EXACTLY_ONCE) }\n          return\n          action(inWholeDays, hoursComponent, minutesComponent, secondsComponent, nanosecondsComponent)\n          }\n
```



```

/**\n * Splits this duration into hours, minutes, seconds, and nanoseconds and executes the given [action] with
these components.\n * The result of [action] is returned as the result of this function.\n *\n * - `nanoseconds`
represents the whole number of nanoseconds in this duration, and its absolute value is less than 1_000_000_000;\n
* - `seconds` represents the whole number of seconds in this duration, and its absolute value is less than 60;\n * -
`minutes` represents the whole number of minutes in this duration, and its absolute value is less than 60;\n * -
`hours` represents the whole number of hours in this duration.\n *\n * Infinite durations are represented as
either [Long.MAX_VALUE] hours, or [Long.MIN_VALUE] hours (depending on the sign of infinity),\n * and
zeroes in the lower components.\n */\n public inline fun <T> toComponents(action: (hours: Long, minutes: Int,
seconds: Int, nanoseconds: Int) -> T): T {\n     contract { callsInPlace(action, InvocationKind.EXACTLY_ONCE)
}\n     return action(inWholeHours, minutesComponent, secondsComponent, nanosecondsComponent)\n }\n\n
/**\n * Splits this duration into minutes, seconds, and nanoseconds and executes the given [action] with these
components.\n * The result of [action] is returned as the result of this function.\n *\n * - `nanoseconds`
represents the whole number of nanoseconds in this duration, and its absolute value is less than 1_000_000_000;\n
* - `seconds` represents the whole number of seconds in this duration, and its absolute value is less than 60;\n * -
`minutes` represents the whole number of minutes in this duration.\n *\n * Infinite durations are represented as
either [Long.MAX_VALUE] minutes, or [Long.MIN_VALUE] minutes (depending on the sign of infinity),\n *
and zeroes in the lower components.\n */\n public inline fun <T> toComponents(action: (minutes: Long,
seconds: Int, nanoseconds: Int) -> T): T {\n     contract { callsInPlace(action, InvocationKind.EXACTLY_ONCE)
}\n     return action(inWholeMinutes, secondsComponent, nanosecondsComponent)\n }\n\n
/**\n * Splits
this duration into seconds, and nanoseconds and executes the given [action] with these components.\n * The result
of [action] is returned as the result of this function.\n *\n * - `nanoseconds` represents the whole number of
nanoseconds in this duration, and its absolute value is less than 1_000_000_000;\n * - `seconds` represents the
whole number of seconds in this duration.\n *\n * Infinite durations are represented as either
[Long.MAX_VALUE] seconds, or [Long.MIN_VALUE] seconds (depending on the sign of infinity),\n * and
zero nanoseconds.\n */\n public inline fun <T> toComponents(action: (seconds: Long, nanoseconds: Int) -> T):
T {\n     contract { callsInPlace(action, InvocationKind.EXACTLY_ONCE) }\n     return
action(inWholeSeconds, nanosecondsComponent)\n }\n\n @PublishedApi\n internal val hoursComponent:
Int\n     get() = if (isInfinite()) 0 else (inWholeHours % 24).toInt()\n\n @PublishedApi\n internal val
minutesComponent: Int\n     get() = if (isInfinite()) 0 else (inWholeMinutes % 60).toInt()\n\n @PublishedApi\n
internal val secondsComponent: Int\n     get() = if (isInfinite()) 0 else (inWholeSeconds % 60).toInt()\n\n
@PublishedApi\n internal val nanosecondsComponent: Int\n     get() = when {\n         isInfinite() -> 0\n
isInMillis() -> millisToNanos(value % 1_000).toInt()\n         else -> (value % 1_000_000_000).toInt()\n
}\n\n // conversion to units\n\n /**\n * Returns the value of this duration expressed as a [Double] number of
the specified [unit].\n *\n * The operation may involve rounding when the result cannot be represented exactly
with a [Double] number.\n *\n * An infinite duration value is converted either to
[Double.POSITIVE_INFINITY] or [Double.NEGATIVE_INFINITY] depending on its sign.\n */\n public fun
toDouble(unit: DurationUnit): Double {\n     return when (rawValue) {\n         INFINITE.rawValue ->
Double.POSITIVE_INFINITY\n         NEG_INFINITE.rawValue -> Double.NEGATIVE_INFINITY\n         else -> {\n
// TODO: whether it's ok to convert to Double before scaling\n
convertDurationUnit(value.toDouble(), storageUnit, unit)\n         }\n     }\n }\n\n /**\n * Returns the value
of this duration expressed as a [Long] number of the specified [unit].\n *\n * If the result doesn't fit in the range
of [Long] type, it is coerced into that range:\n * - [Long.MIN_VALUE] is returned if it's less than
`Long.MIN_VALUE`,\n * - [Long.MAX_VALUE] is returned if it's greater than `Long.MAX_VALUE`.\n *\n * An infinite
duration value is converted either to [Long.MAX_VALUE] or [Long.MIN_VALUE] depending on
its sign.\n */\n public fun toLong(unit: DurationUnit): Long {\n     return when (rawValue) {\n
INFINITE.rawValue -> Long.MAX_VALUE\n         NEG_INFINITE.rawValue -> Long.MIN_VALUE\n         else ->
convertDurationUnit(value, storageUnit, unit)\n     }\n }\n\n /**\n * Returns the value of this
duration expressed as an [Int] number of the specified [unit].\n *\n * If the result doesn't fit in the range of [Int]

```

```

type, it is coerced into that range:\n    * - [Int.MIN_VALUE] is returned if it's less than `Int.MIN_VALUE`,\n    * - [Int.MAX_VALUE] is returned if it's greater than `Int.MAX_VALUE`.\n    *\n    * An infinite duration value is converted either to [Int.MAX_VALUE] or [Int.MIN_VALUE] depending on its sign.\n    */\n    public fun toInt(unit: DurationUnit): Int =\n        toLong(unit).coerceIn(Int.MIN_VALUE.toLong(), Int.MAX_VALUE.toLong()).toInt()\n\n    /** The value of this duration expressed as a [Double] number of days.\n    */\n    @ExperimentalTime\n    @Deprecated("Use inWholeDays property instead or convert toDouble(DAYS) if a double value is required.", ReplaceWith("toDouble(DurationUnit.DAYS)"))\n    public val inDays: Double get() = toDouble(DurationUnit.DAYS)\n\n    /** The value of this duration expressed as a [Double] number of hours.\n    */\n    @ExperimentalTime\n    @Deprecated("Use inWholeHours property instead or convert toDouble(HOURS) if a double value is required.", ReplaceWith("toDouble(DurationUnit.HOURS)"))\n    public val inHours: Double get() = toDouble(DurationUnit.HOURS)\n\n    /** The value of this duration expressed as a [Double] number of minutes.\n    */\n    @ExperimentalTime\n    @Deprecated("Use inWholeMinutes property instead or convert toDouble(MINUTES) if a double value is required.", ReplaceWith("toDouble(DurationUnit.MINUTES)"))\n    public val inMinutes: Double get() = toDouble(DurationUnit.MINUTES)\n\n    /** The value of this duration expressed as a [Double] number of seconds.\n    */\n    @ExperimentalTime\n    @Deprecated("Use inWholeSeconds property instead or convert toDouble(SECONDS) if a double value is required.", ReplaceWith("toDouble(DurationUnit.SECONDS)"))\n    public val inSeconds: Double get() = toDouble(DurationUnit.SECONDS)\n\n    /** The value of this duration expressed as a [Double] number of milliseconds.\n    */\n    @ExperimentalTime\n    @Deprecated("Use inWholeMilliseconds property instead or convert toDouble(MILLISECONDS) if a double value is required.", ReplaceWith("toDouble(DurationUnit.MILLISECONDS)"))\n    public val inMilliseconds: Double get() = toDouble(DurationUnit.MILLISECONDS)\n\n    /** The value of this duration expressed as a [Double] number of microseconds.\n    */\n    @ExperimentalTime\n    @Deprecated("Use inWholeMicroseconds property instead or convert toDouble(MICROSECONDS) if a double value is required.", ReplaceWith("toDouble(DurationUnit.MICROSECONDS)"))\n    public val inMicroseconds: Double get() = toDouble(DurationUnit.MICROSECONDS)\n\n    /** The value of this duration expressed as a [Double] number of nanoseconds.\n    */\n    @ExperimentalTime\n    @Deprecated("Use inWholeNanoseconds property instead or convert toDouble(NANOSECONDS) if a double value is required.", ReplaceWith("toDouble(DurationUnit.NANOSECONDS)"))\n    public val inNanoseconds: Double get() = toDouble(DurationUnit.NANOSECONDS)\n\n    /**\n    * The value of this duration expressed as a [Long] number of days.\n    */\n    *\n    * An infinite duration value is converted either to [Long.MAX_VALUE] or [Long.MIN_VALUE] depending on its sign.\n    */\n    public val inWholeDays: Long\n        get() = toLong(DurationUnit.DAYS)\n\n    /**\n    * The value of this duration expressed as a [Long] number of hours.\n    */\n    *\n    * An infinite duration value is converted either to [Long.MAX_VALUE] or [Long.MIN_VALUE] depending on its sign.\n    */\n    public val inWholeHours: Long\n        get() = toLong(DurationUnit.HOURS)\n\n    /**\n    * The value of this duration expressed as a [Long] number of minutes.\n    */\n    *\n    * An infinite duration value is converted either to [Long.MAX_VALUE] or [Long.MIN_VALUE] depending on its sign.\n    */\n    public val inWholeMinutes: Long\n        get() = toLong(DurationUnit.MINUTES)\n\n    /**\n    * The value of this duration expressed as a [Long] number of seconds.\n    */\n    *\n    * An infinite duration value is converted either to [Long.MAX_VALUE] or [Long.MIN_VALUE] depending on its sign.\n    */\n    public val inWholeSeconds: Long\n        get() = toLong(DurationUnit.SECONDS)\n\n    /**\n    * The value of this duration expressed as a [Long] number of milliseconds.\n    */\n    *\n    * An infinite duration value is converted either to [Long.MAX_VALUE] or [Long.MIN_VALUE] depending on its sign.\n    */\n    public val inWholeMilliseconds: Long\n        get() {\n            return if (isInMillis() && isFinite()) value else toLong(DurationUnit.MILLISECONDS)\n        }\n\n    /**\n    * The value of this duration expressed as a [Long] number of microseconds.\n    */\n    *\n    * If the result doesn't fit in the range of [Long] type, it is coerced into that range:\n    * - [Long.MIN_VALUE] is returned if it's less than `Long.MIN_VALUE`,\n    * - [Long.MAX_VALUE] is returned if it's greater than `Long.MAX_VALUE`.\n    */\n    *\n    * An infinite duration value is converted either to [Long.MAX_VALUE] or [Long.MIN_VALUE] depending on

```

```

its sign.\n    */\n    public val inWholeMicroseconds: Long\n        get() =
toLong(DurationUnit.MICROSECONDS)\n\n    /**\n     * The value of this duration expressed as a [Long] number
of nanoseconds.\n     *\n     * If the result doesn't fit in the range of [Long] type, it is coerced into that range:\n     * -
[Long.MIN_VALUE] is returned if it's less than `Long.MIN_VALUE`,\n     * - [Long.MAX_VALUE] is returned if
it's greater than `Long.MAX_VALUE`.\n     *\n     * An infinite duration value is converted either to
[Long.MAX_VALUE] or [Long.MIN_VALUE] depending on its sign.\n    */\n    public val inWholeNanoseconds:
Long\n        get() {\n            val value = value\n            return when {\n                isInNanos() -> value\n
value > Long.MAX_VALUE / NANOS_IN_MILLIS -> Long.MAX_VALUE\n                value <
Long.MIN_VALUE / NANOS_IN_MILLIS -> Long.MIN_VALUE\n                else -> millisToNanos(value)\n
            }\n        }\n\n    // shortcuts\n\n    /**\n     * Returns the value of this duration expressed as a [Long] number of
nanoseconds.\n     *\n     * If the value doesn't fit in the range of [Long] type, it is coerced into that range, see the
conversion [Double.toLong] for details.\n     *\n     * The range of durations that can be expressed as a `Long`
number of nanoseconds is approximately \u00b1292 years.\n    */\n    @ExperimentalTime\n    @Deprecated("Use
inWholeNanoseconds property instead.", ReplaceWith("this.inWholeNanoseconds"))\n    public fun
toLongNanoseconds(): Long = inWholeNanoseconds\n\n    /**\n     * Returns the value of this duration expressed as
a [Long] number of milliseconds.\n     *\n     * The value is coerced to the range of [Long] type, if it doesn't fit in
that range, see the conversion [Double.toLong] for details.\n     *\n     * The range of durations that can be expressed
as a `Long` number of milliseconds is approximately \u00b1292 million years.\n    */\n    @ExperimentalTime\n    @Deprecated("Use inWholeMilliseconds property instead.", ReplaceWith("this.inWholeMilliseconds"))\n    public fun
toLongMilliseconds(): Long = inWholeMilliseconds\n\n    /**\n     * Returns a string representation of
this duration value\n     * expressed as a combination of numeric components, each in its own unit.\n     *\n     * Each
component is a number followed by the unit abbreviated name: `d`, `h`, `m`, `s`:\n     * `5h`, `1d 12h`, `1h 0m
30.340s`.\n     *\n     * The last component, usually seconds, can be a number with a fractional part.\n     *\n     * If the
duration is less than a second, it is represented as a single number\n     * with one of sub-second units: `ms`
(milliseconds), `us` (microseconds), or `ns` (nanoseconds):\n     * `140.884ms`, `500us`, `24ns`.\n     *\n     * A
negative duration is prefixed with `-` sign and, if it consists of multiple components, surrounded with parentheses:\n
     * `-12m` and `-(1h 30m)`.\n     *\n     * Special cases:\n     * - an infinite duration is formatted as `\"Infinity\"` or
`\"-Infinity\"` without a unit.\n     *\n     * It's recommended to use [toIsoString] that uses more strict ISO-8601
format instead of this `toString`\n     * when you want to convert a duration to a string in cases of serialization,
interchange, etc.\n     *\n     * @sample samples.time.Durations.toStringDefault\n    */\n    override fun toString():
String = when (rawValue) {\n        0L -> \"0s\"\n        INFINITE.rawValue -> \"Infinity\"\n        NEG_INFINITE.rawValue -> \"-Infinity\"\n        else -> {\n            val isNegative = isNegative()\n
            buildString {\n                if (isNegative) append('-')\n                absoluteValue.toComponents { days, hours, minutes,
seconds, nanoseconds ->\n                    val hasDays = days != 0\n                    val hasHours = hours != 0\n
                    val hasMinutes = minutes != 0\n                    val hasSeconds = seconds != 0 || nanoseconds != 0\n                    var
components = 0\n                    if (hasDays) {\n                        append(days).append('d')\n
                        components++\n                    }\n                    if (hasHours || (hasDays && (hasMinutes || hasSeconds))) {\n
                        if (components++ > 0) append(' ')\n                        append(hours).append('h')\n                    }\n                    if
(hasMinutes || (hasSeconds && (hasHours || hasDays))) {\n                        if (components++ > 0) append(' ')\n
                        append(minutes).append('m')\n                    }\n                    if (hasSeconds) {\n                        if
(components++ > 0) append(' ')\n                        when {\n                            seconds != 0 || hasDays || hasHours ||
hasMinutes ->\n                                appendFractional(seconds, nanoseconds, 9, \"s\", isoZeroes = false)\n
                            nanoseconds >= 1_000_000 ->\n                                appendFractional(nanoseconds / 1_000_000, nanoseconds
% 1_000_000, 6, \"ms\", isoZeroes = false)\n
                            nanoseconds >= 1_000 ->\n                                appendFractional(nanoseconds / 1_000, nanoseconds % 1_000, 3, \"us\", isoZeroes = false)\n
                        }\n                    }\n                    else ->\n                        append(nanoseconds).append(\"ns\")\n                }\n            }\n            if
(isNegative && components > 1) insert(1, '(').append(')')\n        }\n    }\n\n    private fun
StringBuilder.appendFractional(whole: Int, fractional: Int, fractionalSize: Int, unit: String, isoZeroes: Boolean) {\n

```

```

    append(whole)\n    if (fractional != 0) {\n        append('.')\n        val fracString =
fractional.toString().padStart(fractionalSize, '0')\n        val nonZeroDigits = fracString.indexOfLast { it != '0' } +
1\n        when {\n            !isoZeroes && nonZeroDigits < 3 -> appendRange(fracString, 0, nonZeroDigits)\n
            else -> appendRange(fracString, 0, ((nonZeroDigits + 2) / 3) * 3)\n        }\n        append(unit)\n
}\n\n /**\n * Returns a string representation of this duration value expressed in the given [unit]\n * and
formatted with the specified [decimals] number of digits after decimal point.\n * \n * Special cases:\n * - an
infinite duration is formatted as `\"Infinity\"` or `\"-Infinity\"` without a unit.\n * \n * @param decimals the
number of digits after decimal point to show. The value must be non-negative.\n * \n * No more than 12 decimals will
be shown, even if a larger number is requested.\n * \n * @return the value of duration in the specified [unit]
followed by that unit abbreviated name: `d`, `h`, `m`, `s`, `ms`, `us`, or `ns`.\n * \n * @throws
IllegalArgumentException if [decimals] is less than zero.\n * \n * @sample
samples.time.Durations.toStringDecimals\n * \n public fun toString(unit: DurationUnit, decimals: Int = 0):
String {\n    require(decimals >= 0) { \"decimals must be not negative, but was $decimals\" }\n    val number =
toDouble(unit)\n    if (number.isInfinite()) return number.toString()\n    return formatToExactDecimals(number,
decimals.coerceAtMost(12)) + unit.shortName()\n }\n\n /**\n * Returns an ISO-8601 based string
representation of this duration.\n * \n * The returned value is presented in the format `PTm>s.fS`, where `h`,
`m`, `s` are the integer components of this duration (see [toComponents])\n * and `f` is a fractional part of second.
Depending on the roundness of the value the fractional part can be formatted with either\n * 0, 3, 6, or 9 decimal
digits.\n * \n * The infinite duration is represented as `\"PT999999999999999H\"` which is larger than any
possible finite duration in Kotlin.\n * \n * Negative durations are indicated with the sign `-` in the beginning of
the returned string, for example, `\"-PT5M30S\"`.\n * \n * @sample samples.time.Durations.toIsoString\n
*\n public fun toIsoString(): String = buildString {\n    if (isNegative()) append('-')\n    append(\"PT\")\n
this@Duration.absoluteValue.toComponents { hours, minutes, seconds, nanoseconds ->\n
@Suppress(\"NAME_SHADOWING\")\n        var hours = hours\n        if (isInfinite()) {\n            // use large
enough value instead of Long.MAX_VALUE\n            hours = 9_999_999_999_999\n        }\n        val
hasHours = hours != 0L\n        val hasSeconds = seconds != 0 || nanoseconds != 0\n        val hasMinutes =
minutes != 0 || (hasSeconds && hasHours)\n        if (hasHours) {\n            append(hours).append('H')\n
}\n        if (hasMinutes) {\n            append(minutes).append('M')\n        }\n        if (hasSeconds ||
(!hasHours && !hasMinutes)) {\n            appendFractional(seconds, nanoseconds, 9, \"S\", isoZeroes = true)\n
}\n        }\n    }\n}\n\n// constructing from number of units\n// extension functions\n\n/** Returns a [Duration]
equal to this [Int] number of the specified [unit].\n *\n @SinceKotlin(\"1.6\")\n @WasExperimental(ExperimentalTime::class)\n public fun Int.toDuration(unit:
DurationUnit): Duration {\n    return if (unit <= DurationUnit.SECONDS) {\n
durationOfNanos(convertDurationUnitOverflow(this.toLong(), unit, DurationUnit.NANOSECONDS))\n    } else {\n
toLong().toDuration(unit)\n    }\n}\n\n/** Returns a [Duration] equal to this [Long] number of the specified [unit].\n
*\n @SinceKotlin(\"1.6\")\n @WasExperimental(ExperimentalTime::class)\n public fun Long.toDuration(unit:
DurationUnit): Duration {\n    val maxNsInUnit = convertDurationUnitOverflow(MAX_NANOS,
DurationUnit.NANOSECONDS, unit)\n    if (this in -maxNsInUnit..maxNsInUnit) {\n        return
durationOfNanos(convertDurationUnitOverflow(this, unit, DurationUnit.NANOSECONDS))\n    } else {\n        val
millis = convertDurationUnit(this, unit, DurationUnit.MILLISECONDS)\n        return
durationOfMillis(millis.coerceIn(-MAX_MILLIS, MAX_MILLIS))\n    }\n}\n\n/** Returns a [Duration] equal
to this [Double] number of the specified [unit].\n * \n * Depending on its magnitude, the value is rounded to an
integer number of nanoseconds or milliseconds.\n * \n * @throws IllegalArgumentException if this `Double` value is
`NaN`.\n *\n @SinceKotlin(\"1.6\")\n @WasExperimental(ExperimentalTime::class)\n public fun
Double.toDuration(unit: DurationUnit): Duration {\n    val valueInNs = convertDurationUnit(this, unit,
DurationUnit.NANOSECONDS)\n    require(!valueInNs.isNaN()) { \"Duration value cannot be NaN.\" }\n    val
nanos = valueInNs.roundToLong()\n    return if (nanos in -MAX_NANOS..MAX_NANOS) {\n
durationOfNanos(nanos)\n    } else {\n        val millis = convertDurationUnit(this, unit,

```

```

DurationUnit.MILLISECONDS).roundToLong()\n    durationOfMillisNormalized(millis)\n    }\n}\n\n//
constructing from number of units\n// deprecated extension properties\n\n/** Returns a [Duration] equal to this [Int]
number of nanoseconds. *\n@SinceKotlin("1.3")\n@ExperimentalTime\n@Deprecated(\n"Use 'Int.nanoseconds'
extension property from Duration.Companion instead.\n", ReplaceWith(\n"this.nanoseconds\n",
\n" kotlin.time.Duration.Companion.nanoseconds\n"))\n@DeprecatedSinceKotlin(warningSince = \n"1.5")\npublic val
Int.nanoseconds get() = toDuration(DurationUnit.NANOSECONDS)\n\n/** Returns a [Duration] equal to this
[Long] number of nanoseconds. *\n@SinceKotlin("1.3")\n@ExperimentalTime\n@Deprecated(\n"Use
'Long.nanoseconds' extension property from Duration.Companion instead.\n", ReplaceWith(\n"this.nanoseconds\n",
\n" kotlin.time.Duration.Companion.nanoseconds\n"))\n@DeprecatedSinceKotlin(warningSince = \n"1.5")\npublic val
Long.nanoseconds get() = toDuration(DurationUnit.NANOSECONDS)\n\n/**\n * Returns a [Duration] equal to this
[Double] number of nanoseconds.\n * \n * @throws IllegalArgumentException if this [Double] value is `NaN`.\n
*\n@SinceKotlin("1.3")\n@ExperimentalTime\n@Deprecated(\n"Use 'Double.nanoseconds' extension property
from Duration.Companion instead.\n", ReplaceWith(\n"this.nanoseconds\n",
\n" kotlin.time.Duration.Companion.nanoseconds\n"))\n@DeprecatedSinceKotlin(warningSince = \n"1.5")\npublic val
Double.nanoseconds get() = toDuration(DurationUnit.NANOSECONDS)\n\n/** Returns a [Duration] equal to
this [Int] number of microseconds. *\n@SinceKotlin("1.3")\n@ExperimentalTime\n@Deprecated(\n"Use
'Int.microseconds' extension property from Duration.Companion instead.\n", ReplaceWith(\n"this.microseconds\n",
\n" kotlin.time.Duration.Companion.microseconds\n"))\n@DeprecatedSinceKotlin(warningSince = \n"1.5")\npublic val
Int.microseconds get() = toDuration(DurationUnit.MICROSECONDS)\n\n/** Returns a [Duration] equal to this
[Long] number of microseconds. *\n@SinceKotlin("1.3")\n@ExperimentalTime\n@Deprecated(\n"Use
'Long.microseconds' extension property from Duration.Companion instead.\n", ReplaceWith(\n"this.microseconds\n",
\n" kotlin.time.Duration.Companion.microseconds\n"))\n@DeprecatedSinceKotlin(warningSince = \n"1.5")\npublic val
Long.microseconds get() = toDuration(DurationUnit.MICROSECONDS)\n\n/**\n * Returns a [Duration] equal to
this [Double] number of microseconds.\n * \n * @throws IllegalArgumentException if this [Double] value is
`NaN`.\n * \n *\n@SinceKotlin("1.3")\n@ExperimentalTime\n@Deprecated(\n"Use 'Double.microseconds' extension
property from Duration.Companion instead.\n", ReplaceWith(\n"this.microseconds\n",
\n" kotlin.time.Duration.Companion.microseconds\n"))\n@DeprecatedSinceKotlin(warningSince = \n"1.5")\npublic val
Double.microseconds get() = toDuration(DurationUnit.MICROSECONDS)\n\n/** Returns a [Duration] equal to
this [Int] number of milliseconds. *\n@SinceKotlin("1.3")\n@ExperimentalTime\n@Deprecated(\n"Use
'Int.milliseconds' extension property from Duration.Companion instead.\n", ReplaceWith(\n"this.milliseconds\n",
\n" kotlin.time.Duration.Companion.milliseconds\n"))\n@DeprecatedSinceKotlin(warningSince = \n"1.5")\npublic val
Int.milliseconds get() = toDuration(DurationUnit.MILLISECONDS)\n\n/** Returns a [Duration] equal to this
[Long] number of milliseconds. *\n@SinceKotlin("1.3")\n@ExperimentalTime\n@Deprecated(\n"Use
'Long.milliseconds' extension property from Duration.Companion instead.\n", ReplaceWith(\n"this.milliseconds\n",
\n" kotlin.time.Duration.Companion.milliseconds\n"))\n@DeprecatedSinceKotlin(warningSince = \n"1.5")\npublic val
Long.milliseconds get() = toDuration(DurationUnit.MILLISECONDS)\n\n/**\n * Returns a [Duration] equal to this
[Double] number of milliseconds.\n * \n * @throws IllegalArgumentException if this [Double] value is `NaN`.\n
*\n@SinceKotlin("1.3")\n@ExperimentalTime\n@Deprecated(\n"Use 'Double.milliseconds' extension property
from Duration.Companion instead.\n", ReplaceWith(\n"this.milliseconds\n",
\n" kotlin.time.Duration.Companion.milliseconds\n"))\n@DeprecatedSinceKotlin(warningSince = \n"1.5")\npublic val
Double.milliseconds get() = toDuration(DurationUnit.MILLISECONDS)\n\n/** Returns a [Duration] equal to
this [Int] number of seconds. *\n@SinceKotlin("1.3")\n@ExperimentalTime\n@Deprecated(\n"Use 'Int.seconds'
extension property from Duration.Companion instead.\n", ReplaceWith(\n"this.seconds\n",
\n" kotlin.time.Duration.Companion.seconds\n"))\n@DeprecatedSinceKotlin(warningSince = \n"1.5")\npublic val
Int.seconds get() = toDuration(DurationUnit.SECONDS)\n\n/** Returns a [Duration] equal to this [Long] number of
seconds. *\n@SinceKotlin("1.3")\n@ExperimentalTime\n@Deprecated(\n"Use 'Long.seconds' extension property
from Duration.Companion instead.\n", ReplaceWith(\n"this.seconds\n",
\n" kotlin.time.Duration.Companion.seconds\n"))\n@DeprecatedSinceKotlin(warningSince = \n"1.5")\npublic val

```

```

Long.seconds get() = toDuration(DurationUnit.SECONDS)\n\n/**\n * Returns a [Duration] equal to this [Double]
number of seconds.\n * \n * @throws IllegalArgumentException if this [Double] value is `NaN`.\n
*\n@SinceKotlin("1.3")\n@ExperimentalTime\n@Deprecated("Use 'Double.seconds' extension property from
Duration.Companion instead.", ReplaceWith("this.seconds"),
"\"kotlin.time.Duration.Companion.seconds\""))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic val
Double.seconds get() = toDuration(DurationUnit.SECONDS)\n\n/** Returns a [Duration] equal to this [Int]
number of minutes. *\n@SinceKotlin("1.3")\n@ExperimentalTime\n@Deprecated("Use 'Int.minutes' extension
property from Duration.Companion instead.", ReplaceWith("this.minutes"),
"\"kotlin.time.Duration.Companion.minutes\""))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic val
Int.minutes get() = toDuration(DurationUnit.MINUTES)\n\n/** Returns a [Duration] equal to this [Long] number of
minutes. *\n@SinceKotlin("1.3")\n@ExperimentalTime\n@Deprecated("Use 'Long.minutes' extension property
from Duration.Companion instead.", ReplaceWith("this.minutes"),
"\"kotlin.time.Duration.Companion.minutes\""))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic val
Long.minutes get() = toDuration(DurationUnit.MINUTES)\n\n/**\n * Returns a [Duration] equal to this [Double]
number of minutes.\n * \n * @throws IllegalArgumentException if this [Double] value is `NaN`.\n
*\n@SinceKotlin("1.3")\n@ExperimentalTime\n@Deprecated("Use 'Double.minutes' extension property from
Duration.Companion instead.", ReplaceWith("this.minutes"),
"\"kotlin.time.Duration.Companion.minutes\""))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic val
Double.minutes get() = toDuration(DurationUnit.MINUTES)\n\n/** Returns a [Duration] equal to this [Int]
number of hours. *\n@SinceKotlin("1.3")\n@ExperimentalTime\n@Deprecated("Use 'Int.hours' extension
property from Duration.Companion instead.", ReplaceWith("this.hours"),
"\"kotlin.time.Duration.Companion.hours\""))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic val
Int.hours get() = toDuration(DurationUnit.HOURS)\n\n/** Returns a [Duration] equal to this [Long] number of
hours. *\n@SinceKotlin("1.3")\n@ExperimentalTime\n@Deprecated("Use 'Long.hours' extension property from
Duration.Companion instead.", ReplaceWith("this.hours",
"\"kotlin.time.Duration.Companion.hours\""))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic val
Long.hours get() = toDuration(DurationUnit.HOURS)\n\n/**\n * Returns a [Duration] equal to this [Double]
number of hours.\n * \n * @throws IllegalArgumentException if this [Double] value is `NaN`.\n
*\n@SinceKotlin("1.3")\n@ExperimentalTime\n@Deprecated("Use 'Double.hours' extension property from
Duration.Companion instead.", ReplaceWith("this.hours",
"\"kotlin.time.Duration.Companion.hours\""))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic val
Double.hours get() = toDuration(DurationUnit.HOURS)\n\n/** Returns a [Duration] equal to this [Int] number of
days. *\n@SinceKotlin("1.3")\n@ExperimentalTime\n@Deprecated("Use 'Int.days' extension property from
Duration.Companion instead.", ReplaceWith("this.days",
"\"kotlin.time.Duration.Companion.days\""))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic val Int.days
get() = toDuration(DurationUnit.DAYS)\n\n/** Returns a [Duration] equal to this [Long] number of days.
*\n@SinceKotlin("1.3")\n@ExperimentalTime\n@Deprecated("Use 'Long.days' extension property from
Duration.Companion instead.", ReplaceWith("this.days",
"\"kotlin.time.Duration.Companion.days\""))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic val
Long.days get() = toDuration(DurationUnit.DAYS)\n\n/**\n * Returns a [Duration] equal to this [Double] number
of days.\n * \n * @throws IllegalArgumentException if this [Double] value is `NaN`.\n
*\n@SinceKotlin("1.3")\n@ExperimentalTime\n@Deprecated("Use 'Double.days' extension property from
Duration.Companion instead.", ReplaceWith("this.days",
"\"kotlin.time.Duration.Companion.days\""))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic val
Double.days get() = toDuration(DurationUnit.DAYS)\n\n/** Returns a duration whose value is the specified
[duration] value multiplied by this number.
*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalTime::class)\n@kotlin.internal.InlineOnly\npublic
inline operator fun Int.times(duration: Duration): Duration = duration * this\n\n/**\n * Returns a duration whose

```

value is the specified [duration] value multiplied by this number.\n * The operation may involve rounding when the result cannot be represented exactly with a [Double] number.\n * @throws IllegalArgumentException if the operation results in a `NaN` value.\n

```

*\/n@SinceKotlin("1.6")n@WasExperimental(ExperimentalTime::class)n@kotlin.internal.InlineOnlynpublic
inline operator fun Double.times(duration: Duration): Duration = duration * thisn\n\nprivate fun
parseDuration(value: String, strictIso: Boolean): Duration {n    var length = value.lengthn    if (length == 0) throw
IllegalArgumentException("The string is empty")n    var index = 0n    var result = Duration.ZERO\n    val
infinityString = "Infinity"n    when (value[index]) {n        '+', '-' -> index++n    }n    val hasSign = index > 0n
val isNegative = hasSign && value.startsWith('-')n    when {n        length <= index ->n            throw
IllegalArgumentException("No components")n        value[index] == 'P' -> {n            if (++index == length) throw
IllegalArgumentException()\n            val nonDigitSymbols = "+-."n            var isTimeComponent = false\n
var prevUnit: DurationUnit? = nulln            while (index < length) {n                if (value[index] == 'T') {n
                    if (isTimeComponent || ++index == length) throw IllegalArgumentException()\n                    isTimeComponent =
true\n                    continue\n                }n                val component = value.substringWhile(index) { it in '0'..'9' || it in
nonDigitSymbols }n                if (component.isEmpty()) throw IllegalArgumentException()\n                index +=
component.length\n                val unitChar = value.getOrElse(index) { throw IllegalArgumentException("Missing
unit for value $component") }n                index++n                val unit = durationUnitByIsoChar(unitChar,
isTimeComponent)n                if (prevUnit != null && prevUnit <= unit) throw
IllegalArgumentException("Unexpected order of duration components")n                prevUnit = unit\n                val
dotIndex = component.indexOf('.')n                if (unit == DurationUnit.SECONDS && dotIndex > 0) {n
                    val whole = component.substring(0, dotIndex)n                    result +=
parseOverLongIsoComponent(whole).toDuration(unit)n                    result +=
component.substring(dotIndex).toDouble().toDuration(unit)n                } else {n                    result +=
parseOverLongIsoComponent(component).toDuration(unit)n                }n                }n                strictIso ->n
                throw IllegalArgumentException()\n                value.regionMatches(index, infinityString, 0, length = maxOf(length -
index, infinityString.length), ignoreCase = true) -> {n                    result = Duration.INFINITE\n                }n                else -> {n
                    // parse default string format\n                    var prevUnit: DurationUnit? = null\n                    var afterFirst = false\n
var allowSpaces = !hasSign\n                    if (hasSign && value[index] == '(' && value.last() == ')') {n
                        allowSpaces = true\n                        if (++index == --length) throw IllegalArgumentException("No components")n
                    }n                    while (index < length) {n                        if (afterFirst && allowSpaces) {n                            index =
value.skipWhile(index) { it == ' ' }n                        }n                        afterFirst = true\n                        val component =
value.substringWhile(index) { it in '0'..'9' || it == '.' }n                        if (component.isEmpty()) throw
IllegalArgumentException()\n                        index += component.length\n                        val unitName =
value.substringWhile(index) { it in 'a'..'z' }n                        index += unitName.length\n                        val unit =
durationUnitByShortName(unitName)n                        if (prevUnit != null && prevUnit <= unit) throw
IllegalArgumentException("Unexpected order of duration components")n                        prevUnit = unit\n                        val
dotIndex = component.indexOf('.')n                        if (dotIndex > 0) {n                            val whole = component.substring(0,
dotIndex)n                            result += whole.toLong().toDuration(unit)n                            result +=
component.substring(dotIndex).toDouble().toDuration(unit)n                        } if (index < length) throw
IllegalArgumentException("Fractional component must be last")n                    } else {n                        result +=
component.toLong().toDuration(unit)n                    }n                }n                }n                }n                return if (isNegative) -result else
result\n\n\nprivate fun parseOverLongIsoComponent(value: String): Long {n    val length = value.lengthn    var
startIndex = 0n    if (length > 0 && value[0] in "+-") startIndex++n    if ((length - startIndex) > 16 &&
(startIndex..value.lastIndex).all { value[it] in '0'..'9' }) {n        // all chars are digits, but more than
ceiling(log10(MAX_MILLIS / 1000)) of them\n        return if (value[0] == '-') Long.MIN_VALUE else
Long.MAX_VALUE\n    }n    // TODO: replace with just toLong after min JDK becomes 8\n    return if
(value.startsWith("+")) value.drop(1).toLong() else value.toLong()\n\n\nprivate inline fun
String.substringWhile(startIndex: Int, predicate: (Char) -> Boolean): String =\n    substring(startIndex,

```

```

skipWhile(startIndex, predicate))\n\nprivate inline fun String.skipWhile(startIndex: Int, predicate: (Char) ->
Boolean): Int {\n    var i = startIndex\n    while (i < length && predicate(this[i])) i++\n    return i}\n\n\n\n\n\n//
The ranges are chosen so that they are:\n// - symmetric relative to zero: this greatly simplifies operations with sign,
e.g. unaryMinus and minus.\n// - non-overlapping, but adjacent: the first value that doesn't fit in nanos range, can be
exactly represented in millis.\n\ninternal const val NANOS_IN_MILLIS = 1_000_000\n// maximum number
duration can store in nanosecond range\ninternal const val MAX_NANOS = Long.MAX_VALUE / 2 /
NANOS_IN_MILLIS * NANOS_IN_MILLIS - 1 // ends in ..._999_999\n// maximum number duration can store in
millisecond range, also encodes an infinite value\ninternal const val MAX_MILLIS = Long.MAX_VALUE / 2\n//
MAX_NANOS expressed in milliseconds\nprivate const val MAX_NANOS_IN_MILLIS = MAX_NANOS /
NANOS_IN_MILLIS\n\nprivate fun nanosToMillis(nanos: Long): Long = nanos / NANOS_IN_MILLIS\nprivate
fun millisToNanos(millis: Long): Long = millis * NANOS_IN_MILLIS\n\nprivate fun
durationOfNanos(normalNanos: Long) = Duration(normalNanos shl 1)\nprivate fun durationOfMillis(normalMillis:
Long) = Duration((normalMillis shl 1) + 1)\nprivate fun durationOf(normalValue: Long, unitDiscriminator: Int) =
Duration((normalValue shl 1) + unitDiscriminator)\nprivate fun durationOfNanosNormalized(nanos: Long) =\n    if
(nanos in -MAX_NANOS..MAX_NANOS) {\n        durationOfNanos(nanos)\n    } else {\n
durationOfMillis(nanosToMillis(nanos))\n    }\n\nprivate fun durationOfMillisNormalized(millis: Long) =\n    if
(millis in -MAX_NANOS_IN_MILLIS..MAX_NANOS_IN_MILLIS) {\n
durationOfNanos(millisToNanos(millis))\n    } else {\n        durationOfMillis(millis.coerceIn(-MAX_MILLIS,
MAX_MILLIS))\n    }\n\ninternal expect val durationAssertionsEnabled: Boolean\n\ninternal expect fun
formatToExactDecimals(value: Double, decimals: Int): String\n\ninternal expect fun formatUpToDecimals(value:
Double, decimals: Int): String", "/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n@file:kotlin.jvm.JvmName("UnsignedKt")\npackage
kotlin\n\n@PublishedApi\ninternal fun uintCompare(v1: Int, v2: Int): Int = (v1 xor
Int.MIN_VALUE).compareTo(v2 xor Int.MIN_VALUE)\n\n@PublishedApi\ninternal fun ulongCompare(v1: Long,
v2: Long): Int = (v1 xor Long.MIN_VALUE).compareTo(v2 xor Long.MIN_VALUE)\n\n@PublishedApi\ninternal
fun uintDivide(v1: UInt, v2: UInt): UInt = (v1.toLong() / v2.toLong()).toUInt()\n\n@PublishedApi\ninternal fun
uintRemainder(v1: UInt, v2: UInt): UInt = (v1.toLong() % v2.toLong()).toUInt()\n\n// Division and remainder are
based on Guava's UnsignedLongs implementation\n// Copyright 2011 The Guava
Authors\n\n@PublishedApi\ninternal fun ulongDivide(v1: ULong, v2: ULong): ULong {\n    val dividend =
v1.toLong()\n    val divisor = v2.toLong()\n    if (divisor < 0) { // i.e., divisor >= 2^63:\n        return if (v1 < v2)
ULong(0) else ULong(1)\n    }\n\n    // Optimization - use signed division if both dividend and divisor < 2^63\n    if
(dividend >= 0) {\n        return ULong(dividend / divisor)\n    }\n\n    // Otherwise, approximate the quotient, check,
and correct if necessary.\n    val quotient = ((dividend ushr 1) / divisor) shl 1\n    val rem = dividend - quotient *
divisor\n    return ULong(quotient + if (ULong(rem) >= ULong(divisor)) 1 else 0)\n}\n\n@PublishedApi\ninternal
fun ulongRemainder(v1: ULong, v2: ULong): ULong {\n    val dividend = v1.toLong()\n    val divisor =
v2.toLong()\n    if (divisor < 0) { // i.e., divisor >= 2^63:\n        return if (v1 < v2) {\n            v1 // dividend <
divisor\n        } else {\n            v1 - v2 // dividend >= divisor\n        }\n    }\n\n    // Optimization - use signed
modulus if both dividend and divisor < 2^63\n    if (dividend >= 0) {\n        return ULong(dividend % divisor)\n
    }\n\n    // Otherwise, approximate the quotient, check, and correct if necessary.\n    val quotient = ((dividend ushr 1)
/ divisor) shl 1\n    val rem = dividend - quotient * divisor\n    return ULong(rem - if (ULong(rem) >=
ULong(divisor)) divisor else 0)\n}\n\n@PublishedApi\ninternal fun doubleToUInt(v: Double): UInt = when {\n
v.isNaN() -> 0u\n    v <= UInt.MIN_VALUE.toDouble() -> UInt.MIN_VALUE\n    v >=
UInt.MAX_VALUE.toDouble() -> UInt.MAX_VALUE\n    v <= Int.MAX_VALUE -> v.toInt().toUInt()\n    else -
> (v - Int.MAX_VALUE).toInt().toUInt() + Int.MAX_VALUE.toUInt() // Int.MAX_VALUE < v <
UInt.MAX_VALUE\n}\n\n@PublishedApi\ninternal fun doubleToULong(v: Double): ULong = when {\n
v.isNaN() -> 0u\n    v <= ULong.MIN_VALUE.toDouble() -> ULong.MIN_VALUE\n    v >=
ULong.MAX_VALUE.toDouble() -> ULong.MAX_VALUE\n    v < Long.MAX_VALUE ->

```



```

v.toLong().toULong()\n\n // Real values from Long.MAX_VALUE to (Long.MAX_VALUE + 1) are not
representable in Double, so don't handle them.\n else -> (v - 9223372036854775808.0).toLong().toULong() +
9223372036854775808uL // Long.MAX_VALUE + 1 < v <
ULong.MAX_VALUE\n}\n\n\n@PublishedApi\ninternal fun uintToDouble(v: Int): Double = (v and
Int.MAX_VALUE).toDouble() + (v ushr 31 shl 30).toDouble() * 2\n\n@PublishedApi\ninternal fun
ulongToDouble(v: Long): Double = (v ushr 11).toDouble() * 2048 + (v and 2047)\n}\n\ninternal fun
ulongToString(v: Long): String = ulongToString(v, 10)\n\ninternal fun ulongToString(v: Long, base: Int): String {\n
if (v >= 0) return v.toString(base)\n\n var quotient = ((v ushr 1) / base) shl 1\n var rem = v - quotient * base\n
if (rem >= base) {\n rem -= base\n quotient += 1\n }\n return quotient.toString(base) +
rem.toString(base)\n}\n\n", "/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n
*/\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("CollectionsKt")\n\npackage
kotlin.collections\n\n/**\n * Given an [iterator] function constructs an [Iterable] instance that returns values through
the [Iterator]\n * provided by that function.\n * @sample samples.collections.Iterables.Building.iterable\n
*/\n\n@kotlin.internal.InlineOnly\npublic inline fun <T> Iterable(crossinline iterator: () -> Iterator<T>): Iterable<T>
= object : Iterable<T> {\n override fun iterator(): Iterator<T> = iterator()\n}\n\n/**\n * A wrapper over another
[Iterable] (or any other object that can produce an [Iterator]) that returns\n * an indexing iterator.\n */\n\ninternal class
IndexingIterable<out T>(private val iteratorFactory: () -> Iterator<T>) : Iterable<IndexedValue<T>> {\n override
fun iterator(): Iterator<IndexedValue<T>> = IndexingIterator(iteratorFactory())\n}\n\n\n/**\n * Returns the size of
this iterable if it is known, or `null` otherwise.\n */\n\n@PublishedApi\ninternal fun <T>
Iterable<T>.collectionSizeOrNull(): Int? = if (this is Collection<*>) this.size else null\n\n\n/**\n * Returns the size of
this iterable if it is known, or the specified [default] value otherwise.\n */\n\n@PublishedApi\ninternal fun <T>
Iterable<T>.collectionSizeOrDefault(default: Int): Int = if (this is Collection<*>) this.size else default\n\n\n\n/**\n *
Returns a single list of all elements from all collections in the given collection.\n * @sample
samples.collections.Iterables.Operations.flattenIterable\n */\n\npublic fun <T> Iterable<Iterable<T>>.flatten():
List<T> {\n val result = ArrayList<T>()\n for (element in this) {\n result.addAll(element)\n }\n return
result\n}\n\n\n/**\n * Returns a pair of lists, where\n * *first* list is built from the first values of each pair from this
collection,\n * *second* list is built from the second values of each pair from this collection.\n * @sample
samples.collections.Iterables.Operations.unzipIterable\n */\n\npublic fun <T, R> Iterable<Pair<T, R>>.unzip():
Pair<List<T>, List<R>> {\n val expectedSize = collectionSizeOrDefault(10)\n val listT =
ArrayList<T>(expectedSize)\n val listR = ArrayList<R>(expectedSize)\n for (pair in this) {\n
listT.add(pair.first)\n listR.add(pair.second)\n }\n return listT to listR\n}\n\n", "/*\n * Copyright 2010-2020
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*/\n\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("SequencesKt")\n\npackage
kotlin.sequences\n\nimport kotlin.random.Random\n\n/**\n * Given an [iterator] function constructs a [Sequence]
that returns values through the [Iterator]\n * provided by that function.\n * The values are evaluated lazily, and the
sequence is potentially infinite.\n */\n\n * @sample samples.collections.Sequences.Building.sequenceFromIterator\n
*/\n\n@kotlin.internal.InlineOnly\npublic inline fun <T> Sequence(crossinline iterator: () -> Iterator<T>):
Sequence<T> = object : Sequence<T> {\n override fun iterator(): Iterator<T> = iterator()\n}\n\n\n/**\n * Creates a
sequence that returns all elements from this iterator. The sequence is constrained to be iterated only once.\n */\n\n *
@sample samples.collections.Sequences.Building.sequenceFromIterator\n */\n\npublic fun <T>
Iterator<T>.asSequence(): Sequence<T> = Sequence { this }.constrainOnce()\n\n\n/**\n * Creates a sequence that
returns the specified values.\n */\n\n * @sample samples.collections.Sequences.Building.sequenceOfValues\n
*/\n\npublic fun <T> sequenceOf(vararg elements: T): Sequence<T> = if (elements.isEmpty()) emptySequence() else
elements.asSequence()\n\n\n/**\n * Returns an empty sequence.\n */\n\npublic fun <T> emptySequence():
Sequence<T> = EmptySequence\n\nprivate object EmptySequence : Sequence<Nothing>,

```

```

DropTakeSequence<Nothing> {\n  override fun iterator(): Iterator<Nothing> = EmptyIterator\n  override fun
drop(n: Int) = EmptySequence\n  override fun take(n: Int) = EmptySequence}\n\n/**\n * Returns this sequence if
it's not `null` and the empty sequence otherwise.\n * @sample
samples.collections.Sequences.Usage.sequenceOrEmpty\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun <T> Sequence<T>?.orEmpty():
Sequence<T> = this ?: emptySequence()\n\n/**\n * Returns a sequence that iterates through the elements either of
this sequence\n * or, if this sequence turns out to be empty, of the sequence returned by [defaultValue] function.\n
*\n * @sample samples.collections.Sequences.Usage.sequenceIfEmpty\n *\n@SinceKotlin("1.3")\npublic fun
<T> Sequence<T>.ifEmpty(defaultValue: () -> Sequence<T>): Sequence<T> = sequence {\n  val iterator =
this@ifEmpty.iterator()\n  if (iterator.hasNext()) {\n    yieldAll(iterator)\n  } else {\n
yieldAll(defaultValue())\n  }\n}\n\n/**\n * Returns a sequence of all elements from all sequences in this
sequence.\n *\n * The operation is _intermediate_ and _stateless_.\n *\n * @sample
samples.collections.Sequences.Transformations.flattenSequenceOfSequences\n *\npublic fun <T>
Sequence<Sequence<T>>.flatten(): Sequence<T> = flatten { it.iterator() }\n\n/**\n * Returns a sequence of all
elements from all iterables in this sequence.\n *\n * The operation is _intermediate_ and _stateless_.\n *\n *
@sample samples.collections.Sequences.Transformations.flattenSequenceOfLists\n
*\n@kotlin.jvm.JvmName("flattenSequenceOfIterable")\npublic fun <T> Sequence<Iterable<T>>.flatten():
Sequence<T> = flatten { it.iterator() }\n\nprivate fun <T, R> Sequence<T>.flatten(iterator: (T) -> Iterator<R>):
Sequence<R> {\n  if (this is TransformingSequence<*, *>) {\n    return (this as TransformingSequence<*,
T>).flatten(iterator)\n  }\n  return FlatteningSequence(this, { it }, iterator)\n}\n\n/**\n * Returns a pair of lists,
where\n * *first* list is built from the first values of each pair from this sequence,\n * *second* list is built from the
second values of each pair from this sequence.\n *\n * The operation is _terminal_.\n *\n * @sample
samples.collections.Sequences.Transformations.unzip\n *\npublic fun <T, R> Sequence<Pair<T, R>>.unzip():
Pair<List<T>, List<R>> {\n  val listT = ArrayList<T>()\n  val listR = ArrayList<R>()\n  for (pair in this) {\n
listT.add(pair.first)\n    listR.add(pair.second)\n  }\n  return listT to listR\n}\n\n/**\n * Returns a sequence that
yields elements of this sequence randomly shuffled.\n *\n * Note that every iteration of the sequence returns
elements in a different order.\n *\n * The operation is _intermediate_ and _stateful_.\n
*\n@SinceKotlin("1.4")\npublic fun <T> Sequence<T>.shuffled(): Sequence<T> = shuffled(Random)\n\n/**\n * Returns a sequence that yields elements of this sequence randomly shuffled\n * using the specified [random]
instance as the source of randomness.\n *\n * Note that every iteration of the sequence returns elements in a
different order.\n *\n * The operation is _intermediate_ and _stateful_.\n *\n@SinceKotlin("1.4")\npublic fun <T>
Sequence<T>.shuffled(random: Random): Sequence<T> = sequence<T> {\n  val buffer = toMutableList()\n
while (buffer.isNotEmpty()) {\n    val j = random.nextInt(buffer.size)\n    val last = buffer.removeLast()\n
val value = if (j < buffer.size) buffer.set(j, last) else last\n    yield(value)\n  }\n}\n\n/**\n * A sequence that
returns the values from the underlying [sequence] that either match or do not match\n * the specified [predicate].\n
*\n * @param sendWhen If `true`, values for which the predicate returns `true` are returned. Otherwise,\n * values
for which the predicate returns `false` are returned\n *\ninternal class FilteringSequence<T>(\n  private val
sequence: Sequence<T>,\n  private val sendWhen: Boolean = true,\n  private val predicate: (T) -> Boolean)\n :
Sequence<T> {\n\n  override fun iterator(): Iterator<T> = object : Iterator<T> {\n    val iterator =
sequence.iterator()\n    var nextState: Int = -1 // -1 for unknown, 0 for done, 1 for continue\n    var nextItem: T?
= null\n\n    private fun calcNext() {\n      while (iterator.hasNext()) {\n        val item = iterator.next()\n
if (predicate(item) == sendWhen) {\n          nextItem = item\n          nextState = 1\n        }\n      }\n    }\n\n    override fun next(): T {\n      if (nextState
== -1)\n        calcNext()\n      if (nextState == 0)\n        throw NoSuchElementException()\n      val
result = nextItem\n      nextItem = null\n      nextState = -1\n      @SuppressWarnings("UNCHECKED_CAST")\n
return result as T\n    }\n\n    override fun hasNext(): Boolean {\n      if (nextState == -1)\n        calcNext()\n      return nextState == 1\n    }\n  }\n}\n\n/**\n * A sequence which returns the results of
applying the given [transformer] function to the values\n * in the underlying [sequence].\n *\ninternal class

```

```

TransformingSequence<T, R>\nconstructor(private val sequence: Sequence<T>, private val transformer: (T) -> R) :
Sequence<R> {\n  override fun iterator(): Iterator<R> = object : Iterator<R> {\n    val iterator =
sequence.iterator()\n    override fun next(): R {\n      return transformer(iterator.next())\n    }\n  }\n  override fun hasNext(): Boolean {\n    return iterator.hasNext()\n  }\n}\n\ninternal fun <E>
flatten(iterator: (R) -> Iterator<E>): Sequence<E> {\n  return FlatteningSequence<T, R, E>(sequence,
transformer, iterator)\n}\n\n/**\n * A sequence which returns the results of applying the given [transformer]
function to the values\n * in the underlying [sequence], where the transformer function takes the index of the value
in the underlying\n * sequence along with the value itself.\n */\ninternal class TransformingIndexedSequence<T,
R>\nconstructor(private val sequence: Sequence<T>, private val transformer: (Int, T) -> R) : Sequence<R> {\n
override fun iterator(): Iterator<R> = object : Iterator<R> {\n  val iterator = sequence.iterator()\n  var index =
0\n  override fun next(): R {\n    return transformer(checkIndexOverflow(index++), iterator.next())\n  }\n  override fun hasNext(): Boolean {\n    return iterator.hasNext()\n  }\n}\n}\n\n/**\n * A
sequence which combines values from the underlying [sequence] with their indices and returns them as\n *
[IndexValue] objects.\n */\ninternal class IndexingSequence<T>\nconstructor(private val sequence:
Sequence<T>) : Sequence<IndexedValue<T>> {\n  override fun iterator(): Iterator<IndexedValue<T>> = object :
Iterator<IndexedValue<T>> {\n    val iterator = sequence.iterator()\n    var index = 0\n    override fun next():
IndexedValue<T> {\n      return IndexedValue(checkIndexOverflow(index++), iterator.next())\n    }\n  }\n  override fun hasNext(): Boolean {\n    return iterator.hasNext()\n  }\n}\n}\n\n/**\n * A sequence which
takes the values from two parallel underlying sequences, passes them to the given\n * [transform] function and
returns the values returned by that function. The sequence stops returning\n * values as soon as one of the
underlying sequences stops returning values.\n */\ninternal class MergingSequence<T1, T2, V>\nconstructor(\n
private val sequence1: Sequence<T1>,\n private val sequence2: Sequence<T2>,\n private val transform: (T1,
T2) -> V\n) : Sequence<V> {\n  override fun iterator(): Iterator<V> = object : Iterator<V> {\n    val iterator1 =
sequence1.iterator()\n    val iterator2 = sequence2.iterator()\n    override fun next(): V {\n      return
transform(iterator1.next(), iterator2.next())\n    }\n    override fun hasNext(): Boolean {\n      return
iterator1.hasNext() && iterator2.hasNext()\n    }\n  }\n}\n\ninternal class FlatteningSequence<T, R,
E>\nconstructor(\n private val sequence: Sequence<T>,\n private val transformer: (T) -> R,\n private val
iterator: (R) -> Iterator<E>)\n) : Sequence<E> {\n  override fun iterator(): Iterator<E> = object : Iterator<E> {\n
val iterator = sequence.iterator()\n    var itemIterator: Iterator<E>? = null\n\n    override fun next(): E {\n
if (!ensureItemIterator())\n      throw NoSuchElementException()\n    return itemIterator!!.next()\n  }\n  override fun hasNext(): Boolean {\n    return ensureItemIterator()\n  }\n  private fun
ensureItemIterator(): Boolean {\n    if (itemIterator?.hasNext() == false)\n      itemIterator = null\n\n    while (itemIterator == null) {\n      if (!iterator.hasNext()) {\n        return false\n      } else {\n
val element = iterator.next()\n        val nextItemIterator = iterator(transformer(element))\n      }\n      if (nextItemIterator.hasNext()) {\n        itemIterator = nextItemIterator\n        return true\n      }\n    }\n  }\n}\n}\n\ninternal fun <T, C, R> flatMapIndexed(source:
Sequence<T>, transform: (Int, T) -> C, iterator: (C) -> Iterator<R>): Sequence<R> =\n sequence {\n  var
index = 0\n  for (element in source) {\n    val result = transform(checkIndexOverflow(index++), element)\n    yieldAll(iterator(result))\n  }\n}\n\n/**\n * A sequence that supports drop(n) and take(n) operations\n
*/\ninternal interface DropTakeSequence<T> : Sequence<T> {\n  fun drop(n: Int): Sequence<T>\n  fun take(n:
Int): Sequence<T>\n}\n\n/**\n * A sequence that skips [startIndex] values from the underlying [sequence]\n * and
stops returning values right before [endIndex], i.e. stops at `endIndex - 1`\n */\ninternal class SubSequence<T>(\n
private val sequence: Sequence<T>,\n private val startIndex: Int,\n private val endIndex: Int\n) : Sequence<T>,\n
DropTakeSequence<T> {\n  init {\n    require(startIndex >= 0) { "\"startIndex should be non-negative, but is
$startIndex\""}\n    require(endIndex >= 0) { "\"endIndex should be non-negative, but is $endIndex\""}\n
require(endIndex >= startIndex) { "\"endIndex should be not less than startIndex, but was $endIndex < $startIndex\""}\n  }\n  private val count: Int get() = endIndex - startIndex\n  override fun drop(n: Int): Sequence<T> = if
(>= count) emptySequence() else SubSequence(sequence, startIndex + n, endIndex)\n  override fun take(n: Int):

```

```

Sequence<T> = if (n >= count) this else SubSequence(sequence, startIndex, startIndex + n)\n\n override fun
iterator() = object : Iterator<T> {\n\n val iterator = sequence.iterator()\n var position = 0\n //
Shouldn't be called from constructor to avoid premature iteration\n private fun drop() {\n while (position
< startIndex && iterator.hasNext()) {\n iterator.next()\n position++\n }\n }\n\n
override fun hasNext(): Boolean {\n drop()\n return (position < endIndex) && iterator.hasNext()\n
}\n\n override fun next(): T {\n drop()\n if (position >= endIndex)\n throw
NoSuchElementException()\n position++\n return iterator.next()\n }\n }\n}\n\n**\n * A
sequence that returns at most [count] values from the underlying [sequence], and stops returning values\n * as soon
as that count is reached.\n *\n\ninternal class TakeSequence<T>(\n private val sequence: Sequence<T>,\n private
val count: Int)\n : Sequence<T>, DropTakeSequence<T> {\n\n init {\n require(count >= 0) { \"count must be
non-negative, but was $count.\" }\n }\n\n override fun drop(n: Int): Sequence<T> = if (n >= count)
emptySequence() else SubSequence(sequence, n, count)\n\n override fun take(n: Int): Sequence<T> = if (n >=
count) this else TakeSequence(sequence, n)\n\n override fun iterator(): Iterator<T> = object : Iterator<T> {\n
var left = count\n val iterator = sequence.iterator()\n\n override fun next(): T {\n if (left == 0)\n
throw NoSuchElementException()\n left--\n return iterator.next()\n }\n\n override fun
hasNext(): Boolean {\n return left > 0 && iterator.hasNext()\n }\n }\n}\n\n**\n * A sequence that
returns values from the underlying [sequence] while the [predicate] function returns\n * `true`, and stops returning
values once the function returns `false` for the next element.\n *\n\ninternal class
TakeWhileSequence<T>\nconstructor(\n private val sequence: Sequence<T>,\n private val predicate: (T) ->
Boolean)\n : Sequence<T> {\n\n override fun iterator(): Iterator<T> = object : Iterator<T> {\n val iterator =
sequence.iterator()\n var nextState: Int = -1 // -1 for unknown, 0 for done, 1 for continue\n var nextItem: T?
= null\n\n private fun calcNext() {\n if (iterator.hasNext()) {\n val item = iterator.next()\n
if (predicate(item)) {\n nextState = 1\n nextItem = item\n return\n }\n
}\n\n nextState = 0\n }\n\n override fun next(): T {\n if (nextState == -1)\n
calcNext() // will change nextState\n if (nextState == 0)\n throw NoSuchElementException()\n
@Suppress(\"UNCHECKED_CAST\")\n val result = nextItem as T\n // Clean next to avoid keeping
reference on yielded instance\n nextItem = null\n nextState = -1\n return result\n }\n\n
override fun hasNext(): Boolean {\n if (nextState == -1)\n calcNext() // will change nextState\n
return nextState == 1\n }\n }\n}\n\n**\n * A sequence that skips the specified number of values from the
underlying [sequence] and returns\n * all values after that.\n *\n\ninternal class DropSequence<T>(\n private val
sequence: Sequence<T>,\n private val count: Int)\n : Sequence<T>, DropTakeSequence<T> {\n\n init {\n
require(count >= 0) { \"count must be non-negative, but was $count.\" }\n }\n\n override fun drop(n: Int):
Sequence<T> = (count + n).let { n1 -> if (n1 < 0) DropSequence(this, n) else DropSequence(sequence, n1) }\n\n
override fun take(n: Int): Sequence<T> = (count + n).let { n1 -> if (n1 < 0) TakeSequence(this, n) else
SubSequence(sequence, count, n1) }\n\n override fun iterator(): Iterator<T> = object : Iterator<T> {\n val
iterator = sequence.iterator()\n var left = count\n // Shouldn't be called from constructor to avoid
premature iteration\n private fun drop() {\n while (left > 0 && iterator.hasNext()) {\n
iterator.next()\n left--\n }\n }\n\n override fun next(): T {\n drop()\n return
iterator.next()\n }\n\n override fun hasNext(): Boolean {\n drop()\n return iterator.hasNext()\n
}\n }\n}\n\n**\n * A sequence that skips the values from the underlying [sequence] while the given
[predicate] returns `true` and returns\n * all values after that.\n *\n\ninternal class
DropWhileSequence<T>\nconstructor(\n private val sequence: Sequence<T>,\n private val predicate: (T) ->
Boolean)\n : Sequence<T> {\n\n override fun iterator(): Iterator<T> = object : Iterator<T> {\n val iterator =
sequence.iterator()\n var dropState: Int = -1 // -1 for not dropping, 1 for nextItem, 0 for normal iteration\n
var nextItem: T? = null\n\n private fun drop() {\n while (iterator.hasNext()) {\n val item =
iterator.next()\n if (!predicate(item)) {\n nextItem = item\n dropState = 1\n
return\n }\n }\n\n dropState = 0\n }\n\n override fun next(): T {\n if
(dropState == -1)\n drop()\n if (dropState == 1) {\n

```

```

@Suppress("UNCHECKED_CAST")\n        val result = nextItem as T\n        nextItem = null\n        dropState = 0\n        return result\n    }\n    return iterator.next()\n}\n\noverride fun\nhasNext(): Boolean {\n    if (dropState == -1)\n        drop()\n    return dropState == 1 ||\n    iterator.hasNext()\n}\n}\n\ninternal class DistinctSequence<T, K>(private val source: Sequence<T>,\nprivate val keySelector: (T) -> K) : Sequence<T> {\n    override fun iterator(): Iterator<T> =\n    DistinctIterator(source.iterator(), keySelector)\n}\n\nprivate class DistinctIterator<T, K>(private val source:\nIterator<T>, private val keySelector: (T) -> K) : AbstractIterator<T>() {\n    private val observed =\n    HashSet<K>()\n    override fun computeNext() {\n        while (source.hasNext()) {\n            val next =\n            source.next()\n            val key = keySelector(next)\n            if (observed.add(key)) {\n                setNext(next)\n                return\n            }\n        }\n        done()\n    }\n}\n\nprivate class GeneratorSequence<T : Any>(private val\ngetInitialValue: () -> T?, private val getNextValue: (T) -> T?) : Sequence<T> {\n    override fun iterator():\n    Iterator<T> = object : Iterator<T> {\n        var nextItem: T? = null\n        var nextState: Int = -2 // -2 for initial\n        unknown, -1 for next unknown, 0 for done, 1 for continue\n\n        private fun calcNext() {\n            nextItem = if\n            (nextState == -2) getInitialValue() else getNextValue(nextItem!!)\n            nextState = if (nextItem == null) 0 else\n            1\n        }\n\n        override fun next(): T {\n            if (nextState < 0)\n                calcNext()\n            if (nextState\n            == 0)\n                throw NoSuchElementException()\n            val result = nextItem as T\n            // Do not clean\n            nextItem (to avoid keeping reference on yielded instance) -- need to keep state for getNextValue\n            nextState\n            = -1\n            return result\n        }\n\n        override fun hasNext(): Boolean {\n            if (nextState < 0)\n                calcNext()\n            return nextState == 1\n        }\n    }\n}\n\n/**\n * Returns a wrapper sequence that provides\n values of this sequence, but ensures it can be iterated only one time.\n *\n * The operation is _intermediate_ and\n _stateless_.  

 * [IllegalStateException] is thrown on iterating the returned sequence for the second time and the\n following times.\n *\n */\npublic fun <T> Sequence<T>.constrainOnce(): Sequence<T> {\n    // as? does not work\n    in js\n    //return this as? ConstrainedOnceSequence<T> ?: ConstrainedOnceSequence(this)\n    return if (this is\n    ConstrainedOnceSequence<T>) this else ConstrainedOnceSequence(this)\n}\n\n/**\n * Returns a sequence which\n invokes the function to calculate the next value on each iteration until the function returns `null`.\n *\n * The\n returned sequence is constrained to be iterated only once.\n *\n * @see constrainOnce\n *\n * @see\n kotlin.sequences.sequence\n *\n * @sample samples.collections.Sequences.Building.generateSequence\n */\npublic\nfun <T : Any> generateSequence(nextFunction: () -> T?): Sequence<T> {\n    return\n    GeneratorSequence(nextFunction, { nextFunction() }).constrainOnce()\n}\n\n/**\n * Returns a sequence defined by\n the starting value [seed] and the function [nextFunction],\n *\n * which is invoked to calculate the next value based on\n the previous one on each iteration.\n *\n * The sequence produces values until it encounters first `null` value.\n *\n * If\n [seed] is `null`, an empty sequence is produced.\n *\n * The sequence can be iterated multiple times, each time\n starting with [seed].\n *\n * @see kotlin.sequences.sequence\n *\n * @sample\n samples.collections.Sequences.Building.generateSequenceWithSeed\n */\n\n/*\n * @kotl.in.internal.LowPriorityInOverloadResolution\n */\npublic fun <T : Any> generateSequence(seed: T?,\nnextFunction: (T) -> T?): Sequence<T> =\n    if (seed == null)\n        EmptySequence\n    else\n    GeneratorSequence({ seed }, nextFunction)\n}\n\n/**\n * Returns a sequence defined by the function [seedFunction],\n which is invoked to produce the starting value,\n *\n * and the [nextFunction], which is invoked to calculate the next\n value based on the previous one on each iteration.\n *\n * The sequence produces values until it encounters first\n `null` value.\n *\n * If [seedFunction] returns `null`, an empty sequence is produced.\n *\n * The sequence can be\n iterated multiple times.\n *\n * @see kotlin.sequences.sequence\n *\n * @sample\n samples.collections.Sequences.Building.generateSequenceWithLazySeed\n */\n\npublic fun <T : Any>\ngenerateSequence(seedFunction: () -> T?, nextFunction: (T) -> T?): Sequence<T> =\n    GeneratorSequence(seedFunction, nextFunction)\n}\n\n"/\n *\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin\n Programming Language contributors.\n *\n * Use of this source code is governed by the Apache 2.0 license that can be\n found in the license/LICENSE.txt file.\n */\n\n/*\n * @file: kotlin.jvm.JvmMultifileClass\n * @file: kotlin.jvm.JvmName("PreconditionsKt")\n */\npackage\nkotlin\n\nimport kotlin.contracts.contract\n\n/**\n * Throws an [IllegalArgumentException] if the [value] is false.\n */

```

```

*\n * @sample samples.misc.Preconditions.failRequireWithLazyMessage\n *^\n@kotlin.internal.InlineOnly\npublic
inline fun require(value: Boolean): Unit {\n contract {\n returns() implies value\n }\n require(value) {
\nFailed requirement.\n }\n}\n\n/**\n * Throws an [IllegalArgumentException] with the result of calling
[lazyMessage] if the [value] is false.\n *\n * @sample samples.misc.Preconditions.failRequireWithLazyMessage\n
*^\n@kotlin.internal.InlineOnly\npublic inline fun require(value: Boolean, lazyMessage: () -> Any): Unit {\n
contract {\n returns() implies value\n }\n if (!value) {\n val message = lazyMessage()\n throw
IllegalArgumentException(message.toString())\n }\n}\n\n/**\n * Throws an [IllegalArgumentException] if the
[value] is null. Otherwise returns the not null value.\n *^\n@kotlin.internal.InlineOnly\npublic inline fun <T : Any>
requireNotNull(value: T?): T {\n contract {\n returns() implies (value != null)\n }\n return
requireNotNull(value) { "Required value was null.\n }\n}\n\n/**\n * Throws an [IllegalArgumentException] with
the result of calling [lazyMessage] if the [value] is null. Otherwise\n * returns the not null value.\n *\n * @sample
samples.misc.Preconditions.failRequireNotNullWithLazyMessage\n *^\n@kotlin.internal.InlineOnly\npublic inline
fun <T : Any> requireNotNull(value: T?, lazyMessage: () -> Any): T {\n contract {\n returns() implies (value
!= null)\n }\n\n if (value == null) {\n val message = lazyMessage()\n throw
IllegalArgumentException(message.toString())\n } else {\n return value\n }\n}\n\n/**\n * Throws an
[IllegalStateException] if the [value] is false.\n *\n * @sample
samples.misc.Preconditions.failCheckWithLazyMessage\n *^\n@kotlin.internal.InlineOnly\npublic inline fun
check(value: Boolean): Unit {\n contract {\n returns() implies value\n }\n check(value) { "Check failed.\n
}\n}\n\n/**\n * Throws an [IllegalStateException] with the result of calling [lazyMessage] if the [value] is false.\n
*\n * @sample samples.misc.Preconditions.failCheckWithLazyMessage\n *^\n@kotlin.internal.InlineOnly\npublic
inline fun check(value: Boolean, lazyMessage: () -> Any): Unit {\n contract {\n returns() implies value\n }\n
if (!value) {\n val message = lazyMessage()\n throw IllegalStateException(message.toString())\n
}\n}\n\n/**\n * Throws an [IllegalStateException] if the [value] is null. Otherwise\n * returns the not null value.\n
*\n * @sample samples.misc.Preconditions.failCheckWithLazyMessage\n *^\n@kotlin.internal.InlineOnly\npublic
inline fun <T : Any> checkNotNull(value: T?): T {\n contract {\n returns() implies (value != null)\n }\n
return checkNotNull(value) { "Required value was null.\n }\n}\n\n/**\n * Throws an [IllegalStateException] with
the result of calling [lazyMessage] if the [value] is null. Otherwise\n * returns the not null value.\n *\n * @sample
samples.misc.Preconditions.failCheckWithLazyMessage\n *^\n@kotlin.internal.InlineOnly\npublic inline fun <T :
Any> checkNotNull(value: T?, lazyMessage: () -> Any): T {\n contract {\n returns() implies (value != null)\n
}\n\n if (value == null) {\n val message = lazyMessage()\n throw
IllegalStateException(message.toString())\n } else {\n return value\n }\n}\n\n/**\n * Throws an
[IllegalStateException] with the given [message].\n *\n * @sample samples.misc.Preconditions.failWithError\n
*^\n@kotlin.internal.InlineOnly\npublic inline fun error(message: Any): Nothing = throw
IllegalStateException(message.toString())\n\n\n/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlin.collections\n\n// NOTE: THIS FILE IS AUTO-GENERATED
by the GenerateStandardLib.kt\n// See: https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\nimport
kotlin.js.*\nimport primitiveArrayConcat\nimport withType\nimport kotlin.ranges.contains\nimport
kotlin.ranges.reversed\n\n/**\n * Returns an element at the given [index] or throws an
[IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n *\n * @sample
samples.collections.Collections.Elements.elementAt\n *\npublic actual fun <T> Array<out T>.elementAt(index:
Int): T {\n return elementAtOrElse(index) { throw IndexOutOfBoundsException("index: $index, size: $size")\n
}\n}\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the [index] is
out of bounds of this array.\n *\n * @sample samples.collections.Collections.Elements.elementAt\n *\npublic
actual fun ByteArray.elementAt(index: Int): Byte {\n return elementAtOrElse(index) { throw
IndexOutOfBoundsException("index: $index, size: $size")\n }\n}\n\n/**\n * Returns an element at the given
[index] or throws an [IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n *\n * @sample
samples.collections.Collections.Elements.elementAt\n *\npublic actual fun ShortArray.elementAt(index: Int): Short

```

```

{\n    return elementAtOrElse(index) { throw IndexOutOfBoundsException("index: $index, size: $size}")
}\n}\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the [index] is
out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n */\npublic
actual fun IntArray.elementAt(index: Int): Int {\n    return elementAtOrElse(index) { throw
IndexOutOfBoundsException("index: $index, size: $size") } }\n}\n\n/**\n * Returns an element at the given
[index] or throws an [IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAt\n */\npublic actual fun LongArray.elementAt(index: Int): Long
{\n    return elementAtOrElse(index) { throw IndexOutOfBoundsException("index: $index, size: $size") }
}\n}\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the [index] is
out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n */\npublic
actual fun FloatArray.elementAt(index: Int): Float {\n    return elementAtOrElse(index) { throw
IndexOutOfBoundsException("index: $index, size: $size") } }\n}\n\n/**\n * Returns an element at the given
[index] or throws an [IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAt\n */\npublic actual fun DoubleArray.elementAt(index: Int):
Double {\n    return elementAtOrElse(index) { throw IndexOutOfBoundsException("index: $index, size: $size") }
}\n}\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the [index] is
out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n */\npublic
actual fun BooleanArray.elementAt(index: Int): Boolean {\n    return elementAtOrElse(index) { throw
IndexOutOfBoundsException("index: $index, size: $size") } }\n}\n\n/**\n * Returns an element at the given
[index] or throws an [IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAt\n */\npublic actual fun CharArray.elementAt(index: Int): Char
{\n    return elementAtOrElse(index) { throw IndexOutOfBoundsException("index: $index, size: $size") }
}\n}\n\n/**\n * Returns a [List] that wraps the original array.\n */\npublic actual fun <T> Array<out T>.asList():
List<T> {\n    return ArrayList<T>(this.unsafeCast<Array<Any?>>()) }\n}\n\n/**\n * Returns a [List] that wraps the
original array.\n * \n * @kotlin.internal.InlineOnly\n */\npublic actual inline fun ByteArray.asList(): List<Byte> {\n
return this.unsafeCast<Array<Byte>>().asList() }\n}\n\n/**\n * Returns a [List] that wraps the original array.\n
*\n */\n@kotlin.internal.InlineOnly\n */\npublic actual inline fun ShortArray.asList(): List<Short> {\n    return
this.unsafeCast<Array<Short>>().asList() }\n}\n\n/**\n * Returns a [List] that wraps the original array.\n
*\n */\n@kotlin.internal.InlineOnly\n */\npublic actual inline fun IntArray.asList(): List<Int> {\n    return
this.unsafeCast<Array<Int>>().asList() }\n}\n\n/**\n * Returns a [List] that wraps the original array.\n
*\n */\n@kotlin.internal.InlineOnly\n */\npublic actual inline fun LongArray.asList(): List<Long> {\n    return
this.unsafeCast<Array<Long>>().asList() }\n}\n\n/**\n * Returns a [List] that wraps the original array.\n
*\n */\n@kotlin.internal.InlineOnly\n */\npublic actual inline fun FloatArray.asList(): List<Float> {\n    return
this.unsafeCast<Array<Float>>().asList() }\n}\n\n/**\n * Returns a [List] that wraps the original array.\n
*\n */\n@kotlin.internal.InlineOnly\n */\npublic actual inline fun DoubleArray.asList(): List<Double> {\n    return
this.unsafeCast<Array<Double>>().asList() }\n}\n\n/**\n * Returns a [List] that wraps the original array.\n
*\n */\n@kotlin.internal.InlineOnly\n */\npublic actual inline fun BooleanArray.asList(): List<Boolean> {\n    return
this.unsafeCast<Array<Boolean>>().asList() }\n}\n\n/**\n * Returns a [List] that wraps the original array.\n
*\n */\npublic actual fun CharArray.asList(): List<Char> {\n    return object : AbstractList<Char>(), RandomAccess {\n
        override val size: Int get() = this@asList.size\n        override fun isEmpty(): Boolean = this@asList.isEmpty()\n
        override fun contains(element: Char): Boolean = this@asList.contains(element)\n        override fun get(index: Int):
Char {\n            AbstractList.checkElementIndex(index, size)\n            return this@asList[index]\n        }\n
        override fun indexOf(element: Char): Int {\n            @Suppress("USELESS_CAST")\n            if ((element as
Any?) !is Char) return -1\n            return this@asList.indexOf(element)\n        }\n        override fun
lastIndexOf(element: Char): Int {\n            @Suppress("USELESS_CAST")\n            if ((element as Any?) !is
Char) return -1\n            return this@asList.lastIndexOf(element)\n        }\n    }\n}\n}\n\n/**\n * Returns `true` if the
two specified arrays are *deeply* equal to one another,\n * i.e. contain the same number of the same elements in the
same order.\n * \n * If two corresponding elements are nested arrays, they are also compared deeply.\n * If any of

```

arrays contains itself on any nesting level the behavior is undefined.

* The elements of other types are compared for equality with the [equals][Any.equals] function.

* For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.

```

*\/n@SinceKotlin("1.1")n@kotlin.internal.LowPriorityInOverloadResolutionnpublic actual infix fun <T>
Array<out T>.contentDeepEquals(other: Array<out T>): Boolean {n return
this.contentDeepEquals(other)n}n/n/**n * Returns `true` if the two specified arrays are *deeply* equal to one
another,n * i.e. contain the same number of the same elements in the same order.n * n * The specified arrays are
also considered deeply equal if both are `null`.n * n * If two corresponding elements are nested arrays, they are
also compared deeply.n * If any of arrays contains itself on any nesting level the behavior is undefined.n * n * The
elements of other types are compared for equality with the [equals][Any.equals] function.n * For floating point
numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.n
*\/n@SinceKotlin("1.4")n@library("arrayDeepEquals")npublic actual infix fun <T> Array<out
T>?.contentDeepEquals(other: Array<out T>?): Boolean {n definedExternallyn}n/n/**n * Returns a hash code
based on the contents of this array as if it is [List].n * Nested arrays are treated as lists too.n * n * If any of arrays
contains itself on any nesting level the behavior is undefined.n
*\/n@SinceKotlin("1.1")n@kotlin.internal.LowPriorityInOverloadResolutionnpublic actual fun <T> Array<out
T>.contentDeepHashCode(): Int {n return this.contentDeepHashCode()n}n/n/**n * Returns a hash code based
on the contents of this array as if it is [List].n * Nested arrays are treated as lists too.n * n * If any of arrays
contains itself on any nesting level the behavior is undefined.n
*\/n@SinceKotlin("1.4")n@library("arrayDeepHashCode")npublic actual fun <T> Array<out
T>?.contentDeepHashCode(): Int {n definedExternallyn}n/n/**n * Returns a string representation of the
contents of this array as if it is a [List].n * Nested arrays are treated as lists too.n * n * If any of arrays contains
itself on any nesting level that reference\n * is rendered as `[...]` to prevent recursion.n * n * @sample
samples.collections.Arrays.ContentOperations.contentDeepToString\n
*\/n@SinceKotlin("1.1")n@kotlin.internal.LowPriorityInOverloadResolutionnpublic actual fun <T> Array<out
T>.contentDeepToString(): String {n return this.contentDeepToString()n}n/n/**n * Returns a string
representation of the contents of this array as if it is a [List].n * Nested arrays are treated as lists too.n * n * If any
of arrays contains itself on any nesting level that reference\n * is rendered as `[...]` to prevent recursion.n * n *
@sample samples.collections.Arrays.ContentOperations.contentDeepToString\n
*\/n@SinceKotlin("1.4")n@library("arrayDeepToString")npublic actual fun <T> Array<out
T>?.contentDeepToString(): String {n definedExternallyn}n/n/**n * Returns `true` if the two specified arrays
are *structurally* equal to one another,n * i.e. contain the same number of the same elements in the same order.n *
n * The elements are compared for equality with the [equals][Any.equals] function.n * For floating point numbers
it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.n *\/n@Deprecated("Use Kotlin compiler 1.4 to
avoid deprecation warning.")n@SinceKotlin("1.1")n@DeprecatedSinceKotlin(hiddenSince = "1.4")npublic
actual infix fun <T> Array<out T>.contentEquals(other: Array<out T>): Boolean {n return
this.contentEquals(other)n}n/n/**n * Returns `true` if the two specified arrays are *structurally* equal to one
another,n * i.e. contain the same number of the same elements in the same order.n * n * The elements are
compared for equality with the [equals][Any.equals] function.n * For floating point numbers it means that `NaN`
is equal to itself and `-0.0` is not equal to `0.0`.n *\/n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.")n@SinceKotlin("1.1")n@DeprecatedSinceKotlin(hiddenSince = "1.4")npublic actual infix fun
ByteArray.contentEquals(other: ByteArray): Boolean {n return this.contentEquals(other)n}n/n/**n * Returns
`true` if the two specified arrays are *structurally* equal to one another,n * i.e. contain the same number of the
same elements in the same order.n * n * The elements are compared for equality with the [equals][Any.equals]
function.n * For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.n
*\/n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.")n@SinceKotlin("1.1")n@DeprecatedSinceKotlin(hiddenSince = "1.4")npublic actual infix fun
ShortArray.contentEquals(other: ShortArray): Boolean {n return this.contentEquals(other)n}n/n/**n * Returns

```



```

`true` if the two specified arrays are structurally equal to one another,
 * i.e. contain the same number of the same elements in the same order.
 * The elements are compared for equality with the [equals][Any.equals]
function.
 * For floating point numbers it means that `NaN` is equal to itself and
`-0.0` is not equal to `0.0`.
 *
 * /n @Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.")
 * /n @SinceKotlin("1.1")
 * /n @DeprecatedSinceKotlin(hiddenSince = "1.4")
 * /n public actual infix fun
IntArray.contentEquals(other: IntArray): Boolean {
 * /n return this.contentEquals(other)
 * /n }
 * /n /**
 * /n * Returns `true` if the two specified arrays are structurally
equal to one another,
 * i.e. contain the same number of the same elements in the same order.
 * The elements are compared for equality with the [equals][Any.equals]
function.
 * For floating point numbers it means that `NaN` is equal to itself and
`-0.0` is not equal to `0.0`.
 *
 * /n @Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.")
 * /n @SinceKotlin("1.1")
 * /n @DeprecatedSinceKotlin(hiddenSince = "1.4")
 * /n public actual infix fun
LongArray.contentEquals(other: LongArray): Boolean {
 * /n return this.contentEquals(other)
 * /n }
 * /n /**
 * /n * Returns `true` if the two specified arrays are structurally
equal to one another,
 * i.e. contain the same number of the same elements in the same order.
 * The elements are compared for equality with the [equals][Any.equals]
function.
 * For floating point numbers it means that `NaN` is equal to itself and
`-0.0` is not equal to `0.0`.
 *
 * /n @Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.")
 * /n @SinceKotlin("1.1")
 * /n @DeprecatedSinceKotlin(hiddenSince = "1.4")
 * /n public actual infix fun
FloatArray.contentEquals(other: FloatArray): Boolean {
 * /n return this.contentEquals(other)
 * /n }
 * /n /**
 * /n * Returns `true` if the two specified arrays are structurally
equal to one another,
 * i.e. contain the same number of the same elements in the same order.
 * The elements are compared for equality with the [equals][Any.equals]
function.
 * For floating point numbers it means that `NaN` is equal to itself and
`-0.0` is not equal to `0.0`.
 *
 * /n @Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.")
 * /n @SinceKotlin("1.1")
 * /n @DeprecatedSinceKotlin(hiddenSince = "1.4")
 * /n public actual infix fun
DoubleArray.contentEquals(other: DoubleArray): Boolean {
 * /n return this.contentEquals(other)
 * /n }
 * /n /**
 * /n * Returns `true` if the two specified arrays are structurally
equal to one another,
 * i.e. contain the same number of the same elements in the same order.
 * The elements are compared for equality with the [equals][Any.equals]
function.
 * For floating point numbers it means that `NaN` is equal to itself and
`-0.0` is not equal to `0.0`.
 *
 * /n @Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.")
 * /n @SinceKotlin("1.1")
 * /n @DeprecatedSinceKotlin(hiddenSince = "1.4")
 * /n public actual infix fun
BooleanArray.contentEquals(other: BooleanArray): Boolean {
 * /n return this.contentEquals(other)
 * /n }
 * /n /**
 * /n * Returns `true` if the two specified arrays are structurally
equal to one another,
 * i.e. contain the same number of the same elements in the same order.
 * The elements are compared for equality with the [equals][Any.equals]
function.
 * For floating point numbers it means that `NaN` is equal to itself and
`-0.0` is not equal to `0.0`.
 *
 * /n @Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.")
 * /n @SinceKotlin("1.1")
 * /n @DeprecatedSinceKotlin(hiddenSince = "1.4")
 * /n public actual infix fun
CharArray.contentEquals(other: CharArray): Boolean {
 * /n return this.contentEquals(other)
 * /n }
 * /n /**
 * /n * Returns `true` if the two specified arrays are structurally
equal to one another,
 * i.e. contain the same number of the same elements in the same order.
 * The elements are compared for equality with the [equals][Any.equals]
function.
 * For floating point numbers it means that `NaN` is equal to itself and
`-0.0` is not equal to `0.0`.
 *
 * /n @SinceKotlin("1.4")
 * /n @library("arrayEquals")
 * /n public actual infix fun <T> Array<out
T>?.contentEquals(other: Array<out T>?): Boolean {
 * /n definedExternally
 * /n }
 * /n /**
 * /n * Returns `true` if the two specified arrays are structurally
equal to one another,
 * i.e. contain the same number of the same elements in the same order.
 * The elements are compared for equality with the [equals][Any.equals]
function.
 * For floating point numbers it means that `NaN` is equal to itself and
`-0.0` is not equal to `0.0`.
 *
 * /n @SinceKotlin("1.4")
 * /n @library("arrayEquals")
 * /n public actual infix fun ByteArray?.contentEquals(other:
ByteArray?): Boolean {
 * /n definedExternally
 * /n }
 * /n /**
 * /n * Returns `true` if the two specified arrays are structurally
equal to one another,
 * i.e. contain the same number of the same elements in the same order.
 * The elements are compared for equality with the [equals][Any.equals]
function.
 * For floating point numbers it

```

means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.

```
*\n@SinceKotlin("1.4")\n@library("arrayEquals")\npublic actual infix fun ShortArray?.contentEquals(other: ShortArray?): Boolean {\n    definedExternally\n}\n/**\n * Returns `true` if the two specified arrays are\n *structurally* equal to one another,\n * i.e. contain the same number of the same elements in the same order.\n * \n * The elements are compared for equality with the [equals][Any.equals] function.\n * For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.
```

```
*\n@SinceKotlin("1.4")\n@library("arrayEquals")\npublic actual infix fun IntArray?.contentEquals(other: IntArray?): Boolean {\n    definedExternally\n}\n/**\n * Returns `true` if the two specified arrays are\n *structurally* equal to one another,\n * i.e. contain the same number of the same elements in the same order.\n * \n * The elements are compared for equality with the [equals][Any.equals] function.\n * For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.
```

```
*\n@SinceKotlin("1.4")\n@library("arrayEquals")\npublic actual infix fun LongArray?.contentEquals(other: LongArray?): Boolean {\n    definedExternally\n}\n/**\n * Returns `true` if the two specified arrays are\n *structurally* equal to one another,\n * i.e. contain the same number of the same elements in the same order.\n * \n * The elements are compared for equality with the [equals][Any.equals] function.\n * For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.
```

```
*\n@SinceKotlin("1.4")\n@library("arrayEquals")\npublic actual infix fun FloatArray?.contentEquals(other: FloatArray?): Boolean {\n    definedExternally\n}\n/**\n * Returns `true` if the two specified arrays are\n *structurally* equal to one another,\n * i.e. contain the same number of the same elements in the same order.\n * \n * The elements are compared for equality with the [equals][Any.equals] function.\n * For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.
```

```
*\n@SinceKotlin("1.4")\n@library("arrayEquals")\npublic actual infix fun DoubleArray?.contentEquals(other: DoubleArray?): Boolean {\n    definedExternally\n}\n/**\n * Returns `true` if the two specified arrays are\n *structurally* equal to one another,\n * i.e. contain the same number of the same elements in the same order.\n * \n * The elements are compared for equality with the [equals][Any.equals] function.\n * For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.
```

```
*\n@SinceKotlin("1.4")\n@library("arrayEquals")\npublic actual infix fun BooleanArray?.contentEquals(other: BooleanArray?): Boolean {\n    definedExternally\n}\n/**\n * Returns `true` if the two specified arrays are\n *structurally* equal to one another,\n * i.e. contain the same number of the same elements in the same order.\n * \n * The elements are compared for equality with the [equals][Any.equals] function.\n * For floating point numbers it means that `NaN` is equal to itself and `-0.0` is not equal to `0.0`.
```

```
*\n@SinceKotlin("1.4")\n@library("arrayEquals")\npublic actual infix fun CharArray?.contentEquals(other: CharArray?): Boolean {\n    definedExternally\n}\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n */\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic actual fun
```

```
Array<out T>.contentHashCode(): Int {\n    return this.contentHashCode()\n}\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n */\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic actual fun
```

```
ByteArray.contentHashCode(): Int {\n    return this.contentHashCode()\n}\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n */\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic actual fun
```

```
ShortArray.contentHashCode(): Int {\n    return this.contentHashCode()\n}\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n */\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic actual fun
```

```
IntArray.contentHashCode(): Int {\n    return this.contentHashCode()\n}\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n */\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic actual fun
```

```
LongArray.contentHashCode(): Int {\n    return this.contentHashCode()\n}\n/**\n * Returns a hash code based on
```

the contents of this array as if it is [List].\n *^n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic actual fun FloatArray.contentHashCode(): Int {\n return this.contentHashCode()\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n *^n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic actual fun DoubleArray.contentHashCode(): Int {\n return this.contentHashCode()\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n *^n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic actual fun BooleanArray.contentHashCode(): Int {\n return this.contentHashCode()\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n *^n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic actual fun CharArray.contentHashCode(): Int {\n return this.contentHashCode()\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n *^n@SinceKotlin("1.4")\n@library("arrayHashCode")\npublic actual fun <T> Array<out T>?.contentHashCode(): Int {\n definedExternally\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n *^n@SinceKotlin("1.4")\n@library("arrayHashCode")\npublic actual fun ByteArray?.contentHashCode(): Int {\n definedExternally\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n *^n@SinceKotlin("1.4")\n@library("arrayHashCode")\npublic actual fun ShortArray?.contentHashCode(): Int {\n definedExternally\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n *^n@SinceKotlin("1.4")\n@library("arrayHashCode")\npublic actual fun IntArray?.contentHashCode(): Int {\n definedExternally\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n *^n@SinceKotlin("1.4")\n@library("arrayHashCode")\npublic actual fun LongArray?.contentHashCode(): Int {\n definedExternally\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n *^n@SinceKotlin("1.4")\n@library("arrayHashCode")\npublic actual fun FloatArray?.contentHashCode(): Int {\n definedExternally\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n *^n@SinceKotlin("1.4")\n@library("arrayHashCode")\npublic actual fun DoubleArray?.contentHashCode(): Int {\n definedExternally\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n *^n@SinceKotlin("1.4")\n@library("arrayHashCode")\npublic actual fun BooleanArray?.contentHashCode(): Int {\n definedExternally\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n *^n@SinceKotlin("1.4")\n@library("arrayHashCode")\npublic actual fun CharArray?.contentHashCode(): Int {\n definedExternally\n}\n\n/**\n * Returns a string representation of the contents of the specified array as if it is [List].\n *^n * @sample samples.collections.Arrays.ContentOperations.contentToString\n *^n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic actual fun <T> Array<out T>.contentToString(): String {\n return this.contentToString()\n}\n\n/**\n * Returns a string representation of the contents of the specified array as if it is [List].\n *^n * @sample samples.collections.Arrays.ContentOperations.contentToString\n *^n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic actual fun ByteArray.contentToString(): String {\n return this.contentToString()\n}\n\n/**\n * Returns a string representation of the contents of the specified array as if it is [List].\n *^n * @sample samples.collections.Arrays.ContentOperations.contentToString\n *^n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic actual fun ShortArray.contentToString(): String {\n return this.contentToString()\n}\n\n/**\n * Returns a string representation of the contents of the specified array as if it is [List].\n *^n * @sample samples.collections.Arrays.ContentOperations.contentToString\n *^n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic actual fun IntArray.contentToString(): String {\n return this.contentToString()\n}\n\n/**\n * Returns a string representation of the contents of the specified array as if it is [List].\n *^n * @sample samples.collections.Arrays.ContentOperations.contentToString\n *^n@Deprecated("Use Kotlin compiler 1.4 to

```

avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic
actual fun LongArray.contentToString(): String {\n    return this.contentToString()\n}\n\n/**\n * Returns a string
representation of the contents of the specified array as if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use Kotlin compiler 1.4
to avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic
actual fun FloatArray.contentToString(): String {\n    return this.contentToString()\n}\n\n/**\n * Returns a string
representation of the contents of the specified array as if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use Kotlin compiler 1.4
to avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic
actual fun DoubleArray.contentToString(): String {\n    return this.contentToString()\n}\n\n/**\n * Returns a string
representation of the contents of the specified array as if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use Kotlin compiler 1.4
to avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic
actual fun BooleanArray.contentToString(): String {\n    return this.contentToString()\n}\n\n/**\n * Returns a string
representation of the contents of the specified array as if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use Kotlin compiler 1.4
to avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic
actual fun CharArray.contentToString(): String {\n    return this.contentToString()\n}\n\n/**\n * Returns a string
representation of the contents of the specified array as if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use Kotlin compiler 1.4
to avoid deprecation warning.\")\n@SinceKotlin("1.1")\n@DeprecatedSinceKotlin(hiddenSince = "1.4")\npublic
actual fun <T> Array<out T>?.contentToString():
String {\n    definedExternally\n}\n\n/**\n * Returns a string representation of the contents of the specified array as
if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use Kotlin compiler 1.4
to avoid deprecation warning.\")\n@SinceKotlin("1.4")\n@library("arrayToString")\npublic actual fun ByteArray?.contentToString(): String
{\n    definedExternally\n}\n\n/**\n * Returns a string representation of the contents of the specified array as if it is
[List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use Kotlin compiler 1.4
to avoid deprecation warning.\")\n@SinceKotlin("1.4")\n@library("arrayToString")\npublic actual fun ShortArray?.contentToString(): String
{\n    definedExternally\n}\n\n/**\n * Returns a string representation of the contents of the specified array as if it is
[List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use Kotlin compiler 1.4
to avoid deprecation warning.\")\n@SinceKotlin("1.4")\n@library("arrayToString")\npublic actual fun IntArray?.contentToString(): String {\n
definedExternally\n}\n\n/**\n * Returns a string representation of the contents of the specified array as if it is
[List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use Kotlin compiler 1.4
to avoid deprecation warning.\")\n@SinceKotlin("1.4")\n@library("arrayToString")\npublic actual fun LongArray?.contentToString(): String
{\n    definedExternally\n}\n\n/**\n * Returns a string representation of the contents of the specified array as if it is
[List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use Kotlin compiler 1.4
to avoid deprecation warning.\")\n@SinceKotlin("1.4")\n@library("arrayToString")\npublic actual fun FloatArray?.contentToString(): String
{\n    definedExternally\n}\n\n/**\n * Returns a string representation of the contents of the specified array as if it is
[List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use Kotlin compiler 1.4
to avoid deprecation warning.\")\n@SinceKotlin("1.4")\n@library("arrayToString")\npublic actual fun DoubleArray?.contentToString(): String
{\n    definedExternally\n}\n\n/**\n * Returns a string representation of the contents of the specified array as if it is
[List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use Kotlin compiler 1.4
to avoid deprecation warning.\")\n@SinceKotlin("1.4")\n@library("arrayToString")\npublic actual fun BooleanArray?.contentToString():
String {\n    definedExternally\n}\n\n/**\n * Returns a string representation of the contents of the specified array as
if it is [List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated("Use Kotlin compiler 1.4
to avoid deprecation warning.\")\n@SinceKotlin("1.4")\n@library("arrayToString")\npublic actual fun CharArray?.contentToString(): String
{\n    definedExternally\n}\n\n/**\n * Copies this array or its subrange into the [destination] array and returns that
array.\n * \n * It's allowed to pass the same array in the [destination] and even specify the subrange so that it
overlaps with the destination range.\n * \n * @param destination the array to copy to.\n * @param destinationOffset

```

the position in the [destination] array to copy to, 0 by default.\n * @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n * @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n * \n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n * or when that index is out of the [destination] array indices range.\n * \n * @return the [destination] array.\n

```
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual inline fun <T> Array<out T>.copyInto(destination: Array<T>, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): Array<T> {\n    arrayCopy(this, destination, destinationOffset, startIndex, endIndex)\n    return destination\n}\n\n/**\n * Copies this array or its subrange into the [destination] array and returns that array.\n * \n * It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.\n * \n * @param destination the array to copy to.\n * @param destinationOffset the position in the [destination] array to copy to, 0 by default.\n * @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n * @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n * \n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n * or when that index is out of the [destination] array indices range.\n * \n * @return the [destination] array.\n
```

```
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual inline fun ByteArray.copyInto(destination: ByteArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): ByteArray {\n    arrayCopy(this.unsafeCast<Array<Byte>>(), destination.unsafeCast<Array<Byte>>(), destinationOffset, startIndex, endIndex)\n    return destination\n}\n\n/**\n * Copies this array or its subrange into the [destination] array and returns that array.\n * \n * It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.\n * \n * @param destination the array to copy to.\n * @param destinationOffset the position in the [destination] array to copy to, 0 by default.\n * @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n * @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n * \n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n * or when that index is out of the [destination] array indices range.\n * \n * @return the [destination] array.\n
```

```
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual inline fun ShortArray.copyInto(destination: ShortArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): ShortArray {\n    arrayCopy(this.unsafeCast<Array<Short>>(), destination.unsafeCast<Array<Short>>(), destinationOffset, startIndex, endIndex)\n    return destination\n}\n\n/**\n * Copies this array or its subrange into the [destination] array and returns that array.\n * \n * It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.\n * \n * @param destination the array to copy to.\n * @param destinationOffset the position in the [destination] array to copy to, 0 by default.\n * @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n * @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n * \n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n * or when that index is out of the [destination] array indices range.\n * \n * @return the [destination] array.\n
```

```
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual inline fun IntArray.copyInto(destination: IntArray, destinationOffset: Int = 0,
```

```

startIndex: Int = 0, endIndex: Int = size): IntArray {
    arrayCopy(this.unsafeCast<Array<Int>>(),
destination.unsafeCast<Array<Int>>(), destinationOffset, startIndex, endIndex)
    return destination
}

Copies this array or its subrange into the [destination] array and returns that array.
It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.
@param destination the array to copy to.
@param destinationOffset the position in the [destination] array to copy to, 0 by default.
@param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.
@param endIndex the end (exclusive) of the subrange to copy, size of this array by default.
@throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.
@throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset], or when that index is out of the [destination] array indices range.
@return the [destination] array.

@SinceKotlin("1.3")@kotlin.internal.InlineOnly@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")
public actual inline fun LongArray.copyInto(destination: LongArray, destinationOffset: Int = 0,
startIndex: Int = 0, endIndex: Int = size): LongArray {
    arrayCopy(this.unsafeCast<Array<Long>>(),
destination.unsafeCast<Array<Long>>(), destinationOffset, startIndex, endIndex)
    return destination
}

Copies this array or its subrange into the [destination] array and returns that array.
It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.
@param destination the array to copy to.
@param destinationOffset the position in the [destination] array to copy to, 0 by default.
@param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.
@param endIndex the end (exclusive) of the subrange to copy, size of this array by default.
@throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.
@throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset], or when that index is out of the [destination] array indices range.
@return the [destination] array.

@SinceKotlin("1.3")@kotlin.internal.InlineOnly@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")
public actual inline fun FloatArray.copyInto(destination: FloatArray, destinationOffset: Int = 0,
startIndex: Int = 0, endIndex: Int = size): FloatArray {
    arrayCopy(this.unsafeCast<Array<Float>>(),
destination.unsafeCast<Array<Float>>(), destinationOffset, startIndex, endIndex)
    return destination
}

Copies this array or its subrange into the [destination] array and returns that array.
It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.
@param destination the array to copy to.
@param destinationOffset the position in the [destination] array to copy to, 0 by default.
@param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.
@param endIndex the end (exclusive) of the subrange to copy, size of this array by default.
@throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.
@throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset], or when that index is out of the [destination] array indices range.
@return the [destination] array.

@SinceKotlin("1.3")@kotlin.internal.InlineOnly@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")
public actual inline fun DoubleArray.copyInto(destination: DoubleArray, destinationOffset: Int = 0,
startIndex: Int = 0, endIndex: Int = size): DoubleArray {
    arrayCopy(this.unsafeCast<Array<Double>>(),
destination.unsafeCast<Array<Double>>(), destinationOffset, startIndex, endIndex)
    return destination
}

Copies this array or its subrange into the [destination] array and returns that array.
It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.
@param destination the array to copy to.
@param destinationOffset the position in the [destination] array to copy to, 0 by default.
@param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.
@param endIndex the end (exclusive) of the subrange to copy, size of this array by default.
@throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.
@throws IndexOutOfBoundsException when the

```

subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n * or when that index is out of the [destination] array indices range.\n * \n * @return the [destination] array.\n

```

*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual inline fun BooleanArray.copyInto(destination: BooleanArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): BooleanArray {\n
arrayCopy(this.unsafeCast<Array<Boolean>>(), destination.unsafeCast<Array<Boolean>>(), destinationOffset, startIndex, endIndex)\n
return destination\n}

```

\n * Copies this array or its subrange into the [destination] array and returns that array.\n * \n * It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the destination range.\n * \n * @param destination the array to copy to.\n * @param destinationOffset the position in the [destination] array to copy to, 0 by default.\n * @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n * @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n * \n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n * or when that index is out of the [destination] array indices range.\n * \n * @return the [destination] array.\n

```

*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual inline fun CharArray.copyInto(destination: CharArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size): CharArray {\n
arrayCopy(this.unsafeCast<Array<Char>>(), destination.unsafeCast<Array<Char>>(), destinationOffset, startIndex, endIndex)\n
return destination\n}

```

\n * Returns new array which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n * \n * @Suppress("ACTUAL_WITHOUT_EXPECT", "NOTHING_TO_INLINE")\npublic actual inline fun <T> Array<out T>.copyOf(): Array<T> {\n
return this.asDynamic().slice()\n}

\n * Returns new array which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n * \n * @Suppress("NOTHING_TO_INLINE")\npublic actual inline fun ByteArray.copyOfOf(): ByteArray {\n
return this.asDynamic().slice()\n}

\n * Returns new array which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n * \n * @Suppress("NOTHING_TO_INLINE")\npublic actual inline fun ShortArray.copyOfOf(): ShortArray {\n
return this.asDynamic().slice()\n}

\n * Returns new array which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n * \n * @Suppress("NOTHING_TO_INLINE")\npublic actual inline fun IntArray.copyOfOf(): IntArray {\n
return this.asDynamic().slice()\n}

\n * Returns new array which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n * \n * @public actual fun LongArray.copyOfOf(): LongArray {\n
return withType("LongArray", this.asDynamic().slice())\n}

\n * Returns new array which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n * \n * @Suppress("NOTHING_TO_INLINE")\npublic actual inline fun FloatArray.copyOfOf(): FloatArray {\n
return this.asDynamic().slice()\n}

\n * Returns new array which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n * \n * @Suppress("NOTHING_TO_INLINE")\npublic actual inline fun DoubleArray.copyOfOf(): DoubleArray {\n
return this.asDynamic().slice()\n}

\n * Returns new array which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n * \n * @public actual fun BooleanArray.copyOfOf(): BooleanArray {\n
return withType("BooleanArray", this.asDynamic().slice())\n}

\n * Returns new array which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n * \n * @public actual fun CharArray.copyOfOf(): CharArray {\n
return withType("CharArray", this.asDynamic().slice())\n}

\n * Returns new array which is a copy of the original array, resized to the given [newSize].\n * The copy is either truncated or padded at the end with zero values if necessary.\n * \n * - If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].\n * - If [newSize] is greater

than the size of the original array, the extra elements in the copy array are filled with zero values.

```

@sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf
public actual fun
ByteArray.copyOf(newSize: Int): ByteArray {
    require(newSize >= 0) { "Invalid new array size: $newSize." }
    return fillFrom(this, ByteArray(newSize))
}
Returns new array which is a copy of the original array, resized to the given [newSize].
The copy is either truncated or padded at the end with zero values if necessary.
- If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].
- If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with zero values.
@sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf
public actual fun
ShortArray.copyOf(newSize: Int): ShortArray {
    require(newSize >= 0) { "Invalid new array size: $newSize." }
    return fillFrom(this, ShortArray(newSize))
}
Returns new array which is a copy of the original array, resized to the given [newSize].
The copy is either truncated or padded at the end with zero values if necessary.
- If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].
- If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with zero values.
@sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf
public actual fun
IntArray.copyOf(newSize: Int): IntArray {
    require(newSize >= 0) { "Invalid new array size: $newSize." }
    return fillFrom(this, IntArray(newSize))
}
Returns new array which is a copy of the original array, resized to the given [newSize].
The copy is either truncated or padded at the end with zero values if necessary.
- If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].
- If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with zero values.
@sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf
public actual fun
LongArray.copyOf(newSize: Int): LongArray {
    require(newSize >= 0) { "Invalid new array size: $newSize." }
    return withType("LongArray", arrayCopyResize(this, newSize, 0L))
}
Returns new array which is a copy of the original array, resized to the given [newSize].
The copy is either truncated or padded at the end with zero values if necessary.
- If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].
- If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with zero values.
@sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf
public actual fun
FloatArray.copyOf(newSize: Int): FloatArray {
    require(newSize >= 0) { "Invalid new array size: $newSize." }
    return fillFrom(this, FloatArray(newSize))
}
Returns new array which is a copy of the original array, resized to the given [newSize].
The copy is either truncated or padded at the end with zero values if necessary.
- If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].
- If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with zero values.
@sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf
public actual fun
DoubleArray.copyOf(newSize: Int): DoubleArray {
    require(newSize >= 0) { "Invalid new array size: $newSize." }
    return fillFrom(this, DoubleArray(newSize))
}
Returns new array which is a copy of the original array, resized to the given [newSize].
The copy is either truncated or padded at the end with `false` values if necessary.
- If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].
- If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with `false` values.
@sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf
public actual fun
BooleanArray.copyOf(newSize: Int): BooleanArray {
    require(newSize >= 0) { "Invalid new array size: $newSize." }
    return withType("BooleanArray", arrayCopyResize(this, newSize, false))
}
Returns new array which is a copy of the original array, resized to the given [newSize].
The copy is either truncated or padded at the end with null char (`\u0000`) values if necessary.
- If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].
- If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with null char (`\u0000`) values.
@sample samples.collections.Arrays.CopyOfOperations.resizedPrimitiveCopyOf
public actual fun

```



```

CharArray.copyOf(newSize: Int): CharArray {
  require(newSize >= 0) { "Invalid new array size: $newSize." }
  return withType("CharArray", fillFrom(this, CharArray(newSize)))
}

```

Returns new array which is a copy of the original array, resized to the given [newSize]. The copy is either truncated or padded at the end with `null` values if necessary. If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize]. If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with `null` values.

```

samples.collections.Arrays.CopyOfOperations.resizingCopyOf

```

```

*\/@Suppress("ACTUAL_WITHOUT_EXPECT")
public actual fun <T> Array<out T>.copyOf(newSize: Int):
Array<T?> {
  require(newSize >= 0) { "Invalid new array size: $newSize." }
  return arrayCopyResize(this,
  newSize, null)
}

```

Returns a new array which is a copy of the specified range of the original array.

```

*\/@param fromIndex the start of the range (inclusive) to copy.
*\/@param toIndex the end of the range (exclusive) to copy.
*\/@throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than
the size of this array.
*\/@throws IllegalArgumentException if [fromIndex] is greater than [toIndex].

```

```

*\/@Suppress("ACTUAL_WITHOUT_EXPECT")
public actual fun <T> Array<out
T>.copyOfRange(fromIndex: Int, toIndex: Int): Array<T> {
  AbstractList.checkRangeIndexes(fromIndex,
  toIndex, size)
  return this.asDynamic().slice(fromIndex, toIndex)
}

```

Returns a new array which is a copy of the specified range of the original array.

```

*\/@param fromIndex the start of the range (inclusive) to copy.
*\/@param toIndex the end of the range (exclusive) to copy.
*\/@throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the
size of this array.
*\/@throws IllegalArgumentException if [fromIndex] is greater than [toIndex].

```

```

public actual fun
ByteArray.copyOfRange(fromIndex: Int, toIndex: Int): ByteArray {
  AbstractList.checkRangeIndexes(fromIndex, toIndex, size)
  return this.asDynamic().slice(fromIndex,
  toIndex)
}

```

Returns a new array which is a copy of the specified range of the original array.

```

*\/@param fromIndex the start of the range (inclusive) to copy.
*\/@param toIndex the end of the range (exclusive) to copy.
*\/@throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the
size of this array.
*\/@throws IllegalArgumentException if [fromIndex] is greater than [toIndex].

```

```

public actual fun
ShortArray.copyOfRange(fromIndex: Int, toIndex: Int): ShortArray {
  AbstractList.checkRangeIndexes(fromIndex, toIndex, size)
  return this.asDynamic().slice(fromIndex,
  toIndex)
}

```

Returns a new array which is a copy of the specified range of the original array.

```

*\/@param fromIndex the start of the range (inclusive) to copy.
*\/@param toIndex the end of the range (exclusive) to copy.
*\/@throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the
size of this array.
*\/@throws IllegalArgumentException if [fromIndex] is greater than [toIndex].

```

```

public actual fun
IntArray.copyOfRange(fromIndex: Int, toIndex: Int): IntArray {
  AbstractList.checkRangeIndexes(fromIndex, toIndex, size)
  return this.asDynamic().slice(fromIndex,
  toIndex)
}

```

Returns a new array which is a copy of the specified range of the original array.

```

*\/@param fromIndex the start of the range (inclusive) to copy.
*\/@param toIndex the end of the range (exclusive) to copy.
*\/@throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the
size of this array.
*\/@throws IllegalArgumentException if [fromIndex] is greater than [toIndex].

```

```

public actual fun
LongArray.copyOfRange(fromIndex: Int, toIndex: Int): LongArray {
  AbstractList.checkRangeIndexes(fromIndex, toIndex, size)
  return withType("LongArray",
  this.asDynamic().slice(fromIndex, toIndex))
}

```

Returns a new array which is a copy of the specified range of the original array.

```

*\/@param fromIndex the start of the range (inclusive) to copy.
*\/@param toIndex the end of the range (exclusive) to copy.
*\/@throws IndexOutOfBoundsException if [fromIndex] is
less than zero or [toIndex] is greater than the size of this array.
*\/@throws IllegalArgumentException if
[fromIndex] is greater than [toIndex].

```

```

public actual fun
FloatArray.copyOfRange(fromIndex: Int, toIndex: Int):
FloatArray {
  AbstractList.checkRangeIndexes(fromIndex, toIndex, size)
  return
  this.asDynamic().slice(fromIndex, toIndex)
}

```

Returns a new array which is a copy of the specified range of the original array.

```

*\/@param fromIndex the start of the range (inclusive) to copy.
*\/@param toIndex the

```

end of the range (exclusive) to copy.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n\npublic actual fun DoubleArray.copyOfRange(fromIndex: Int, toIndex: Int): DoubleArray {\n\n AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n\n return this.asDynamic().slice(fromIndex, toIndex)\n}\n\n/**\n * Returns a new array which is a copy of the specified range of the original array.\n * \n * @param fromIndex the start of the range (inclusive) to copy.\n * @param toIndex the end of the range (exclusive) to copy.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n\npublic actual fun BooleanArray.copyOfRange(fromIndex: Int, toIndex: Int): BooleanArray {\n\n AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n\n return withType("<code>BooleanArray</code>", this.asDynamic().slice(fromIndex, toIndex))\n}\n\n/**\n * Returns a new array which is a copy of the specified range of the original array.\n * \n * @param fromIndex the start of the range (inclusive) to copy.\n * @param toIndex the end of the range (exclusive) to copy.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n\npublic actual fun CharArray.copyOfRange(fromIndex: Int, toIndex: Int): CharArray {\n\n AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n\n return withType("<code>CharArray</code>", this.asDynamic().slice(fromIndex, toIndex))\n}\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n\npublic actual fun <T> Array<T>.fill(element: T, fromIndex: Int = 0, toIndex: Int = size): Unit {\n\n AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n\n this.asDynamic().fill(element, fromIndex, toIndex);\n}\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n\npublic actual fun ByteArray.fill(element: Byte, fromIndex: Int = 0, toIndex: Int = size): Unit {\n\n AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n\n this.asDynamic().fill(element, fromIndex, toIndex);\n}\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n\npublic actual fun ShortArray.fill(element: Short, fromIndex: Int = 0, toIndex: Int = size): Unit {\n\n AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n\n this.asDynamic().fill(element, fromIndex, toIndex);\n}\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n\npublic actual fun IntArray.fill(element: Int, fromIndex: Int = 0, toIndex: Int = size): Unit {\n\n AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n\n this.asDynamic().fill(element, fromIndex,

```

toIndex);}

/**
 * Fills this array or its subrange with the specified [element] value.
 * @param fromIndex the start of the range (inclusive) to fill, 0 by default.
 * @param toIndex the end of the range (exclusive) to fill, size of this array by default.
 * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.
 * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].
 */
@SinceKotlin("1.3")
@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")
public actual fun LongArray.fill(element: Long, fromIndex: Int = 0, toIndex: Int = size): Unit {
    AbstractList.checkRangeIndexes(fromIndex, toIndex, size)
    this.asDynamic().fill(element, fromIndex, toIndex);
}

/**
 * Fills this array or its subrange with the specified [element] value.
 * @param fromIndex the start of the range (inclusive) to fill, 0 by default.
 * @param toIndex the end of the range (exclusive) to fill, size of this array by default.
 * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.
 * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].
 */
@SinceKotlin("1.3")
@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")
public actual fun FloatArray.fill(element: Float, fromIndex: Int = 0, toIndex: Int = size): Unit {
    AbstractList.checkRangeIndexes(fromIndex, toIndex, size)
    this.asDynamic().fill(element, fromIndex, toIndex);
}

/**
 * Fills this array or its subrange with the specified [element] value.
 * @param fromIndex the start of the range (inclusive) to fill, 0 by default.
 * @param toIndex the end of the range (exclusive) to fill, size of this array by default.
 * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.
 * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].
 */
@SinceKotlin("1.3")
@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")
public actual fun DoubleArray.fill(element: Double, fromIndex: Int = 0, toIndex: Int = size): Unit {
    AbstractList.checkRangeIndexes(fromIndex, toIndex, size)
    this.asDynamic().fill(element, fromIndex, toIndex);
}

/**
 * Fills this array or its subrange with the specified [element] value.
 * @param fromIndex the start of the range (inclusive) to fill, 0 by default.
 * @param toIndex the end of the range (exclusive) to fill, size of this array by default.
 * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.
 * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].
 */
@SinceKotlin("1.3")
@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")
public actual fun BooleanArray.fill(element: Boolean, fromIndex: Int = 0, toIndex: Int = size): Unit {
    AbstractList.checkRangeIndexes(fromIndex, toIndex, size)
    this.asDynamic().fill(element, fromIndex, toIndex);
}

/**
 * Returns an array containing all elements of the original array and then the given [element].
 */
@Suppress("ACTUAL_WITHOUT_EXPECT", "NOTHING_TO_INLINE")
public actual inline operator fun <T> Array<out T>.plus(element: T): Array<T> {
    return this.asDynamic().concat(arrayOf(element))
}

/**
 * Returns an array containing all elements of the original array and then the given [element].
 */
@Suppress("NOTHING_TO_INLINE")
public actual inline operator fun ByteArray.plus(element: Byte): ByteArray {
    return plus(byteArrayOf(element))
}

/**
 * Returns an array containing all elements of the original array and then the given [element].
 */
@Suppress("NOTHING_TO_INLINE")
public actual inline operator fun ShortArray.plus(element: Short):

```

```

ShortArray {
    return plus(shortArrayOf(element))
}

/**
 * Returns an array containing all elements of the original array and then the given [element].
 */
@Suppress("NOTHING_TO_INLINE")
public actual inline operator fun IntArray.plus(element: Int): IntArray {
    return plus(intArrayOf(element))
}

/**
 * Returns an array containing all elements of the original array and then the given [element].
 */
@Suppress("NOTHING_TO_INLINE")
public actual inline operator fun LongArray.plus(element: Long): LongArray {
    return plus(longArrayOf(element))
}

/**
 * Returns an array containing all elements of the original array and then the given [element].
 */
@Suppress("NOTHING_TO_INLINE")
public actual inline operator fun FloatArray.plus(element: Float): FloatArray {
    return plus(floatArrayOf(element))
}

/**
 * Returns an array containing all elements of the original array and then the given [element].
 */
@Suppress("NOTHING_TO_INLINE")
public actual inline operator fun DoubleArray.plus(element: Double): DoubleArray {
    return plus(doubleArrayOf(element))
}

/**
 * Returns an array containing all elements of the original array and then the given [element].
 */
@Suppress("NOTHING_TO_INLINE")
public actual inline operator fun BooleanArray.plus(element: Boolean): BooleanArray {
    return plus(booleanArrayOf(element))
}

/**
 * Returns an array containing all elements of the original array and then the given [element].
 */
@Suppress("NOTHING_TO_INLINE")
public actual inline operator fun CharArray.plus(element: Char): CharArray {
    return plus(charArrayOf(element))
}

/**
 * Returns an array containing all elements of the original array and then all elements of the given [elements] collection.
 */
@Suppress("ACTUAL_WITHOUT_EXPECT")
public actual operator fun <T> Array<out T>.plus(elements: Collection<T>): Array<T> {
    return arrayPlusCollection(this, elements)
}

/**
 * Returns an array containing all elements of the original array and then all elements of the given [elements] collection.
 */
@Suppress("ACTUAL_WITHOUT_EXPECT")
public actual operator fun ByteArray.plus(elements: Collection<Byte>): ByteArray {
    return fillFromCollection(this.copyOf(size + elements.size), this.size, elements)
}

/**
 * Returns an array containing all elements of the original array and then all elements of the given [elements] collection.
 */
@Suppress("ACTUAL_WITHOUT_EXPECT")
public actual operator fun ShortArray.plus(elements: Collection<Short>): ShortArray {
    return fillFromCollection(this.copyOf(size + elements.size), this.size, elements)
}

/**
 * Returns an array containing all elements of the original array and then all elements of the given [elements] collection.
 */
@Suppress("ACTUAL_WITHOUT_EXPECT")
public actual operator fun IntArray.plus(elements: Collection<Int>): IntArray {
    return fillFromCollection(this.copyOf(size + elements.size), this.size, elements)
}

/**
 * Returns an array containing all elements of the original array and then all elements of the given [elements] collection.
 */
@Suppress("ACTUAL_WITHOUT_EXPECT")
public actual operator fun LongArray.plus(elements: Collection<Long>): LongArray {
    return arrayPlusCollection(this, elements)
}

/**
 * Returns an array containing all elements of the original array and then all elements of the given [elements] collection.
 */
@Suppress("ACTUAL_WITHOUT_EXPECT")
public actual operator fun FloatArray.plus(elements: Collection<Float>): FloatArray {
    return fillFromCollection(this.copyOf(size + elements.size), this.size, elements)
}

/**
 * Returns an array containing all elements of the original array and then all elements of the given [elements] collection.
 */
@Suppress("ACTUAL_WITHOUT_EXPECT")
public actual operator fun DoubleArray.plus(elements: Collection<Double>): DoubleArray {
    return fillFromCollection(this.copyOf(size + elements.size), this.size, elements)
}

/**
 * Returns an array containing all elements of the original array and then all elements of the given [elements] collection.
 */
@Suppress("ACTUAL_WITHOUT_EXPECT")
public actual operator fun BooleanArray.plus(elements: Collection<Boolean>): BooleanArray {
    return arrayPlusCollection(this, elements)
}

/**
 * Returns an array containing all elements of the original array and then all elements of the given [elements] collection.
 */
@Suppress("ACTUAL_WITHOUT_EXPECT")
public actual operator fun CharArray.plus(elements: Collection<Char>): CharArray {
    return fillFromCollection(this.copyOf(size + elements.size), this.size, elements)
}

/**
 * Returns an array containing all elements of the original array and then all elements of the given [elements] array.
 */
@Suppress("ACTUAL_WITHOUT_EXPECT")
@Suppress("NOTHING_TO_INLINE")
public actual inline operator fun <T> Array<out T>.plus(elements: Array<out T>): Array<T> {
    return this.asDynamic().concat(elements)
}

/**
 * Returns an array containing all elements of the original array and then all elements of the given [elements] array.
 */
@Suppress("NOTHING_TO_INLINE")
public actual inline operator fun ByteArray.plus(elements: ByteArray): ByteArray {
    return primitiveArrayConcat(this, elements)
}

/**
 * Returns an array containing

```

all elements of the original array and then all elements of the given [elements] array.\n

```

*\n@Suppress("NOTHING_TO_INLINE")\npublic actual inline operator fun ShortArray.plus(elements: ShortArray): ShortArray {\n    return primitiveArrayConcat(this, elements)\n}\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n */
*\n@Suppress("NOTHING_TO_INLINE")\npublic actual inline operator fun IntArray.plus(elements: IntArray): IntArray {\n    return primitiveArrayConcat(this, elements)\n}\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n */
*\n@Suppress("NOTHING_TO_INLINE")\npublic actual inline operator fun LongArray.plus(elements: LongArray): LongArray {\n    return primitiveArrayConcat(this, elements)\n}\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n */
*\n@Suppress("NOTHING_TO_INLINE")\npublic actual inline operator fun FloatArray.plus(elements: FloatArray): FloatArray {\n    return primitiveArrayConcat(this, elements)\n}\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n */
*\n@Suppress("NOTHING_TO_INLINE")\npublic actual inline operator fun DoubleArray.plus(elements: DoubleArray): DoubleArray {\n    return primitiveArrayConcat(this, elements)\n}\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n */
*\n@Suppress("NOTHING_TO_INLINE")\npublic actual inline operator fun BooleanArray.plus(elements: BooleanArray): BooleanArray {\n    return primitiveArrayConcat(this, elements)\n}\n\n/**\n * Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n */
*\n@Suppress("NOTHING_TO_INLINE")\npublic actual inline operator fun CharArray.plus(elements: CharArray): CharArray {\n    return primitiveArrayConcat(this, elements)\n}\n\n/**\n * Returns an array containing all elements of the original array and then the given [element].\n */
*\n@Suppress("ACTUAL_WITHOUT_EXPECT", "NOTHING_TO_INLINE")\npublic actual inline fun <T> Array<out T>.plusElement(element: T): Array<T> {\n    return this.asDynamic().concat(arrayOf(element))\n}\n\n/**\n * Sorts the array in-place.\n */\n * @sample samples.collections.Arrays.Sorting.sortArray\n */
*\n@library("primitiveArraySort")\npublic actual fun IntArray.sort(): Unit {\n    definedExternally\n}\n\n/**\n * Sorts the array in-place.\n */\n * @sample samples.collections.Arrays.Sorting.sortArray\n */
*\npublic actual fun LongArray.sort(): Unit {\n    @Suppress("DEPRECATION")\n    if (size > 1) sort { a: Long, b: Long -> a.compareTo(b) }\n}\n\n/**\n * Sorts the array in-place.\n */\n * @sample samples.collections.Arrays.Sorting.sortArray\n */
*\n@library("primitiveArraySort")\npublic actual fun ByteArray.sort(): Unit {\n    definedExternally\n}\n\n/**\n * Sorts the array in-place.\n */\n * @sample samples.collections.Arrays.Sorting.sortArray\n */
*\n@library("primitiveArraySort")\npublic actual fun ShortArray.sort(): Unit {\n    definedExternally\n}\n\n/**\n * Sorts the array in-place.\n */\n * @sample samples.collections.Arrays.Sorting.sortArray\n */
*\n@library("primitiveArraySort")\npublic actual fun DoubleArray.sort(): Unit {\n    definedExternally\n}\n\n/**\n * Sorts the array in-place.\n */\n * @sample samples.collections.Arrays.Sorting.sortArray\n */
*\n@library("primitiveArraySort")\npublic actual fun FloatArray.sort(): Unit {\n    definedExternally\n}\n\n/**\n * Sorts the array in-place.\n */\n * @sample samples.collections.Arrays.Sorting.sortArray\n */
*\n@library("primitiveArraySort")\npublic actual fun CharArray.sort(): Unit {\n    definedExternally\n}\n\n/**\n * Sorts the array in-place according to the natural order of its elements.\n */\n * @sample samples.collections.Arrays.Sorting.sortArray\n */\n * The sort is _stable_. It means that equal elements preserve their order relative to each other after sorting.\n */
*\npublic actual fun <T : Comparable<T>> Array<out T>.sort(): Unit {\n    if (size > 1) sortArray(this)\n}\n\n/**\n * Sorts the array in-place according to the order specified by the given [comparison] function.\n */\n * @sample samples.collections.Arrays.Sorting.sortArrayOfComparable\n */
*\npublic actual fun <T : Comparable<T>> Array<out T>.sortWith(comparison: (a: T, b: T) -> Int): Unit {\n    if (size > 1) sortArrayWith(this, comparison)\n}\n\n/**\n * Sorts a range in the array in-place.\n */\n * @sample samples.collections.Arrays.Sorting.sortArray\n */\n * The sort is _stable_. It

```

means that equal elements preserve their order relative to each other after sorting.

```

    @param fromIndex the start of the range (inclusive) to sort, 0 by default.
    @param toIndex the end of the range (exclusive) to sort, size of this array by default.
    @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.
    @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].
    @sample samples.collections.Arrays.Sorting.sortRangeOfArrayOfComparable
    *
    @SinceKotlin("1.4")
    @Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")
    public actual fun <T : Comparable<T>> Array<out T>.sort(fromIndex: Int = 0, toIndex: Int = size): Unit {
        AbstractList.checkRangeIndexes(fromIndex, toIndex, size)
        sortArrayWith(this, fromIndex, toIndex, naturalOrder())
    }
    /**
     * Sorts a range in the array in-place.
     * @param fromIndex the start of the range (inclusive) to sort, 0 by default.
     * @param toIndex the end of the range (exclusive) to sort, size of this array by default.
     * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.
     * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].
     * @sample samples.collections.Arrays.Sorting.sortRangeOfArray
     *
     * @SinceKotlin("1.4")
     * @Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")
     * public actual fun ByteArray.sort(fromIndex: Int = 0, toIndex: Int = size): Unit {
        AbstractList.checkRangeIndexes(fromIndex, toIndex, size)
        val subarray = this.asDynamic().subarray(fromIndex, toIndex).unsafeCast<ByteArray>()
        subarray.sort()
    }
    /**
     * Sorts a range in the array in-place.
     * @param fromIndex the start of the range (inclusive) to sort, 0 by default.
     * @param toIndex the end of the range (exclusive) to sort, size of this array by default.
     * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.
     * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].
     * @sample samples.collections.Arrays.Sorting.sortRangeOfArray
     *
     * @SinceKotlin("1.4")
     * @Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")
     * public actual fun ShortArray.sort(fromIndex: Int = 0, toIndex: Int = size): Unit {
        AbstractList.checkRangeIndexes(fromIndex, toIndex, size)
        val subarray = this.asDynamic().subarray(fromIndex, toIndex).unsafeCast<ShortArray>()
        subarray.sort()
    }
    /**
     * Sorts a range in the array in-place.
     * @param fromIndex the start of the range (inclusive) to sort, 0 by default.
     * @param toIndex the end of the range (exclusive) to sort, size of this array by default.
     * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.
     * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].
     * @sample samples.collections.Arrays.Sorting.sortRangeOfArray
     *
     * @SinceKotlin("1.4")
     * @Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")
     * public actual fun IntArray.sort(fromIndex: Int = 0, toIndex: Int = size): Unit {
        AbstractList.checkRangeIndexes(fromIndex, toIndex, size)
        val subarray = this.asDynamic().subarray(fromIndex, toIndex).unsafeCast<IntArray>()
        subarray.sort()
    }
    /**
     * Sorts a range in the array in-place.
     * @param fromIndex the start of the range (inclusive) to sort, 0 by default.
     * @param toIndex the end of the range (exclusive) to sort, size of this array by default.
     * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.
     * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].
     * @sample samples.collections.Arrays.Sorting.sortRangeOfArray
     *
     * @SinceKotlin("1.4")
     * @Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")
     * public actual fun LongArray.sort(fromIndex: Int = 0, toIndex: Int = size): Unit {
        AbstractList.checkRangeIndexes(fromIndex, toIndex, size)
        sortArrayWith(this.unsafeCast<Array<Long>>(), fromIndex, toIndex, naturalOrder())
    }
    /**
     * Sorts a range in the array in-place.
     * @param fromIndex the start of the range (inclusive) to sort, 0 by default.
     * @param toIndex the end of the range (exclusive) to sort, size of this array by default.
     * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.
     * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].
     * @sample samples.collections.Arrays.Sorting.sortRangeOfArray
    
```

```

*\n@SinceKotlin("1.4")\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic
actual fun FloatArray.sort(fromIndex: Int = 0, toIndex: Int = size): Unit {\n
AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n    val subarray =
this.asDynamic().subarray(fromIndex, toIndex).unsafeCast<FloatArray>()\n    subarray.sort()\n}\n\n/**\n * Sorts a
range in the array in-place.\n * \n * @param fromIndex the start of the range (inclusive) to sort, 0 by default.\n *
@param toIndex the end of the range (exclusive) to sort, size of this array by default.\n * \n * @throws
IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n *
@throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n * \n * @sample
samples.collections.Arrays.Sorting.sortRangeOfArray\n
*\n@SinceKotlin("1.4")\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic
actual fun DoubleArray.sort(fromIndex: Int = 0, toIndex: Int = size): Unit {\n
AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n    val subarray =
this.asDynamic().subarray(fromIndex, toIndex).unsafeCast<DoubleArray>()\n    subarray.sort()\n}\n\n/**\n * Sorts
a range in the array in-place.\n * \n * @param fromIndex the start of the range (inclusive) to sort, 0 by default.\n *
@param toIndex the end of the range (exclusive) to sort, size of this array by default.\n * \n * @throws
IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n *
@throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n * \n * @sample
samples.collections.Arrays.Sorting.sortRangeOfArray\n
*\n@SinceKotlin("1.4")\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic
actual fun CharArray.sort(fromIndex: Int = 0, toIndex: Int = size): Unit {\n
AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n    val subarray =
this.asDynamic().subarray(fromIndex, toIndex).unsafeCast<CharArray>()\n    subarray.sort()\n}\n\n/**\n * Sorts the
array in-place according to the order specified by the given [comparison] function.\n * \n * @Deprecated("Use other
sorting functions from the Standard Library")\n * @DeprecatedSinceKotlin(warningSince =
"1.6")\n * @kotlin.internal.InlineOnly\n * public inline fun ByteArray.sort(noinline comparison: (a: Byte, b: Byte) ->
Int): Unit {\n    asDynamic().sort(comparison)\n}\n\n/**\n * Sorts the array in-place according to the order specified
by the given [comparison] function.\n * \n * @Deprecated("Use other sorting functions from the Standard
Library")\n * @DeprecatedSinceKotlin(warningSince = "1.6")\n * @kotlin.internal.InlineOnly\n * public inline fun
ShortArray.sort(noinline comparison: (a: Short, b: Short) -> Int): Unit {\n
asDynamic().sort(comparison)\n}\n\n/**\n * Sorts the array in-place according to the order specified by the given
[comparison] function.\n * \n * @Deprecated("Use other sorting functions from the Standard
Library")\n * @DeprecatedSinceKotlin(warningSince = "1.6")\n * @kotlin.internal.InlineOnly\n * public inline fun
IntArray.sort(noinline comparison: (a: Int, b: Int) -> Int): Unit {\n    asDynamic().sort(comparison)\n}\n\n/**\n *
Sorts the array in-place according to the order specified by the given [comparison] function.\n * \n * @Deprecated("Use other sorting functions from the Standard
Library")\n * @DeprecatedSinceKotlin(warningSince = "1.6")\n * @kotlin.internal.InlineOnly\n * public inline fun
LongArray.sort(noinline comparison: (a: Long, b: Long) -> Int): Unit {\n
asDynamic().sort(comparison)\n}\n\n/**\n * Sorts the array in-place according to the order specified by the given
[comparison] function.\n * \n * @Deprecated("Use other sorting functions from the Standard
Library")\n * @DeprecatedSinceKotlin(warningSince = "1.6")\n * @kotlin.internal.InlineOnly\n * public inline fun
FloatArray.sort(noinline comparison: (a: Float, b: Float) -> Int): Unit {\n
asDynamic().sort(comparison)\n}\n\n/**\n * Sorts the array in-place according to the order specified by the given
[comparison] function.\n * \n * @Deprecated("Use other sorting functions from the Standard
Library")\n * @DeprecatedSinceKotlin(warningSince = "1.6")\n * @kotlin.internal.InlineOnly\n * public inline fun
DoubleArray.sort(noinline comparison: (a: Double, b: Double) -> Int): Unit {\n
asDynamic().sort(comparison)\n}\n\n/**\n * Sorts the array in-place according to the order specified by the given
[comparison] function.\n * \n * @Deprecated("Use other sorting functions from the Standard
Library")\n * @DeprecatedSinceKotlin(warningSince = "1.6")\n * @kotlin.internal.InlineOnly\n * public inline fun

```

```

CharArray.sort(noinline comparison: (a: Char, b: Char) -> Int): Unit {
asDynamic().sort(comparison)\n\n/**\n * Sorts the array in-place according to the order specified by the given
[comparator].\n * \n * The sort is _stable_. It means that equal elements preserve their order relative to each other
after sorting.\n */\npublic actual fun <T> Array<out T>.sortWith(comparator: Comparator<in T>): Unit {\n if
(size > 1) sortArrayWith(this, comparator)\n\n/**\n * Sorts a range in the array in-place with the given
[comparator].\n * \n * The sort is _stable_. It means that equal elements preserve their order relative to each other
after sorting.\n * \n * @param fromIndex the start of the range (inclusive) to sort, 0 by default.\n * @param toIndex
the end of the range (exclusive) to sort, size of this array by default.\n * \n * @throws IndexOutOfBoundsException
if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws
IllegalArgumentOutOfRangeException if [fromIndex] is greater than [toIndex].\n
*/\n@SinceKotlin("1.4")\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic
actual fun <T> Array<out T>.sortWith(comparator: Comparator<in T>, fromIndex: Int = 0, toIndex: Int = size):
Unit {\n AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n sortArrayWith(this, fromIndex, toIndex,
comparator)\n\n/**\n * Returns a *typed* object array containing all of the elements of this primitive array.\n
*/\npublic actual fun ByteArray.toTypedArray(): Array<Byte> {\n return js("[]").slice.call(this)\n\n/**\n *
Returns a *typed* object array containing all of the elements of this primitive array.\n */\npublic actual fun
ShortArray.toTypedArray(): Array<Short> {\n return js("[]").slice.call(this)\n\n/**\n * Returns a *typed*
object array containing all of the elements of this primitive array.\n */\npublic actual fun IntArray.toTypedArray():
Array<Int> {\n return js("[]").slice.call(this)\n\n/**\n * Returns a *typed* object array containing all of the
elements of this primitive array.\n */\npublic actual fun LongArray.toTypedArray(): Array<Long> {\n return
js("[]").slice.call(this)\n\n/**\n * Returns a *typed* object array containing all of the elements of this primitive
array.\n */\npublic actual fun FloatArray.toTypedArray(): Array<Float> {\n return
js("[]").slice.call(this)\n\n/**\n * Returns a *typed* object array containing all of the elements of this primitive
array.\n */\npublic actual fun DoubleArray.toTypedArray(): Array<Double> {\n return
js("[]").slice.call(this)\n\n/**\n * Returns a *typed* object array containing all of the elements of this primitive
array.\n */\npublic actual fun BooleanArray.toTypedArray(): Array<Boolean> {\n return
js("[]").slice.call(this)\n\n/**\n * Returns a *typed* object array containing all of the elements of this primitive
array.\n */\npublic actual fun CharArray.toTypedArray(): Array<Char> {\n return Array(size) { index ->
this[index] }\n\n", "/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n
*/\n@file:kotlin.jvm.JvmName("ComparisonsKt")\n@file:kotlin.jvm.JvmMultifileClass\n\npackage
kotlin.comparisons\n\n/**\n * Compares two values using the specified functions [selectors] to calculate the result
of the comparison.\n * The functions are called sequentially, receive the given values [a] and [b] and return
[Comparable]\n * objects. As soon as the [Comparable] instances returned by a function for [a] and [b] values do
not\n * compare as equal, the result of that comparison is returned.\n * \n * @sample
samples.comparisons.Comparisons.compareValuesByWithSelectors\n */\npublic fun <T> compareValuesBy(a: T,
b: T, vararg selectors: (T) -> Comparable<*>?): Int {\n require(selectors.size > 0)\n return
compareValuesByImpl(a, b, selectors)\n\nprivate fun <T> compareValuesByImpl(a: T, b: T, selectors:
Array<out (T) -> Comparable<*>?): Int {\n for (fn in selectors) {\n val v1 = fn(a)\n val v2 = fn(b)\n
val diff = compareValues(v1, v2)\n if (diff != 0) return diff\n } return 0\n\n/**\n * Compares two
values using the specified [selector] function to calculate the result of the comparison.\n * The function is applied to
the given values [a] and [b] and return [Comparable] objects.\n * The result of comparison of these [Comparable]
instances is returned.\n * \n * @sample samples.comparisons.Comparisons.compareValuesByWithSingleSelector\n
*/\n@kotlin.internal.InlineOnly\npublic inline fun <T> compareValuesBy(a: T, b: T, selector: (T) ->
Comparable<*>?): Int {\n return compareValues(selector(a), selector(b))\n\n/**\n * Compares two values
using the specified [selector] function to calculate the result of the comparison.\n * The function is applied to the
given values [a] and [b] and return objects of type K which are then being\n * compared with the given

```



```

[comparator].\n *\n * @sample samples.comparisons.Comparisons.compareValuesByWithComparator\n
*\n@kotlin.internal.InlineOnly\npublic inline fun <T, K> compareValuesBy(a: T, b: T, comparator: Comparator<in
K>, selector: (T) -> K): Int {\n    return comparator.compare(selector(a), selector(b))\n}\n\n//// Not so useful without
type inference for receiver of expression\n//// compareValuesWith(v1, v2, compareBy { it.prop1 }
thenByDescending { it.prop2 })\n\n/**\n * Compares two values using the specified [comparator].\n//
*\n//@Suppress("NOTHING_TO_INLINE")\n//public inline fun <T> compareValuesWith(a: T, b: T, comparator:
Comparator<T>): Int = comparator.compare(a, b)\n\n/**\n * Compares two nullable [Comparable] values. Null
is considered less than any value.\n *\n * @sample samples.comparisons.Comparisons.compareValues\n *\npublic
fun <T : Comparable<*>> compareValues(a: T?, b: T?): Int {\n    if (a === b) return 0\n    if (a == null) return -1\n
if (b == null) return 1\n    @Suppress("UNCHECKED_CAST")\n    return (a as
Comparable<Any>).compareTo(b)\n}\n\n/**\n * Creates a comparator using the sequence of functions to calculate a
result of comparison.\n *\n * The functions are called sequentially, receive the given values `a` and `b` and return
[Comparable]\n *\n * objects. As soon as the [Comparable] instances returned by a function for `a` and `b` values do
not\n *\n * compare as equal, the result of that comparison is returned from the [Comparator].\n *\n *\n * @sample
samples.comparisons.Comparisons.compareByWithSelectors\n *\npublic fun <T> compareBy(vararg selectors: (T)
-> Comparable<*>?): Comparator<T> {\n    require(selectors.size > 0)\n    return Comparator { a, b ->
compareValuesByImpl(a, b, selectors) }\n}\n\n/**\n * Creates a comparator using the function to transform value
to a [Comparable] instance for comparison.\n *\n *\n * @sample
samples.comparisons.Comparisons.compareByWithSingleSelector\n *\n@kotlin.internal.InlineOnly\npublic inline
fun <T> compareBy(crossinline selector: (T) -> Comparable<*>?): Comparator<T> =\n    Comparator { a, b ->
compareValuesBy(a, b, selector) }\n\n/**\n * Creates a comparator using the [selector] function to transform values
being compared and then applying\n *\n * the specified [comparator] to compare transformed values.\n *\n *\n * @sample
samples.comparisons.Comparisons.compareByWithComparator\n *\n@kotlin.internal.InlineOnly\npublic inline
fun <T, K> compareBy(comparator: Comparator<in K>, crossinline selector: (T) -> K): Comparator<T> =\n    Comparator { a, b -> compareValuesBy(a, b, comparator, selector) }\n\n/**\n * Creates a descending comparator
using the function to transform value to a [Comparable] instance for comparison.\n *\n *\n * @sample
samples.comparisons.Comparisons.compareByDescendingWithSingleSelector\n
*\n@kotlin.internal.InlineOnly\npublic inline fun <T> compareByDescending(crossinline selector: (T) ->
Comparable<*>?): Comparator<T> =\n    Comparator { a, b -> compareValuesBy(b, a, selector) }\n\n/**\n *
Creates a descending comparator using the [selector] function to transform values being compared and then
applying\n *\n * the specified [comparator] to compare transformed values.\n *\n *\n * Note that an order of [comparator] is
reversed by this wrapper.\n *\n *\n * @sample
samples.comparisons.Comparisons.compareByDescendingWithComparator\n
*\n@kotlin.internal.InlineOnly\npublic inline fun <T, K> compareByDescending(comparator: Comparator<in K>,
crossinline selector: (T) -> K): Comparator<T> =\n    Comparator { a, b -> compareValuesBy(b, a, comparator,
selector) }\n\n/**\n * Creates a comparator comparing values after the primary comparator defined them equal. It
uses\n *\n * the function to transform value to a [Comparable] instance for comparison.\n *\n *\n * @sample
samples.comparisons.Comparisons.thenBy\n *\n@kotlin.internal.InlineOnly\npublic inline fun <T>
Comparator<T>.thenBy(crossinline selector: (T) -> Comparable<*>?): Comparator<T> =\n    Comparator { a, b -
->\n        val previousCompare = this@thenBy.compare(a, b)\n        if (previousCompare != 0) previousCompare else
compareValuesBy(a, b, selector)\n    }\n\n/**\n * Creates a comparator comparing values after the primary
comparator defined them equal. It uses\n *\n * the [selector] function to transform values and then compares them with
the given [comparator].\n *\n *\n * @sample samples.comparisons.Comparisons.thenByWithComparator\n
*\n@kotlin.internal.InlineOnly\npublic inline fun <T, K> Comparator<T>.thenBy(comparator: Comparator<in K>,
crossinline selector: (T) -> K): Comparator<T> =\n    Comparator { a, b ->\n        val previousCompare =
this@thenBy.compare(a, b)\n        if (previousCompare != 0) previousCompare else compareValuesBy(a, b,
comparator, selector)\n    }\n\n/**\n * Creates a descending comparator using the primary comparator and\n *\n * the
function to transform value to a [Comparable] instance for comparison.\n *\n *\n * @sample

```

```

samples.comparisons.Comparisons.thenByDescending\n *\n@kotlin.internal.InlineOnly\npublic inline fun <T>
Comparator<T>.thenByDescending(crossinline selector: (T) -> Comparable<*>?): Comparator<T> =\n
Comparator { a, b ->\n    val previousCompare = this@thenByDescending.compare(a, b)\n    if
(previousCompare != 0) previousCompare else compareValuesBy(b, a, selector)\n    }\n\n/**\n * Creates a
descending comparator comparing values after the primary comparator defined them equal. It uses\n * the [selector]
function to transform values and then compares them with the given [comparator].\n *\n * @sample
samples.comparisons.Comparisons.thenByDescendingWithComparator\n *\n@kotlin.internal.InlineOnly\npublic
inline fun <T, K> Comparator<T>.thenByDescending(comparator: Comparator<in K>, crossinline selector: (T) ->
K): Comparator<T> =\n    Comparator { a, b ->\n        val previousCompare = this@thenByDescending.compare(a,
b)\n        if (previousCompare != 0) previousCompare else compareValuesBy(b, a, comparator, selector)\n
    }\n\n\n/**\n * Creates a comparator using the primary comparator and function to calculate a result of comparison.\n
*\n * @sample samples.comparisons.Comparisons.thenComparator\n *\n@kotlin.internal.InlineOnly\npublic inline
fun <T> Comparator<T>.thenComparator(crossinline comparison: (a: T, b: T) -> Int): Comparator<T> =\n
Comparator { a, b ->\n    val previousCompare = this@thenComparator.compare(a, b)\n    if (previousCompare
!= 0) previousCompare else comparison(a, b)\n    }\n\n\n/**\n * Combines this comparator and the given [comparator]
such that the latter is applied only\n * when the former considered values equal.\n *\n * @sample
samples.comparisons.Comparisons.then\n *\npublic infix fun <T> Comparator<T>.then(comparator:
Comparator<in T>): Comparator<T> =\n    Comparator { a, b ->\n        val previousCompare =
this@then.compare(a, b)\n        if (previousCompare != 0) previousCompare else comparator.compare(a, b)\n
    }\n\n\n/**\n * Combines this comparator and the given [comparator] such that the latter is applied only\n * when the
former considered values equal.\n *\n * @sample samples.comparisons.Comparisons.thenDescending\n *\npublic
infix fun <T> Comparator<T>.thenDescending(comparator: Comparator<in T>): Comparator<T> =\n
Comparator<T> { a, b ->\n    val previousCompare = this@thenDescending.compare(a, b)\n    if
(previousCompare != 0) previousCompare else comparator.compare(b, a)\n    }\n\n\n// Not so useful without type
inference for receiver of expression\n\n/**\n * Extends the given [comparator] of non-nullable values to a comparator
of nullable values\n * considering `null` value less than any other value.\n *\n * @sample
samples.comparisons.Comparisons.nullsFirstLastWithComparator\n *\npublic fun <T : Any>
nullsFirst(comparator: Comparator<in T>): Comparator<T?> =\n    Comparator { a, b ->\n        when {\n            a
=== b -> 0\n            a == null -> -1\n            b == null -> 1\n            else -> comparator.compare(a, b)\n        }\n
    }\n\n\n/**\n * Provides a comparator of nullable [Comparable] values\n * considering `null` value less than any other
value.\n *\n * @sample samples.comparisons.Comparisons.nullsFirstLastComparator\n
*\n@kotlin.internal.InlineOnly\npublic inline fun <T : Comparable<T>> nullsFirst(): Comparator<T?> =
nullsFirst(naturalOrder())\n\n\n/**\n * Extends the given [comparator] of non-nullable values to a comparator of
nullable values\n * considering `null` value greater than any other value.\n *\n * @sample
samples.comparisons.Comparisons.nullsFirstLastWithComparator\n *\npublic fun <T : Any>
nullsLast(comparator: Comparator<in T>): Comparator<T?> =\n    Comparator { a, b ->\n        when {\n            a
=== b -> 0\n            a == null -> 1\n            b == null -> -1\n            else -> comparator.compare(a, b)\n        }\n
    }\n\n\n/**\n * Provides a comparator of nullable [Comparable] values\n * considering `null` value greater than any
other value.\n *\n * @sample samples.comparisons.Comparisons.nullsFirstLastComparator\n
*\n@kotlin.internal.InlineOnly\npublic inline fun <T : Comparable<T>> nullsLast(): Comparator<T?> =
nullsLast(naturalOrder())\n\n\n/**\n * Returns a comparator that compares [Comparable] objects in natural order.\n
*\n * @sample samples.comparisons.Comparisons.naturalOrderComparator\n *\npublic fun <T : Comparable<T>>
naturalOrder(): Comparator<T> = @Suppress("UNCHECKED_CAST") (NaturalOrderComparator as
Comparator<T>)\n\n\n/**\n * Returns a comparator that compares [Comparable] objects in reversed natural order.\n
*\n * @sample samples.comparisons.Comparisons.nullsFirstLastWithComparator\n *\npublic fun <T :
Comparable<T>> reverseOrder(): Comparator<T> = @Suppress("UNCHECKED_CAST")
(ReverseOrderComparator as Comparator<T>)\n\n\n/**\n * Returns a comparator that imposes the reverse ordering
of this comparator.\n *\n * @sample samples.comparisons.Comparisons.reversed\n

```

```

*\n@Suppress("EXTENSION_SHADOWED_BY_MEMBER")\npublic fun <T> Comparator<T>.reversed():
Comparator<T> = when (this) { \n  is ReversedComparator -> this.comparator\n  NaturalOrderComparator ->
@Suppress("UNCHECKED_CAST") (ReverseOrderComparator as Comparator<T>)\n
ReverseOrderComparator -> @Suppress("UNCHECKED_CAST") (NaturalOrderComparator as
Comparator<T>)\n  else -> ReversedComparator(this)\n}\n\nprivate class ReversedComparator<T>(public val
comparator: Comparator<T>) : Comparator<T> { \n  override fun compare(a: T, b: T): Int = comparator.compare(b,
a)\n  @Suppress("VIRTUAL_MEMBER_HIDDEN")\n  fun reversed(): Comparator<T> =
comparator\n}\n\nprivate object NaturalOrderComparator : Comparator<Comparable<Any>> { \n  override fun
compare(a: Comparable<Any>, b: Comparable<Any>): Int = a.compareTo(b)\n
@Suppress("VIRTUAL_MEMBER_HIDDEN")\n  fun reversed(): Comparator<Comparable<Any>> =
ReverseOrderComparator\n}\n\nprivate object ReverseOrderComparator : Comparator<Comparable<Any>> { \n
override fun compare(a: Comparable<Any>, b: Comparable<Any>): Int = b.compareTo(a)\n
@Suppress("VIRTUAL_MEMBER_HIDDEN")\n  fun reversed(): Comparator<Comparable<Any>> =
NaturalOrderComparator\n}\n\n"/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n
*\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("StandardKt")\npackage kotlin\nimport
kotlin.contracts.*\n\n/**\n * An exception is thrown to indicate that a method body remains to be implemented.\n
*\npublic class NotImplementedError(message: String = "An operation is not implemented.") :
Error(message)\n\n/**\n * Always throws [NotImplementedError] stating that operation is not implemented.\n
*\n\n@kotlin.internal.InlineOnly\npublic inline fun TODO(): Nothing = throw NotImplementedError()\n\n/**\n *
Always throws [NotImplementedError] stating that operation is not implemented.\n * \n * @param reason a string
explaining why the implementation is missing.\n * \n@kotlin.internal.InlineOnly\npublic inline fun TODO(reason:
String): Nothing = throw NotImplementedError("An operation is not implemented: $reason")\n\n\n/**\n * Calls
the specified function [block] and returns its result.\n * \n * For detailed usage information see the documentation for
[scope functions](https://kotlinlang.org/docs/reference/scope-functions.html#run).\n
*\n@kotlin.internal.InlineOnly\npublic inline fun <R> run(block: () -> R): R { \n  contract { \n
callsInPlace(block, InvocationKind.EXACTLY_ONCE)\n  }\n  return block()\n}\n\n/**\n * Calls the specified
function [block] with `this` value as its receiver and returns its result.\n * \n * For detailed usage information see the
documentation for [scope functions](https://kotlinlang.org/docs/reference/scope-functions.html#run).\n
*\n@kotlin.internal.InlineOnly\npublic inline fun <T, R> T.run(block: T.() -> R): R { \n  contract { \n
callsInPlace(block, InvocationKind.EXACTLY_ONCE)\n  }\n  return block()\n}\n\n/**\n * Calls the specified
function [block] with the given [receiver] as its receiver and returns its result.\n * \n * For detailed usage information
see the documentation for [scope functions](https://kotlinlang.org/docs/reference/scope-functions.html#with).\n
*\n@kotlin.internal.InlineOnly\npublic inline fun <T, R> with(receiver: T, block: T.() -> R): R { \n  contract { \n
callsInPlace(block, InvocationKind.EXACTLY_ONCE)\n  }\n  return receiver.block()\n}\n\n/**\n * Calls the
specified function [block] with `this` value as its receiver and returns `this` value.\n * \n * For detailed usage
information see the documentation for [scope functions](https://kotlinlang.org/docs/reference/scope-
functions.html#apply).\n * \n@kotlin.internal.InlineOnly\npublic inline fun <T> T.apply(block: T.() -> Unit): T { \n
contract { \n  callsInPlace(block, InvocationKind.EXACTLY_ONCE)\n  }\n  block()\n  return
this\n}\n\n/**\n * Calls the specified function [block] with `this` value as its argument and returns `this` value.\n * \n
* For detailed usage information see the documentation for [scope
functions](https://kotlinlang.org/docs/reference/scope-functions.html#also).\n
*\n@kotlin.internal.InlineOnly\n@SinceKotlin("1.1")\npublic inline fun <T> T.also(block: (T) -> Unit): T { \n
contract { \n  callsInPlace(block, InvocationKind.EXACTLY_ONCE)\n  }\n  block(this)\n  return
this\n}\n\n/**\n * Calls the specified function [block] with `this` value as its argument and returns its result.\n * \n
* For detailed usage information see the documentation for [scope
functions](https://kotlinlang.org/docs/reference/scope-functions.html#let).\n * \n@kotlin.internal.InlineOnly\npublic

```

```

inline fun <T, R> T.let(block: (T) -> R): R {
    contract {
        callsInPlace(block,
        InvocationKind.EXACTLY_ONCE)
    }
    return block(this)
}

Returns `this` value if it satisfies the
given [predicate] or `null`, if it doesn't.
For detailed usage information see the documentation for [scope
functions](https://kotlinlang.org/docs/reference/scope-functions.html#takeif-and-takeunless).

@kotlin.internal.InlineOnly@SinceKotlin("1.1")
public inline fun <T> T.takeIf(predicate: (T) -> Boolean):
T? {
    contract {
        callsInPlace(predicate, InvocationKind.EXACTLY_ONCE)
    }
    return if
    (predicate(this)) this else null
}

Returns `this` value if it _does not_ satisfy the given [predicate] or
`null`, if it does.
For detailed usage information see the documentation for [scope
functions](https://kotlinlang.org/docs/reference/scope-functions.html#takeif-and-takeunless).

@kotlin.internal.InlineOnly@SinceKotlin("1.1")
public inline fun <T> T.takeUnless(predicate: (T) ->
Boolean): T? {
    contract {
        callsInPlace(predicate, InvocationKind.EXACTLY_ONCE)
    }
    return if
    (!predicate(this)) this else null
}

Executes the given function [action] specified number of [times].
A zero-based index of current iteration is passed as a parameter to [action].
@sample
samples.misc.ControlFlow.repeat

@kotlin.internal.InlineOnly
public inline fun repeat(times: Int, action: (Int)
-> Unit) {
    contract {
        callsInPlace(action)
    }
    for (index in 0 until times) {
        action(index)
    }
}

Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.
Use of
this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.

@package kotlin.comparisons
// NOTE: THIS FILE IS AUTO-GENERATED by the
GenerateStandardLib.kt
// See: https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib
import
kotlin.js.*

Returns the greater of two values.
If values are equal, returns the first one.

@SinceKotlin("1.1")
public actual fun <T : Comparable<T>> maxOf(a: T, b: T): T {
    return if (a >= b) a
    else b
}

Returns the greater of two values.

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public actual inline fun maxOf(a: Byte, b: Byte): Byte {
    return maxOf(a.toInt(), b.toInt()).unsafeCast<Byte>()
}

Returns the greater of two values.

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public actual inline fun maxOf(a: Short, b: Short): Short {
    return maxOf(a.toInt(), b.toInt()).unsafeCast<Short>()
}

Returns the greater of two values.

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public actual inline fun maxOf(a: Int, b: Int): Int {
    return JsMath.max(a, b)
}

Returns the greater of two values.

@SinceKotlin("1.1")
@Suppress("NOTHING_TO_INLINE")
public actual inline fun maxOf(a: Long, b:
Long): Long {
    return if (a >= b) a else b
}

Returns the greater of two values.
If either value
is `NaN`, returns `NaN`.

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public actual inline fun
maxOf(a: Float, b: Float): Float {
    return JsMath.max(a, b)
}

Returns the greater of two values.
If either value
is `NaN`, returns `NaN`.

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public actual
inline fun maxOf(a: Double, b: Double): Double {
    return JsMath.max(a, b)
}

Returns the greater of
three values.
If there are multiple equal maximal values, returns the first of them.

@SinceKotlin("1.1")
public actual fun <T : Comparable<T>> maxOf(a: T, b: T, c: T): T {
    return
maxOf(a, maxOf(b, c))
}

Returns the greater of three values.

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public actual inline fun maxOf(a: Byte, b: Byte, c: Byte):
Byte {
    return JsMath.max(a.toInt(), b.toInt(), c.toInt()).unsafeCast<Byte>()
}

Returns the greater of
three values.

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public actual inline fun maxOf(a: Short, b:
Short, c: Short): Short {
    return JsMath.max(a.toInt(), b.toInt(), c.toInt()).unsafeCast<Short>()
}

Returns the greater of three values.

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public actual inline
fun maxOf(a: Int, b: Int, c: Int): Int {
    return JsMath.max(a, b, c)
}

Returns the greater of three
values.

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public actual inline fun maxOf(a: Long, b: Long,
c: Long): Long {
    return maxOf(a, maxOf(b, c))
}

Returns the greater of three values.
If any
value is `NaN`, returns `NaN`.

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public actual inline fun
maxOf(a: Float, b: Float, c: Float): Float {
    return JsMath.max(a, b, c)
}

Returns the greater of three
values.
If any value
is `NaN`, returns `NaN`.

```

```

*^@SinceKotlin("1.1")@kotlin.internal.InlineOnly\npublic actual inline fun maxOf(a: Double, b: Double, c: Double): Double {\n    return JsMath.max(a, b, c)\n}\n\n/**\n * Returns the greater of the given values.\n * \n * If there are multiple equal maximal values, returns the first of them.\n */^@SinceKotlin("1.4")\npublic actual fun <T : Comparable<T>> maxOf(a: T, vararg other: T): T {\n    var max = a\n    for (e in other) max = maxOf(max, e)\n    return max\n}\n\n/**\n * Returns the greater of the given values.\n */^@SinceKotlin("1.4")\npublic actual fun maxOf(a: Byte, vararg other: Byte): Byte {\n    var max = a\n    for (e in other) max = maxOf(max, e)\n    return max\n}\n\n/**\n * Returns the greater of the given values.\n */^@SinceKotlin("1.4")\npublic actual fun maxOf(a: Short, vararg other: Short): Short {\n    var max = a\n    for (e in other) max = maxOf(max, e)\n    return max\n}\n\n/**\n * Returns the greater of the given values.\n */^@SinceKotlin("1.4")\npublic actual fun maxOf(a: Int, vararg other: Int): Int {\n    var max = a\n    for (e in other) max = maxOf(max, e)\n    return max\n}\n\n/**\n * Returns the greater of the given values.\n */^@SinceKotlin("1.4")\npublic actual fun maxOf(a: Long, vararg other: Long): Long {\n    var max = a\n    for (e in other) max = maxOf(max, e)\n    return max\n}\n\n/**\n * Returns the greater of the given values.\n * \n * If any value is `NaN`, returns `NaN`.\n */^@SinceKotlin("1.4")\npublic actual fun maxOf(a: Float, vararg other: Float): Float {\n    var max = a\n    for (e in other) max = maxOf(max, e)\n    return max\n}\n\n/**\n * Returns the greater of the given values.\n * \n * If any value is `NaN`, returns `NaN`.\n */^@SinceKotlin("1.4")\npublic actual fun maxOf(a: Double, vararg other: Double): Double {\n    var max = a\n    for (e in other) max = maxOf(max, e)\n    return max\n}\n\n/**\n * Returns the smaller of two values.\n * \n * If values are equal, returns the first one.\n */^@SinceKotlin("1.1")\npublic actual fun <T : Comparable<T>> minOf(a: T, b: T): T {\n    return if (a <= b) a else b\n}\n\n/**\n * Returns the smaller of two values.\n */^@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun minOf(a: Byte, b: Byte): Byte {\n    return minOf(a.toInt(), b.toInt()).unsafeCast<Byte>()\n}\n\n/**\n * Returns the smaller of two values.\n */^@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun minOf(a: Short, b: Short): Short {\n    return minOf(a.toInt(), b.toInt()).unsafeCast<Short>()\n}\n\n/**\n * Returns the smaller of two values.\n */^@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun minOf(a: Int, b: Int): Int {\n    return JsMath.min(a, b)\n}\n\n/**\n * Returns the smaller of two values.\n */^@SinceKotlin("1.1")\n@Suppress("NOTHING_TO_INLINE")\npublic actual inline fun minOf(a: Long, b: Long): Long {\n    return if (a <= b) a else b\n}\n\n/**\n * Returns the smaller of two values.\n * \n * If either value is `NaN`, returns `NaN`.\n */^@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun minOf(a: Float, b: Float): Float {\n    return JsMath.min(a, b)\n}\n\n/**\n * Returns the smaller of two values.\n * \n * If either value is `NaN`, returns `NaN`.\n */^@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun minOf(a: Double, b: Double): Double {\n    return JsMath.min(a, b)\n}\n\n/**\n * Returns the smaller of three values.\n * \n * If there are multiple equal minimal values, returns the first of them.\n */^@SinceKotlin("1.1")\npublic actual fun <T : Comparable<T>> minOf(a: T, b: T, c: T): T {\n    return minOf(a, minOf(b, c))\n}\n\n/**\n * Returns the smaller of three values.\n */^@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun minOf(a: Byte, b: Byte, c: Byte): Byte {\n    return JsMath.min(a.toInt(), b.toInt(), c.toInt()).unsafeCast<Byte>()\n}\n\n/**\n * Returns the smaller of three values.\n */^@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun minOf(a: Short, b: Short, c: Short): Short {\n    return JsMath.min(a.toInt(), b.toInt(), c.toInt()).unsafeCast<Short>()\n}\n\n/**\n * Returns the smaller of three values.\n */^@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun minOf(a: Int, b: Int, c: Int): Int {\n    return JsMath.min(a, b, c)\n}\n\n/**\n * Returns the smaller of three values.\n */^@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun minOf(a: Long, b: Long, c: Long): Long {\n    return minOf(a, minOf(b, c))\n}\n\n/**\n * Returns the smaller of three values.\n * \n * If any value is `NaN`, returns `NaN`.\n */^@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun minOf(a: Float, b: Float, c: Float): Float {\n    return JsMath.min(a, b, c)\n}\n\n/**\n * Returns the smaller of three values.\n * \n * If any value is `NaN`, returns `NaN`.\n */^@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic actual inline fun minOf(a: Double, b: Double, c: Double): Double {\n    return JsMath.min(a, b, c)\n}\n\n/**\n * Returns the smaller of the given values.\n * \n * If there are multiple equal minimal values, returns the first of them.\n */^@SinceKotlin("1.4")\npublic actual fun <T

```

```

: Comparable<T>> minOf(a: T, vararg other: T): T {
    var min = a
    for (e in other) min = minOf(min, e)
    return min
}

Returns the smaller of the given values.

@SinceKotlin("1.4")
public actual fun minOf(a: Byte, vararg other: Byte): Byte {
    var min = a
    for (e in other) min = minOf(min, e)
    return min
}

Returns the smaller of the given values.

@SinceKotlin("1.4")
public actual fun minOf(a: Short, vararg other: Short): Short {
    var min = a
    for (e in other) min = minOf(min, e)
    return min
}

Returns the smaller of the given values.

@SinceKotlin("1.4")
public actual fun minOf(a: Int, vararg other: Int): Int {
    var min = a
    for (e in other) min = minOf(min, e)
    return min
}

Returns the smaller of the given values.

@SinceKotlin("1.4")
public actual fun minOf(a: Long, vararg other: Long): Long {
    var min = a
    for (e in other) min = minOf(min, e)
    return min
}

Returns the smaller of the given values.

If any value is `NaN`, returns `NaN`.

@SinceKotlin("1.4")
public actual fun minOf(a: Float, vararg other: Float): Float {
    var min = a
    for (e in other) min = minOf(min, e)
    return min
}

Returns the smaller of the given values.

If any value is `NaN`, returns `NaN`.

@SinceKotlin("1.4")
public actual fun minOf(a: Double, vararg other: Double): Double {
    var min = a
    for (e in other) min = minOf(min, e)
    return min
}

Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.
Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.

// Auto-generated file. DO NOT EDIT!
package kotlin.experimental
import kotlin.jvm.*

@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
@JvmInline
public value class ULong @PublishedApi internal constructor(@PublishedApi internal val data: Long) : Comparable<ULong> {
    companion object {
        /**
         * A constant holding the minimum value an instance of ULong can have.
         */
        public const val MIN_VALUE: ULong = ULong(0)

        /**
         * A constant holding the maximum value an instance of ULong can have.
         */
        public const val MAX_VALUE: ULong = ULong(-1)

        /**
         * The number of bytes used to represent an instance of ULong in a binary form.
         */
        public const val SIZE_BYTES: Int = 8

        /**
         * The number of bits used to represent an instance of ULong in a binary form.
         */
        public const val SIZE_BITS: Int = 64
    }

    /**
     * Compares this value with the specified value for order.
     * Returns zero if this value is equal to the specified other value, a negative number if it's less than other,
     * or a positive number if it's greater than other.
     */
    @kotlin.internal.InlineOnly
    public inline operator fun compareTo(other: UByte): Int = this.compareTo(other.toULong())

    /**
     * Compares this value with the specified value for order.
     * Returns zero if this value is equal to the specified other value, a negative number if it's less than other,
     * or a positive number if it's greater than other.
     */
    @kotlin.internal.InlineOnly
    public inline operator fun compareTo(other: UShort): Int = this.compareTo(other.toULong())

    /**
     * Compares this value with the specified value for order.
     * Returns zero if this value is equal to the specified other value, a negative number if it's less than other,
     * or a positive number if it's greater than other.
     */
    @kotlin.internal.InlineOnly
    public inline operator fun compareTo(other: UInt): Int = this.compareTo(other.toULong())

    /**
     * Compares this value with the specified value for order.
     * Returns zero if this value is equal to the specified other value, a negative number if it's less than other,
     * or a positive number if it's greater than other.
     */
    @kotlin.internal.InlineOnly
    @Suppress("OVERRIDE_BY_INLINE")
    public override inline operator fun compareTo(other: ULong): Int = ulongCompare(this.data, other.data)

    /**
     * Adds the other value to this value.
     */
    @kotlin.internal.InlineOnly
    public inline operator fun plus(other: UByte): ULong = this.plus(other.toULong())

    /**
     * Adds the other value to this value.
     */
    @kotlin.internal.InlineOnly
    public inline operator fun plus(other: UShort): ULong = this.plus(other.toULong())

    /**
     * Adds the other value to this value.
     */
    @kotlin.internal.InlineOnly
    public inline operator fun plus(other: UInt): ULong = this.plus(other.toULong())

    /**
     * Adds the other value to this value.
     */
    @kotlin.internal.InlineOnly
    public inline operator fun plus(other: ULong): ULong = ULong(this.data.plus(other.data))

    /**
     * Subtracts the other value from this value.
     */
    @kotlin.internal.InlineOnly
    public inline operator fun minus(other: UByte): ULong = this.minus(other.toULong())

    /**
     * Subtracts the other value from this value.
     */
    @kotlin.internal.InlineOnly
    public inline operator fun minus(other: UShort): ULong = this.minus(other.toULong())

    /**
     * Subtracts the other

```

```

value from this value. */n @kotlin.internal.InlineOnly\n public inline operator fun minus(other: UInt): ULong =
this.minus(other.toULong())\n /** Subtracts the other value from this value. */n @kotlin.internal.InlineOnly\n
public inline operator fun minus(other: ULong): ULong = ULong(this.data.minus(other.data))\n\n /** Multiplies
this value by the other value. */n @kotlin.internal.InlineOnly\n public inline operator fun times(other: UByte):
ULong = this.times(other.toULong())\n /** Multiplies this value by the other value. */n
@kotlin.internal.InlineOnly\n public inline operator fun times(other: UShort): ULong =
this.times(other.toULong())\n /** Multiplies this value by the other value. */n @kotlin.internal.InlineOnly\n
public inline operator fun times(other: UInt): ULong = this.times(other.toULong())\n /** Multiplies this value by
the other value. */n @kotlin.internal.InlineOnly\n public inline operator fun times(other: ULong): ULong =
ULong(this.data.times(other.data))\n\n /** Divides this value by the other value, truncating the result to an integer
that is closer to zero. */n @kotlin.internal.InlineOnly\n public inline operator fun div(other: UByte): ULong =
this.div(other.toULong())\n /** Divides this value by the other value, truncating the result to an integer that is
closer to zero. */n @kotlin.internal.InlineOnly\n public inline operator fun div(other: UShort): ULong =
this.div(other.toULong())\n /** Divides this value by the other value, truncating the result to an integer that is
closer to zero. */n @kotlin.internal.InlineOnly\n public inline operator fun div(other: UInt): ULong =
this.div(other.toULong())\n /** Divides this value by the other value, truncating the result to an integer that is
closer to zero. */n @kotlin.internal.InlineOnly\n public inline operator fun div(other: ULong): ULong =
ulongDivide(this, other)\n\n /**\n * Calculates the remainder of truncating division of this value by the other
value.\n * \n * The result is always less than the divisor.\n */n @kotlin.internal.InlineOnly\n public
inline operator fun rem(other: UByte): ULong = this.rem(other.toULong())\n /**\n * Calculates the remainder
of truncating division of this value by the other value.\n * \n * The result is always less than the divisor.\n
*/n @kotlin.internal.InlineOnly\n public inline operator fun rem(other: UShort): ULong =
this.rem(other.toULong())\n /**\n * Calculates the remainder of truncating division of this value by the other
value.\n * \n * The result is always less than the divisor.\n */n @kotlin.internal.InlineOnly\n public
inline operator fun rem(other: UInt): ULong = this.rem(other.toULong())\n /**\n * Calculates the remainder of
truncating division of this value by the other value.\n * \n * The result is always less than the divisor.\n
*/n @kotlin.internal.InlineOnly\n public inline operator fun rem(other: ULong): ULong = ulongRemainder(this,
other)\n\n /**\n * Divides this value by the other value, flooring the result to an integer that is closer to negative
infinity.\n * \n * For unsigned types, the results of flooring division and truncating division are the same.\n
*/n @kotlin.internal.InlineOnly\n public inline fun floorDiv(other: UByte): ULong =
this.floorDiv(other.toULong())\n /**\n * Divides this value by the other value, flooring the result to an integer
that is closer to negative infinity.\n * \n * For unsigned types, the results of flooring division and truncating
division are the same.\n */n @kotlin.internal.InlineOnly\n public inline fun floorDiv(other: UShort): ULong
= this.floorDiv(other.toULong())\n /**\n * Divides this value by the other value, flooring the result to an integer
that is closer to negative infinity.\n * \n * For unsigned types, the results of flooring division and truncating
division are the same.\n */n @kotlin.internal.InlineOnly\n public inline fun floorDiv(other: UInt): ULong =
this.floorDiv(other.toULong())\n /**\n * Divides this value by the other value, flooring the result to an integer
that is closer to negative infinity.\n * \n * For unsigned types, the results of flooring division and truncating
division are the same.\n */n @kotlin.internal.InlineOnly\n public inline fun floorDiv(other: ULong): ULong =
div(other)\n\n /**\n * Calculates the remainder of flooring division of this value by the other value.\n * \n *
The result is always less than the divisor.\n * \n * For unsigned types, the remainders of flooring division and
truncating division are the same.\n */n @kotlin.internal.InlineOnly\n public inline fun mod(other: UByte):
UByte = this.mod(other.toULong()).toUByte()\n /**\n * Calculates the remainder of flooring division of this
value by the other value.\n * \n * The result is always less than the divisor.\n * \n * For unsigned types, the
remainders of flooring division and truncating division are the same.\n */n @kotlin.internal.InlineOnly\n
public inline fun mod(other: UShort): UShort = this.mod(other.toULong()).toUShort()\n /**\n * Calculates the
remainder of flooring division of this value by the other value.\n * \n * The result is always less than the
divisor.\n * \n * For unsigned types, the remainders of flooring division and truncating division are the same.\n

```

```

*^n @kotlin.internal.InlineOnly^n public inline fun mod(other: UInt): UInt =
this.mod(other.toULong()).toUInt()\n /**\n * Calculates the remainder of flooring division of this value by the
other value.\n * ^n * The result is always less than the divisor.\n * ^n * For unsigned types, the remainders
of flooring division and truncating division are the same.\n *^n @kotlin.internal.InlineOnly^n public inline
fun mod(other: ULong): ULong = rem(other)\n /**\n * Returns this value incremented by one.\n * ^n *
@sample samples.misc.Builtins.inc\n *^n @kotlin.internal.InlineOnly^n public inline operator fun inc():
ULong = ULong(data.inc())\n /**\n * Returns this value decremented by one.\n * ^n * @sample
samples.misc.Builtins.dec\n *^n @kotlin.internal.InlineOnly^n public inline operator fun dec(): ULong =
ULong(data.dec())\n /**\n * Creates a range from this value to the specified [other] value. *\n
@kotlin.internal.InlineOnly^n public inline operator fun rangeTo(other: ULong): ULongRange =
ULongRange(this, other)\n /**\n * Shifts this value left by the [bitCount] number of bits.\n * ^n * Note
that only the six lowest-order bits of the [bitCount] are used as the shift distance.\n * The shift distance actually
used is therefore always in the range `0..63`.\n *^n @kotlin.internal.InlineOnly^n public inline infix fun
shl(bitCount: Int): ULong = ULong(data shl bitCount)\n /**\n * Shifts this value right by the [bitCount]
number of bits, filling the leftmost bits with zeros.\n * ^n * Note that only the six lowest-order bits of the
[bitCount] are used as the shift distance.\n * The shift distance actually used is therefore always in the range
`0..63`.\n *^n @kotlin.internal.InlineOnly^n public inline infix fun shr(bitCount: Int): ULong = ULong(data
ushr bitCount)\n /**\n * Performs a bitwise AND operation between the two values. *\n
@kotlin.internal.InlineOnly^n public inline infix fun and(other: ULong): ULong = ULong(this.data and
other.data)\n /**\n * Performs a bitwise OR operation between the two values. *\n
@kotlin.internal.InlineOnly^n public inline infix fun or(other: ULong): ULong = ULong(this.data or other.data)\n /**\n * Performs a bitwise XOR
operation between the two values. *\n
@kotlin.internal.InlineOnly^n public inline infix fun xor(other: ULong):
ULong = ULong(this.data xor other.data)\n /**\n * Inverts the bits in this value. *\n
@kotlin.internal.InlineOnly^n public inline fun inv(): ULong = ULong(data.inv())\n /**\n * Converts this [ULong] value to [Byte].\n * ^n
* If this value is less than or equals to [Byte.MAX_VALUE], the resulting `Byte` value represents\n * the same
numerical value as this `ULong`.\n * ^n * The resulting `Byte` value is represented by the least significant 8 bits
of this `ULong` value.\n * Note that the resulting `Byte` value may be negative.\n * ^n
@kotlin.internal.InlineOnly^n public inline fun toByte(): Byte = data.toByte()\n /**\n * Converts this [ULong]
value to [Short].\n * ^n * If this value is less than or equals to [Short.MAX_VALUE], the resulting `Short` value
represents\n * the same numerical value as this `ULong`.\n * ^n * The resulting `Short` value is represented
by the least significant 16 bits of this `ULong` value.\n * Note that the resulting `Short` value may be negative.\n
* ^n
@kotlin.internal.InlineOnly^n public inline fun toShort(): Short = data.toShort()\n /**\n * Converts this
[ULong] value to [Int].\n * ^n * If this value is less than or equals to [Int.MAX_VALUE], the resulting `Int`
value represents\n * the same numerical value as this `ULong`.\n * ^n * The resulting `Int` value is
represented by the least significant 32 bits of this `ULong` value.\n * Note that the resulting `Int` value may be
negative.\n * ^n
@kotlin.internal.InlineOnly^n public inline fun toInt(): Int = data.toInt()\n /**\n *
Converts this [ULong] value to [Long].\n * ^n * If this value is less than or equals to [Long.MAX_VALUE], the
resulting `Long` value represents\n * the same numerical value as this `ULong`. Otherwise the result is
negative.\n * ^n * The resulting `Long` value has the same binary representation as this `ULong` value.\n * ^n
@kotlin.internal.InlineOnly^n public inline fun toLong(): Long = data\n /**\n * Converts this [ULong]
value to [UByte].\n * ^n * If this value is less than or equals to [UByte.MAX_VALUE], the resulting `UByte`
value represents\n * the same numerical value as this `ULong`.\n * ^n * The resulting `UByte` value is
represented by the least significant 8 bits of this `ULong` value.\n * ^n
@kotlin.internal.InlineOnly^n public inline fun toUByte(): UByte = data.toUByte()\n /**\n * Converts this [ULong] value to [UShort].\n * ^n * If
this value is less than or equals to [UShort.MAX_VALUE], the resulting `UShort` value represents\n * the same
numerical value as this `ULong`.\n * ^n * The resulting `UShort` value is represented by the least significant 16
bits of this `ULong` value.\n * ^n
@kotlin.internal.InlineOnly^n public inline fun toUShort(): UShort =
data.toUShort()\n /**\n * Converts this [ULong] value to [UInt].\n * ^n * If this value is less than or equals

```



```

to [UInt.MAX_VALUE], the resulting `UInt` value represents
 * the same numerical value as this `ULong`.
 *
 * The resulting `UInt` value is represented by the least significant 32 bits of this `ULong` value.
 *
@kotlin.internal.InlineOnly
 public inline fun toUInt(): UInt = data.toUInt()
 /** Returns this value. */
@kotlin.internal.InlineOnly
 public inline fun toULong(): ULong = this
 /**
 * Converts this [ULong]
 value to [Float].
 *
 * The resulting value is the closest `Float` to this `ULong` value.
 * In case when this
 `ULong` value is exactly between two `Float`s,
 * the one with zero at least significant bit of mantissa is
 selected.
 */
@kotlin.internal.InlineOnly
 public inline fun toFloat(): Float = this.toDouble().toFloat()
 /**
 * Converts this [ULong] value to [Double].
 *
 * The resulting value is the closest `Double` to this
 `ULong` value.
 * In case when this `ULong` value is exactly between two `Double`s,
 * the one with zero at
 least significant bit of mantissa is selected.
 */
@kotlin.internal.InlineOnly
 public inline fun toDouble():
 Double = ulongToDouble(data)
 public override fun toString(): String = ulongToString(data)
}
 *
 * Converts this [Byte] value to [ULong].
 *
 * If this value is positive, the resulting `ULong` value represents the
 same numerical value as this `Byte`.
 *
 * The least significant 8 bits of the resulting `ULong` value are the same
 as the bits of this `Byte` value,
 * whereas the most significant 56 bits are filled with the sign bit of this value.
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
@kotlin.internal.InlineOnly
 public inline fun Byte.toULong(): ULong = ULong(this.toLong())
 /**
 * Converts this [Short] value to
 [ULong].
 *
 * If this value is positive, the resulting `ULong` value represents the same numerical value as this
 `Short`.
 *
 * The least significant 16 bits of the resulting `ULong` value are the same as the bits of this `Short`
 value,
 * whereas the most significant 48 bits are filled with the sign bit of this value.
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
@kotlin.internal.InlineOnly
 public inline fun Short.toULong(): ULong = ULong(this.toLong())
 /**
 * Converts this [Int] value to [ULong].
 *
 * If this value is positive, the resulting `ULong` value represents the same numerical value as this `Int`.
 *
 * The least significant 32 bits of the resulting `ULong` value are the same as the bits of this `Int` value,
 * whereas
 the most significant 32 bits are filled with the sign bit of this value.
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
@kotlin.internal.InlineOnly
 public inline fun Int.toULong(): ULong = ULong(this.toLong())
 /**
 * Converts this [Long] value to [ULong].
 *
 * If this value is positive, the resulting `ULong` value represents the same numerical value as this `Long`.
 *
 * The resulting `ULong` value has the same binary representation as this `Long` value.
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
@kotlin.internal.InlineOnly
 public inline fun Long.toULong(): ULong = ULong(this)
 /**
 * Converts this [Float] value to [ULong].
 *
 * The fractional part, if any, is rounded down towards zero.
 * Returns zero if this `Float` value is negative or `NaN`,
 [ULong.MAX_VALUE] if it's bigger than `ULong.MAX_VALUE`.
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
@kotlin.internal.InlineOnly
 public inline fun Float.toULong(): ULong = doubleToULong(this.toDouble())
 /**
 * Converts this [Double]
 value to [ULong].
 *
 * The fractional part, if any, is rounded down towards zero.
 * Returns zero if this
 `Double` value is negative or `NaN`, [ULong.MAX_VALUE] if it's bigger than `ULong.MAX_VALUE`.
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
@kotlin.internal.InlineOnly
 public inline fun Double.toULong(): ULong = doubleToULong(this)
}
 *
 * Copyright 2010-2021 JetBrains
 s.r.o. and Kotlin Programming Language contributors.
 * Use of this source code is governed by the Apache 2.0
 license that can be found in the license/LICENSE.txt file.
}
}
@file:kotlin.jvm.JvmMultifileClass
@file:kotlin.jvm.JvmName("CollectionsKt")
package
kotlin.collections
// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt
// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib
//
import kotlin.random.*
import
kotlin.ranges.contains
import kotlin.ranges.reversed
 *
 * Returns 1st *element* from the list.
 *
 * Throws an [IndexOutOfBoundsException] if the size of this list is less than 1.
 */
@kotlin.internal.InlineOnly
 public inline operator fun <T> List<T>.component1(): T {
 return
 get(0)
}
 *
 * Returns 2nd *element* from the list.
 *
 * Throws an [IndexOutOfBoundsException] if the
 size of this list is less than 2.
 */
@kotlin.internal.InlineOnly
 public inline operator fun <T>

```

```

List<T>.component2(): T { \n  return get(1)\n}\n\n/** \n * Returns 3rd *element* from the list.\n * \n * Throws an
[IndexOutOfBoundsExcpion] if the size of this list is less than 3.\n */\n@kotlin.internal.InlineOnly\npublic inline
operator fun <T> List<T>.component3(): T { \n  return get(2)\n}\n\n/** \n * Returns 4th *element* from the list.\n
* \n * Throws an [IndexOutOfBoundsExcpion] if the size of this list is less than 4.\n
*/\n@kotlin.internal.InlineOnly\npublic inline operator fun <T> List<T>.component4(): T { \n  return
get(3)\n}\n\n/** \n * Returns 5th *element* from the list.\n * \n * Throws an [IndexOutOfBoundsExcpion] if the
size of this list is less than 5.\n */\n@kotlin.internal.InlineOnly\npublic inline operator fun <T>
List<T>.component5(): T { \n  return get(4)\n}\n\n/** \n * Returns `true` if [element] is found in the collection.\n
*/\npublic operator fun <@kotlin.internal.OnlyInputTypes T> Iterable<T>.contains(element: T): Boolean { \n  if
(this is Collection)\n    return contains(element)\n    return indexOf(element) >= 0\n}\n\n/** \n * Returns an
element at the given [index] or throws an [IndexOutOfBoundsExcpion] if the [index] is out of bounds of this
collection.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n */\npublic fun <T>
Iterable<T>.elementAt(index: Int): T { \n  if (this is List)\n    return get(index)\n    return
elementAtOrElse(index) { throw IndexOutOfBoundsExcpion("\Collection doesn't contain element at index
$index.\n") } }\n\n/** \n * Returns an element at the given [index] or throws an [IndexOutOfBoundsExcpion] if
the [index] is out of bounds of this list.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n
*/\n@kotlin.internal.InlineOnly\npublic inline fun <T> List<T>.elementAt(index: Int): T { \n  return
get(index)\n}\n\n/** \n * Returns an element at the given [index] or the result of calling the [defaultValue] function
if the [index] is out of bounds of this collection.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n */\npublic fun <T>
Iterable<T>.elementAtOrElse(index: Int, defaultValue: (Int) -> T): T { \n  if (this is List)\n    return
this.getOrElse(index, defaultValue)\n    if (index < 0)\n      return defaultValue(index)\n    val iterator = iterator()\n
    var count = 0\n    while (iterator.hasNext()) { \n      val element = iterator.next()\n      if (index == count++)\n
      return element\n    }\n    return defaultValue(index)\n}\n\n/** \n * Returns an element at the given [index] or
the result of calling the [defaultValue] function if the [index] is out of bounds of this list.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n */\n@kotlin.internal.InlineOnly\npublic inline fun
<T> List<T>.elementAtOrElse(index: Int, defaultValue: (Int) -> T): T { \n  return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n\n/** \n * Returns an element at the given [index] or `null` if the
[index] is out of bounds of this collection.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrNull\n */\npublic fun <T>
Iterable<T>.elementAtOrNull(index: Int): T? { \n  if (this is List)\n    return this.getOrNull(index)\n    if (index <
0)\n      return null\n    val iterator = iterator()\n    var count = 0\n    while (iterator.hasNext()) { \n      val element =
iterator.next()\n      if (index == count++)\n        return element\n    }\n    return null\n}\n\n/** \n * Returns an
element at the given [index] or `null` if the [index] is out of bounds of this list.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrNull\n */\n@kotlin.internal.InlineOnly\npublic inline fun
<T> List<T>.elementAtOrNull(index: Int): T? { \n  return this.getOrNull(index)\n}\n\n/** \n * Returns the first
element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n */\n@kotlin.internal.InlineOnly\npublic inline fun <T>
Iterable<T>.find(predicate: (T) -> Boolean): T? { \n  return firstOrNull(predicate)\n}\n\n/** \n * Returns the last
element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n */\n@kotlin.internal.InlineOnly\npublic inline fun <T>
Iterable<T>.findLast(predicate: (T) -> Boolean): T? { \n  return lastOrNull(predicate)\n}\n\n/** \n * Returns the last
element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n */\n@kotlin.internal.InlineOnly\npublic inline fun <T>
List<T>.findLast(predicate: (T) -> Boolean): T? { \n  return lastOrNull(predicate)\n}\n\n/** \n * Returns first
element.\n * @throws [NoSuchElementException] if the collection is empty.\n */\npublic fun <T>
Iterable<T>.first(): T { \n  when (this) { \n    is List -> return this.first()\n    else -> { \n      val iterator =
iterator()\n      if (!iterator.hasNext())\n        throw NoSuchElementException("\Collection is empty.\n")\n    }
}

```

```

return iterator.next()\n    }\n }\n}\n\n/**\n * Returns first element.\n * @throws [NoSuchElementException]
if the list is empty.\n */\npublic fun <T> List<T>.first(): T {\n    if (isEmpty())\n        throw
NoSuchElementException("List is empty.")\n    return this[0]\n}\n\n/**\n * Returns the first element matching the
given [predicate].\n * @throws [NoSuchElementException] if no such element is found.\n */\npublic inline fun <T>
Iterable<T>.first(predicate: (T) -> Boolean): T {\n    for (element in this) if (predicate(element)) return element\n
throw NoSuchElementException("Collection contains no element matching the predicate.")\n}\n\n/**\n * Returns
the first non-null value produced by [transform] function being applied to elements of this collection in iteration
order,\n * or throws [NoSuchElementException] if no non-null value was produced.\n * \n * @sample
samples.collections.Collections.Transformations.firstNotNullOf\n
*/\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Any>
Iterable<T>.firstNotNullOf(transform: (T) -> R?): R {\n    return firstNotNullOfOrNull(transform) ?: throw
NoSuchElementException("No element of the collection was transformed to a non-null value.")\n}\n\n/**\n * Returns
the first non-null value produced by [transform] function being applied to elements of this collection in
iteration order,\n * or `null` if no non-null value was produced.\n * \n * @sample
samples.collections.Collections.Transformations.firstNotNullOf\n
*/\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Any>
Iterable<T>.firstNotNullOfOrNull(transform: (T) -> R?): R? {\n    for (element in this) {\n        val result =
transform(element)\n        if (result != null) {\n            return result\n        }\n    }\n    return null\n}\n\n/**\n * Returns the first element, or `null` if the collection is empty.\n */\npublic fun <T> Iterable<T>.firstOrNull(): T? {\n
when (this) {\n    is List -> {\n        if (isEmpty())\n            return null\n        else\n            return this[0]\n    }\n    else -> {\n        val iterator = iterator()\n        if (!iterator.hasNext())\n            return null\n        return iterator.next()\n    }\n }\n}\n\n/**\n * Returns the first element, or `null` if the list is empty.\n */\npublic
fun <T> List<T>.firstOrNull(): T? {\n    return if (isEmpty()) null else this[0]\n}\n\n/**\n * Returns the first element
matching the given [predicate], or `null` if element was not found.\n */\npublic inline fun <T>
Iterable<T>.firstOrNull(predicate: (T) -> Boolean): T? {\n    for (element in this) if (predicate(element)) return
element\n    return null\n}\n\n/**\n * Returns an element at the given [index] or the result of calling the
[defaultValue] function if the [index] is out of bounds of this list.\n */\n@kotlin.internal.InlineOnly\npublic inline
fun <T> List<T>.getOrNull(index: Int, defaultValue: (Int) -> T): T {\n    return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or `null` if the
[index] is out of bounds of this list.\n * \n * @sample samples.collections.Collections.Elements.getOrNull\n
*/\npublic fun <T> List<T>.getOrNull(index: Int): T? {\n    return if (index >= 0 && index <= lastIndex) get(index)
else null\n}\n\n/**\n * Returns first index of [element], or -1 if the collection does not contain element.\n */\npublic
fun <@kotlin.internal.OnlyInputTypes T> Iterable<T>.indexOf(element: T): Int {\n    if (this is List) return
this.indexOf(element)\n    var index = 0\n    for (item in this) {\n        checkIndexOverflow(index)\n        if (element
== item)\n            return index\n            index++\n    }\n    return -1\n}\n\n/**\n * Returns first index of [element], or -1
if the list does not contain element.\n */\n@Suppress("EXTENSION_SHADOWED_BY_MEMBER") // false
warning, extension takes precedence in some cases\npublic fun <@kotlin.internal.OnlyInputTypes T>
List<T>.indexOf(element: T): Int {\n    return indexOf(element)\n}\n\n/**\n * Returns index of the first element
matching the given [predicate], or -1 if the collection does not contain such element.\n */\npublic inline fun <T>
Iterable<T>.indexOfFirst(predicate: (T) -> Boolean): Int {\n    var index = 0\n    for (item in this) {\n
checkIndexOverflow(index)\n        if (predicate(item))\n            return index\n            index++\n    }\n    return -
1\n}\n\n/**\n * Returns index of the first element matching the given [predicate], or -1 if the list does not contain
such element.\n */\npublic inline fun <T> List<T>.indexOfFirst(predicate: (T) -> Boolean): Int {\n    var index = 0\n
for (item in this) {\n    if (predicate(item))\n        return index\n        index++\n    }\n    return -1\n}\n\n/**\n * Returns index of the last element matching the given [predicate], or -1 if the collection does not contain such
element.\n */\npublic inline fun <T> Iterable<T>.indexOfLast(predicate: (T) -> Boolean): Int {\n    var lastIndex = -
1\n    var index = 0\n    for (item in this) {\n        checkIndexOverflow(index)\n        if (predicate(item))\n
lastIndex = index\n        index++\n    }\n    return lastIndex\n}\n\n/**\n * Returns index of the last element matching

```

```

the given [predicate], or -1 if the list does not contain such element.\n *^public inline fun <T>
List<T>.indexOfLast(predicate: (T) -> Boolean): Int {\n  val iterator = this.listIterator(size)\n  while
(iterator.hasPrevious()) {\n    if (predicate(iterator.previous())) {\n      return iterator.nextIndex()\n    }\n  }\n  return -1\n}\n\n/**\n * Returns the last element.\n * \n * @throws NoSuchElementException if the collection
is empty.\n * \n * @sample samples.collections.Collections.Elements.last\n *^public fun <T> Iterable<T>.last(): T
{\n  when (this) {\n    is List -> return this.last()\n    else -> {\n      val iterator = iterator()\n      if
(!iterator.hasNext())\n        throw NoSuchElementException("Collection is empty.")\n      var last =
iterator.next()\n      while (iterator.hasNext())\n        last = iterator.next()\n      return last\n    }\n  }\n}\n\n/**\n * Returns the last element.\n * \n * @throws NoSuchElementException if the list is empty.\n * \n *
@sample samples.collections.Collections.Elements.last\n *^public fun <T> List<T>.last(): T {\n  if (isEmpty())\n    throw NoSuchElementException("List is empty.")\n  return this[lastIndex]}\n}\n\n/**\n * Returns the last
element matching the given [predicate].\n * \n * @throws NoSuchElementException if no such element is found.\n * \n *
@sample samples.collections.Collections.Elements.last\n *^public inline fun <T>
Iterable<T>.last(predicate: (T) -> Boolean): T {\n  var last: T? = null\n  var found = false\n  for (element in this)
{\n    if (predicate(element)) {\n      last = element\n      found = true\n    }\n  }\n  if (!found) throw
NoSuchElementException("Collection contains no element matching the predicate.")\n  @Suppress("UNCHECKED_CAST")\n  return last as T\n}\n\n/**\n * Returns the last element matching the
given [predicate].\n * \n * @throws NoSuchElementException if no such element is found.\n * \n * @sample
samples.collections.Collections.Elements.last\n *^public inline fun <T> List<T>.last(predicate: (T) -> Boolean): T
{\n  val iterator = this.listIterator(size)\n  while (iterator.hasPrevious()) {\n    val element = iterator.previous()\n
    if (predicate(element)) return element\n  }\n  throw NoSuchElementException("List contains no element
matching the predicate.")\n}\n\n/**\n * Returns last index of [element], or -1 if the collection does not contain
element.\n *^public fun <@kotlin.internal.OnlyInputTypes T> Iterable<T>.lastIndexOf(element: T): Int {\n  if
(this is List) return this.lastIndexOf(element)\n  var lastIndex = -1\n  var index = 0\n  for (item in this) {\n
checkIndexOverflow(index)\n    if (element == item)\n      lastIndex = index\n      index++\n  }\n  return
lastIndex\n}\n\n/**\n * Returns last index of [element], or -1 if the list does not contain element.\n *^@Suppress("EXTENSION_SHADOWED_BY_MEMBER") // false warning, extension takes precedence in
some cases\npublic fun <@kotlin.internal.OnlyInputTypes T> List<T>.lastIndexOf(element: T): Int {\n  return
lastIndexOf(element)\n}\n\n/**\n * Returns the last element, or `null` if the collection is empty.\n * \n * @sample
samples.collections.Collections.Elements.last\n *^public fun <T> Iterable<T>.lastOrNull(): T? {\n  when (this)
{\n    is List -> return if (isEmpty()) null else this[size - 1]\n    else -> {\n      val iterator = iterator()\n
if (!iterator.hasNext())\n        return null\n      var last = iterator.next()\n      while (iterator.hasNext())\n
        last = iterator.next()\n      return last\n    }\n  }\n}\n\n/**\n * Returns the last element, or `null` if the
list is empty.\n * \n * @sample samples.collections.Collections.Elements.last\n *^public fun <T>
List<T>.lastOrNull(): T? {\n  return if (isEmpty()) null else this[size - 1]}\n}\n\n/**\n * Returns the last element
matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.last\n *^public inline fun <T> Iterable<T>.lastOrNull(predicate: (T) ->
Boolean): T? {\n  var last: T? = null\n  for (element in this) {\n    if (predicate(element)) {\n      last =
element\n    }\n  }\n  return last\n}\n\n/**\n * Returns the last element matching the given [predicate], or `null`
if no such element was found.\n * \n * @sample samples.collections.Collections.Elements.last\n *^public inline
fun <T> List<T>.lastOrNull(predicate: (T) -> Boolean): T? {\n  val iterator = this.listIterator(size)\n  while
(iterator.hasPrevious()) {\n    val element = iterator.previous()\n    if (predicate(element)) return element\n  }\n
return null\n}\n\n/**\n * Returns a random element from this collection.\n * \n * @throws
NoSuchElementException if this collection is empty.\n *^@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun <T> Collection<T>.random(): T {\n  return random(Random)\n}\n\n/**\n * Returns a random element from this collection using the specified source of
randomness.\n * \n * @throws NoSuchElementException if this collection is empty.\n *^@SinceKotlin("1.3")\npublic fun <T> Collection<T>.random(random: Random): T {\n  if (isEmpty())\n
```

```

throw NoSuchElementException("Collection is empty.")\n    return elementAt(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this collection, or `null` if this collection is empty.\n */\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun <T> Collection<T>.randomOrNull(): T? {\n    return randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this collection using the specified source of randomness, or `null` if this collection is empty.\n */\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun <T> Collection<T>.randomOrNull(random: Random): T? {\n    if (isEmpty())\n        return null\n    return elementAt(random.nextInt(size))\n}\n\n/**\n * Returns the single element, or throws an exception if the collection is empty or has more than one element.\n */\npublic fun <T> Iterable<T>.single(): T {\n    when (this) {\n        is List -> return this.single()\n        else -> {\n            val iterator = iterator()\n            if (!iterator.hasNext())\n                throw NoSuchElementException("Collection is empty.")\n            val single = iterator.next()\n            if (iterator.hasNext())\n                throw IllegalArgumentException("Collection has more than one element.")\n            return single\n        }\n    }\n}\n\n/**\n * Returns the single element, or throws an exception if the list is empty or has more than one element.\n */\npublic fun <T> List<T>.single(): T {\n    return when (size) {\n        0 -> throw NoSuchElementException("List is empty.")\n        1 -> this[0]\n        else -> throw IllegalArgumentException("List has more than one element.")\n    }\n}\n\n/**\n * Returns the single element matching the given [predicate], or throws exception if there is no or more than one matching element.\n */\npublic inline fun <T> Iterable<T>.single(predicate: (T) -> Boolean): T {\n    var single: T? = null\n    var found = false\n    for (element in this) {\n        if (predicate(element)) {\n            if (found) throw IllegalArgumentException("Collection contains more than one matching element.")\n            single = element\n            found = true\n        }\n    }\n    if (!found) throw NoSuchElementException("Collection contains no element matching the predicate.")\n    @Suppress("UNCHECKED_CAST")\n    return single as T\n}\n\n/**\n * Returns single element, or `null` if the collection is empty or has more than one element.\n */\npublic fun <T> Iterable<T>.singleOrNull(): T? {\n    when (this) {\n        is List -> return if (size == 1) this[0] else null\n        else -> {\n            val iterator = iterator()\n            if (!iterator.hasNext())\n                return null\n            val single = iterator.next()\n            if (iterator.hasNext())\n                return null\n            return single\n        }\n    }\n}\n\n/**\n * Returns single element, or `null` if the list is empty or has more than one element.\n */\npublic fun <T> List<T>.singleOrNull(): T? {\n    return if (size == 1) this[0] else null\n}\n\n/**\n * Returns the single element matching the given [predicate], or `null` if element was not found or more than one element was found.\n */\npublic inline fun <T> Iterable<T>.singleOrNull(predicate: (T) -> Boolean): T? {\n    var single: T? = null\n    var found = false\n    for (element in this) {\n        if (predicate(element)) {\n            if (found) return null\n            single = element\n            found = true\n        }\n    }\n    if (!found) return null\n    return single\n}\n\n/**\n * Returns a list containing all elements except first [n] elements.\n * @throws IllegalArgumentException if [n] is negative.\n * @sample samples.collections.Collections.Transformations.drop\n */\npublic fun <T> Iterable<T>.drop(n: Int): List<T> {\n    require(n >= 0) {"Requested element count $n is less than zero."}\n    if (n == 0) return toList()\n    val list: ArrayList<T>\n    if (this is Collection<*>) {\n        val resultSize = size - n\n        if (resultSize <= 0)\n            return emptyList()\n        if (resultSize == 1)\n            return listOf(last())\n        list = ArrayList<T>(resultSize)\n        if (this is List<T>) {\n            if (this is RandomAccess) {\n                for (index in n until size)\n                    list.add(this[index])\n            } else {\n                for (item in listIterator(n))\n                    list.add(item)\n            }\n        }\n        return list\n    }\n    else {\n        list = ArrayList<T>()\n        var count = 0\n        for (item in this) {\n            if (count >= n) list.add(item) else ++count\n        }\n        return list.optimizeReadOnlyList()\n    }\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * @throws IllegalArgumentException if [n] is negative.\n * @sample samples.collections.Collections.Transformations.drop\n */\npublic fun <T> List<T>.dropLast(n: Int): List<T> {\n    require(n >= 0) {"Requested element count $n is less than zero."}\n    return take((size - n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last elements that satisfy the given [predicate].\n * @sample samples.collections.Collections.Transformations.drop\n */\npublic inline fun <T> List<T>.dropLastWhile(predicate: (T) -> Boolean): List<T> {\n    if (!isEmpty()) {\n        val iterator = listIterator(size)\n        while (iterator.hasPrevious()) {\n            if (!predicate(iterator.previous()))\n                return

```

```

take(iterator.nextIndex() + 1)\n        }\n        }\n        }\n        return emptyList()\n}\n\n/**\n * Returns a list containing
all elements except first elements that satisfy the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n * \npublic inline fun <T> Iterable<T>.dropWhile(predicate:
(T) -> Boolean): List<T> {\n    var yielding = false\n    val list = ArrayList<T>()\n    for (item in this)\n        if
(yielding)\n            list.add(item)\n        else if (!predicate(item)) {\n            list.add(item)\n            yielding = true\n
        }\n    return list\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n * \n *
@sample samples.collections.Collections.Filtering.filter\n * \npublic inline fun <T> Iterable<T>.filter(predicate: (T)
-> Boolean): List<T> {\n    return filterTo(ArrayList<T>(), predicate)\n}\n\n/**\n * Returns a list containing only
elements matching the given [predicate].\n * @param [predicate] function that takes the index of an element and the
element itself\n * and returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexed\n * \npublic inline fun <T>
Iterable<T>.filterIndexed(predicate: (index: Int, T) -> Boolean): List<T> {\n    return
filterIndexedTo(ArrayList<T>(), predicate)\n}\n\n/**\n * Appends all elements matching the given [predicate] to
the given [destination].\n * @param [predicate] function that takes the index of an element and the element itself\n *
and returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexedTo\n * \npublic inline fun <T, C : MutableCollection<in T>>
Iterable<T>.filterIndexedTo(destination: C, predicate: (index: Int, T) -> Boolean): C {\n    forEachIndexed { index,
element ->\n        if (predicate(index, element)) destination.add(element)\n    }\n    return destination\n}\n\n/**\n *
Returns a list containing all elements that are instances of specified type parameter R.\n * \n * @sample
samples.collections.Collections.Filtering.filterIsInstance\n * \npublic inline fun <reified R>
Iterable<*>.filterIsInstance(): List<@kotlin.internal.NoInfer R> {\n    return
filterIsInstanceTo(ArrayList<R>())\n}\n\n/**\n * Appends all elements that are instances of specified type
parameter R to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterIsInstanceTo\n * \npublic inline fun <reified R, C :
MutableCollection<in R>> Iterable<*>.filterIsInstanceTo(destination: C): C {\n    for (element in this) if (element is
R) destination.add(element)\n    return destination\n}\n\n/**\n * Returns a list containing all elements not matching
the given [predicate].\n * \n * @sample samples.collections.Collections.Filtering.filter\n * \npublic inline fun <T>
Iterable<T>.filterNot(predicate: (T) -> Boolean): List<T> {\n    return filterNotTo(ArrayList<T>(),
predicate)\n}\n\n/**\n * Returns a list containing all elements that are not `null`.\n * \n * @sample
samples.collections.Collections.Filtering.filterNotNull\n * \npublic fun <T : Any> Iterable<T?>.filterNotNull():
List<T> {\n    return filterNotNullTo(ArrayList<T>())\n}\n\n/**\n * Appends all elements that are not `null` to the
given [destination].\n * \n * @sample samples.collections.Collections.Filtering.filterNotNullTo\n * \npublic fun <C
: MutableCollection<in T>, T : Any> Iterable<T?>.filterNotNullTo(destination: C): C {\n    for (element in this) if
(element != null) destination.add(element)\n    return destination\n}\n\n/**\n * Appends all elements not matching
the given [predicate] to the given [destination].\n * \n * @sample samples.collections.Collections.Filtering.filterTo\n *
\npublic inline fun <T, C : MutableCollection<in T>> Iterable<T>.filterNotTo(destination: C, predicate: (T) ->
Boolean): C {\n    for (element in this) if (!predicate(element)) destination.add(element)\n    return
destination\n}\n\n/**\n * Appends all elements matching the given [predicate] to the given [destination].\n * \n *
@sample samples.collections.Collections.Filtering.filterTo\n * \npublic inline fun <T, C : MutableCollection<in
T>> Iterable<T>.filterTo(destination: C, predicate: (T) -> Boolean): C {\n    for (element in this) if
(predicate(element)) destination.add(element)\n    return destination\n}\n\n/**\n * Returns a list containing elements
at indices in the specified [indices] range.\n * \npublic fun <T> List<T>.slice(indices: IntRange): List<T> {\n    if
(indices.isEmpty()) return listOf()\n    return this.subList(indices.start, indices.endInclusive + 1).toList()\n}\n\n/**\n *
Returns a list containing elements at specified [indices].\n * \npublic fun <T> List<T>.slice(indices:
Iterable<Int>): List<T> {\n    val size = indices.collectionSizeOrDefault(10)\n    if (size == 0) return emptyList()\n
    val list = ArrayList<T>(size)\n    for (index in indices) {\n        list.add(get(index))\n    }\n    return list\n}\n\n/**\n *
Returns a list containing first [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n *
@sample samples.collections.Collections.Transformations.take\n * \npublic fun <T> Iterable<T>.take(n: Int):

```

```

List<T> {
    require(n >= 0) { "Requested element count $n is less than zero." }
    if (n == 0) return emptyList()
    if (this is Collection<T>) {
        if (n >= size) return toList()
        if (n == 1) return listOf(first())
    }
    var count = 0
    val list = ArrayList<T>(n)
    for (item in this) {
        list.add(item)
        if (++count == n) break
    }
    return list.optimizeReadOnlyList()
}

/**
 * Returns a list containing last [n] elements.
 * @throws IllegalArgumentException if [n] is negative.
 * @sample
 * samples.collections.Collections.Transformations.take
 */
public fun <T> List<T>.takeLast(n: Int): List<T> {
    require(n >= 0) { "Requested element count $n is less than zero." }
    if (n == 0) return emptyList()
    val size = size
    if (n >= size) return toList()
    if (n == 1) return listOf(last())
    val list = ArrayList<T>(n)
    if (this is RandomAccess) {
        for (index in size - n until size)
            list.add(this[index])
    } else {
        for (item in listIterator(size - n))
            list.add(item)
    }
    return list
}

/**
 * Returns a list containing last elements satisfying the given [predicate].
 * @sample
 * samples.collections.Collections.Transformations.take
 */
public inline fun <T> List<T>.takeLastWhile(predicate: (T) -> Boolean): List<T> {
    if (isEmpty()) return emptyList()
    val iterator = listIterator(size)
    while (iterator.hasPrevious()) {
        if (!predicate(iterator.previous())) {
            iterator.next()
            val expectedSize = size - iterator.nextIndex()
            if (expectedSize == 0) return emptyList()
            return ArrayList<T>(expectedSize).apply {
                while (iterator.hasNext())
                    add(iterator.next())
            }
        }
    }
    return toList()
}

/**
 * Returns a list containing first elements satisfying the given [predicate].
 * @sample
 * samples.collections.Collections.Transformations.take
 */
public inline fun <T> Iterable<T>.takeWhile(predicate: (T) -> Boolean): List<T> {
    val list = ArrayList<T>()
    for (item in this) {
        if (!predicate(item)) break
        list.add(item)
    }
    return list
}

/**
 * Reverses elements in the list in-place.
 * @public
 * expect fun <T> MutableList<T>.reverse(): Unit
 */
/**
 * Returns a list with elements in reversed order.
 * @public
 * fun <T> Iterable<T>.reversed(): List<T>
 */
if (this is Collection && size <= 1) return toList()
val list = toMutableList()
list.reverse()
return list
}

/**
 * Randomly shuffles elements in this list in-place using the specified [random] instance as the source of randomness.
 * @sample
 * See:
 * https://en.wikipedia.org/wiki/Fisher%E2%80%93Yates_shuffle#The_modern_algorithm
 */
@SinceKotlin("1.3")
public fun <T> MutableList<T>.shuffle(random: Random): Unit {
    for (i in lastIndex downTo 1) {
        val j = random.nextInt(i + 1)
        this[j] = this.set(i, this[j])
    }
}

/**
 * Sorts elements in the list in-place according to natural sort order of the value returned by specified [selector] function.
 * The sort is _stable_. It means that equal elements preserve their order relative to each other after sorting.
 * @public
 * inline fun <T, R : Comparable<R>> MutableList<T>.sortBy(crossinline selector: (T) -> R?): Unit
 */
if (size > 1)
    sortWith(compareBy(selector))
}

/**
 * Sorts elements in the list in-place descending according to natural sort order of the value returned by specified [selector] function.
 * The sort is _stable_. It means that equal elements preserve their order relative to each other after sorting.
 * @public
 * inline fun <T, R : Comparable<R>> MutableList<T>.sortByDescending(crossinline selector: (T) -> R?): Unit
 */
if (size > 1)
    sortWith(compareByDescending(selector))
}

/**
 * Sorts elements in the list in-place descending according to their natural sort order.
 * The sort is _stable_. It means that equal elements preserve their order relative to each other after sorting.
 * @public
 * inline fun <T : Comparable<T>> MutableList<T>.sortDescending(): Unit
 */
if (size > 1)
    sortWith(reverseOrder())
}

/**
 * Returns a list of all elements sorted according to their natural sort order.
 * The sort is _stable_. It means that equal elements preserve their order relative to each other after sorting.
 * @public
 * fun <T : Comparable<T>> Iterable<T>.sorted(): List<T>
 */
if (this is Collection) {
    if (size <= 1) return this.toList()
    @Suppress("UNCHECKED_CAST")
    return (toArray<Comparable<T>>()) as Array<T>.apply { sort() }.asList()
}
return toMutableList().apply { sort() }
}

/**
 * Returns a list of all elements sorted according to natural sort order of the value returned by specified [selector] function.
 * The sort is _stable_. It means that equal elements preserve their order relative to each other after sorting.
 * @sample
 * samples.collections.Collections.Sorting.sortedBy
 */
public inline fun <T, R : Comparable<R>> Iterable<T>.sortedBy(crossinline selector: (T) -> R?): List<T> {
    return sortedWith(compareBy(selector))
}

/**
 * Returns a list of all elements sorted descending according to natural sort order of the value returned by specified [selector] function.
 * The sort is _stable_. It means that equal

```

elements preserve their order relative to each other after sorting.

```

public inline fun <T, R : Comparable<R>>
Iterable<T>.sortedByDescending(crossinline selector: (T) -> R?): List<T> {
    return
sortedWith(compareByDescending(selector))
}

```

* Returns a list of all elements sorted descending according to their natural sort order. The sort is `_stable_`. It means that equal elements preserve their order relative to each other after sorting.

```

public fun <T : Comparable<T>> Iterable<T>.sortedDescending(): List<T>
{
    return sortedWith(reverseOrder())
}

```

* Returns a list of all elements sorted according to the specified [comparator]. The sort is `_stable_`. It means that equal elements preserve their order relative to each other after sorting.

```

public fun <T> Iterable<T>.sortedWith(comparator: Comparator<in T>): List<T>
{
    if (this is Collection) {
        if (size <= 1) return this.toList()
        @Suppress("UNCHECKED_CAST")
        return
(toTypedArray<Any?>() as Array<T>).apply {
            sortWith(comparator)
        }.asList()
    }
    return
toMutableList().apply {
        sortWith(comparator)
    }
}

```

* Returns an array of Boolean containing all of the elements of this collection.

```

public fun Collection<Boolean>.toBooleanArray(): BooleanArray
{
    val result = BooleanArray(size)
    var index = 0
    for (element in this)
        result[index++] = element
    return
result
}

```

* Returns an array of Byte containing all of the elements of this collection.

```

public fun Collection<Byte>.toByteArray(): ByteArray
{
    val result = ByteArray(size)
    var index = 0
    for (element in this)
        result[index++] = element
    return
result
}

```

* Returns an array of Char containing all of the elements of this collection.

```

public fun Collection<Char>.toCharArray(): CharArray
{
    val result = CharArray(size)
    var index = 0
    for (element in this)
        result[index++] = element
    return
result
}

```

* Returns an array of Double containing all of the elements of this collection.

```

public fun Collection<Double>.toDoubleArray(): DoubleArray
{
    val result = DoubleArray(size)
    var index = 0
    for (element in this)
        result[index++] = element
    return
result
}

```

* Returns an array of Float containing all of the elements of this collection.

```

public fun Collection<Float>.toFloatArray(): FloatArray
{
    val result = FloatArray(size)
    var index = 0
    for (element in this)
        result[index++] = element
    return
result
}

```

* Returns an array of Int containing all of the elements of this collection.

```

public fun Collection<Int>.toIntArray(): IntArray
{
    val result = IntArray(size)
    var index = 0
    for (element in this)
        result[index++] = element
    return
result
}

```

* Returns an array of Long containing all of the elements of this collection.

```

public fun Collection<Long>.toLongArray(): LongArray
{
    val result = LongArray(size)
    var index = 0
    for (element in this)
        result[index++] = element
    return
result
}

```

* Returns an array of Short containing all of the elements of this collection.

```

public fun Collection<Short>.toShortArray(): ShortArray
{
    val result = ShortArray(size)
    var index = 0
    for (element in this)
        result[index++] = element
    return
result
}

```

* Returns a [Map] containing key-value pairs provided by [transform] function applied to elements of the given collection. If any of two pairs would have the same key the last one gets added to the map. The returned map preserves the entry iteration order of the original collection.

```

@sample
samples.collections.Collections.Transformations.associate

```

```

public inline fun <T, K, V> Iterable<T>.associate(transform: (T) -> Pair<K, V>): Map<K, V>
{
    val capacity = mapCapacity(collectionSizeOrDefault(10)).coerceAtLeast(16)
    return associateTo(LinkedHashMap<K, V>(capacity), transform)
}

```

* Returns a [Map] containing the elements from the given collection indexed by the key returned from [keySelector] function applied to each element. If any two elements would have the same key returned by [keySelector] the last one gets added to the map. The returned map preserves the entry iteration order of the original collection.

```

@sample
samples.collections.Collections.Transformations.associateBy

```

```

public inline fun <T, K> Iterable<T>.associateBy(keySelector: (T) -> K): Map<K, T>
{
    val capacity = mapCapacity(collectionSizeOrDefault(10)).coerceAtLeast(16)
    return associateByTo(LinkedHashMap<K, T>(capacity), keySelector)
}

```

* Returns a [Map] containing the values provided by [valueTransform] and indexed by [keySelector] functions applied to elements of the given collection. If any two elements would have the same key returned by [keySelector] the last one gets added to the map. The returned map preserves the entry iteration order of the original collection.

```

@sample
samples.collections.Collections.Transformations.associateByWithValueTransform

```

```

public inline fun <T, K, V>

```



```

Iterable<T>.associateBy(keySelector: (T) -> K, valueTransform: (T) -> V): Map<K, V> {\n  val capacity =
mapCapacity(collectionSizeOrDefault(10)).coerceAtLeast(16)\n  return associateByTo(LinkedHashMap<K,
V>(capacity), keySelector, valueTransform)\n}\n\n/**\n * Populates and returns the [destination] mutable map with
key-value pairs,\n * where key is provided by the [keySelector] function applied to each element of the given
collection\n * and value is the element itself.\n * \n * If any two elements would have the same key returned by
[keySelector] the last one gets added to the map.\n * \n * @sample
samples.collections.Collections.Transformations.associateByTo\n */\npublic inline fun <T, K, M : MutableMap<in
K, in T>> Iterable<T>.associateByTo(destination: M, keySelector: (T) -> K): M {\n  for (element in this) {\n
destination.put(keySelector(element), element)\n  }\n  return destination\n}\n\n/**\n * Populates and returns the
[destination] mutable map with key-value pairs,\n * where key is provided by the [keySelector] function and\n *
and value is provided by the [valueTransform] function applied to elements of the given collection.\n * \n * If any two
elements would have the same key returned by [keySelector] the last one gets added to the map.\n * \n * @sample
samples.collections.Collections.Transformations.associateByToWithValueTransform\n */\npublic inline fun <T, K,
V, M : MutableMap<in K, in V>> Iterable<T>.associateByTo(destination: M, keySelector: (T) -> K,
valueTransform: (T) -> V): M {\n  for (element in this) {\n    destination.put(keySelector(element),
valueTransform(element))\n  }\n  return destination\n}\n\n/**\n * Populates and returns the [destination] mutable
map with key-value pairs\n * provided by [transform] function applied to each element of the given collection.\n *
\n * If any of two pairs would have the same key the last one gets added to the map.\n * \n * @sample
samples.collections.Collections.Transformations.associateTo\n */\npublic inline fun <T, K, V, M : MutableMap<in
K, in V>> Iterable<T>.associateTo(destination: M, transform: (T) -> Pair<K, V>): M {\n  for (element in this) {\n
destination += transform(element)\n  }\n  return destination\n}\n\n/**\n * Returns a [Map] where keys are
elements from the given collection and values are\n * produced by the [valueSelector] function applied to each
element.\n * \n * If any two elements are equal, the last one gets added to the map.\n * \n * The returned map
preserves the entry iteration order of the original collection.\n * \n * @sample
samples.collections.Collections.Transformations.associateWith\n */\n@SinceKotlin("1.3")\npublic inline fun <K,
V> Iterable<K>.associateWith(valueSelector: (K) -> V): Map<K, V> {\n  val result = LinkedHashMap<K,
V>(mapCapacity(collectionSizeOrDefault(10)).coerceAtLeast(16))\n  return associateWithTo(result,
valueSelector)\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs for each
element of the given collection,\n * where key is the element itself and value is provided by the [valueSelector]
function applied to that key.\n * \n * If any two elements are equal, the last one overwrites the former value in the
map.\n * \n * @sample samples.collections.Collections.Transformations.associateWithTo\n */\n@SinceKotlin("1.3")\npublic inline fun <K, V, M : MutableMap<in K, in V>>
Iterable<K>.associateWithTo(destination: M, valueSelector: (K) -> V): M {\n  for (element in this) {\n
destination.put(element, valueSelector(element))\n  }\n  return destination\n}\n\n/**\n * Appends all elements to
the given [destination] collection.\n */\npublic fun <T, C : MutableCollection<in T>>
Iterable<T>.toCollection(destination: C): C {\n  for (item in this) {\n    destination.add(item)\n  }\n  return
destination\n}\n\n/**\n * Returns a new [HashSet] of all elements.\n */\npublic fun <T> Iterable<T>.toHashSet():
HashSet<T> {\n  return toCollection(HashSet<T>(mapCapacity(collectionSizeOrDefault(12))))\n}\n\n/**\n *
Returns a [List] containing all elements.\n */\npublic fun <T> Iterable<T>.toList(): List<T> {\n  if (this is
Collection) {\n    return when (size) {\n      0 -> emptyList()\n      1 -> listOf(if (this is List) get(0) else
iterator().next())\n      else -> this.toMutableList()\n    }\n  }\n  return
this.toMutableList().optimizeReadOnlyList()\n}\n\n/**\n * Returns a new [MutableList] filled with all elements of
this collection.\n */\npublic fun <T> Iterable<T>.toMutableList(): MutableList<T> {\n  if (this is Collection<T>)\n
return this.toMutableList()\n  return toCollection(ArrayList<T>())\n}\n\n/**\n * Returns a new [MutableList]
filled with all elements of this collection.\n */\npublic fun <T> Collection<T>.toMutableList(): MutableList<T> {\n
return ArrayList(this)\n}\n\n/**\n * Returns a [Set] of all elements.\n * \n * The returned set preserves the element
iteration order of the original collection.\n */\npublic fun <T> Iterable<T>.toSet(): Set<T> {\n  if (this is
Collection) {\n    return when (size) {\n      0 -> emptySet()\n      1 -> setOf(if (this is List) this[0] else
}

```

```

iterator().next())\n        else -> toCollection(LinkedHashSet<T>(mapCapacity(size)))\n    }\n }\n return
toCollection(LinkedHashSet<T>()).optimizeReadOnlySet()\n}\n\n/**\n * Returns a single list of all elements
yielded from results of [transform] function being invoked on each element of original collection.\n * \n * @sample
samples.collections.Collections.Transformations.flatMap\n */\npublic inline fun <T, R>
Iterable<T>.flatMap(transform: (T) -> Iterable<R>): List<R> {\n    return flatMapTo(ArrayList<R>(),
transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being
invoked on each element of original collection.\n * \n * @sample
samples.collections.Collections.Transformations.flatMap\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapSequence")\npublic inline fun <T, R>
Iterable<T>.flatMap(transform: (T) -> Sequence<R>): List<R> {\n    return flatMapTo(ArrayList<R>(),
transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being
invoked on each element\n * and its index in the original collection.\n * \n * @sample
samples.collections.Collections.Transformations.flatMapIndexed\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterable")\n@kotlin.internal.InlineOnly\npublic
inline fun <T, R> Iterable<T>.flatMapIndexed(transform: (index: Int, T) -> Iterable<R>): List<R> {\n    return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original collection.\n * \n *
@sample samples.collections.Collections.Transformations.flatMapIndexed\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedSequence")\n@kotlin.internal.InlineOnly\npubli
c inline fun <T, R> Iterable<T>.flatMapIndexed(transform: (index: Int, T) -> Sequence<R>): List<R> {\n    return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Appends all elements yielded from results of
[transform] function being invoked on each element\n * and its index in the original collection, to the given
[destination].\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterableTo")\n@kotlin.internal.InlineOnly\npubli
c inline fun <T, R, C : MutableCollection<in R>> Iterable<T>.flatMapIndexedTo(destination: C, transform: (index:
Int, T) -> Iterable<R>): C {\n    var index = 0\n    for (element in this) {\n        val list =
transform(checkIndexOverflow(index++), element)\n        destination.addAll(list)\n    }\n    return
destination\n}\n\n/**\n * Appends all elements yielded from results of [transform] function being invoked on each
element\n * and its index in the original collection, to the given [destination].\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedSequenceTo")\n@kotlin.internal.InlineOnly\npubl
ic inline fun <T, R, C : MutableCollection<in R>> Iterable<T>.flatMapIndexedTo(destination: C, transform:
(index: Int, T) -> Sequence<R>): C {\n    var index = 0\n    for (element in this) {\n        val list =
transform(checkIndexOverflow(index++), element)\n        destination.addAll(list)\n    }\n    return
destination\n}\n\n/**\n * Appends all elements yielded from results of [transform] function being invoked on each
element of original collection, to the given [destination].\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapSequenceTo")\npublic inline fun <T, R, C :
MutableCollection<in R>> Iterable<T>.flatMapTo(destination: C, transform: (T) -> Sequence<R>): C {\n    for (element in this) {\n        val
list = transform(element)\n        destination.addAll(list)\n    }\n    return destination\n}\n\n/**\n * Appends all
elements yielded from results of [transform] function being invoked on each element of original collection, to the
given [destination].\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapSequenceTo")\npublic inline fun <T, R, C :
MutableCollection<in R>> Iterable<T>.flatMapTo(destination: C, transform: (T) -> Sequence<R>): C {\n    for
(element in this) {\n        val list = transform(element)\n        destination.addAll(list)\n    }\n    return

```

```

destination\n}\n\n/**\n * Groups elements of the original collection by the key returned by the given [keySelector]
function\n * applied to each element and returns a map where each group key is associated with a list of
corresponding elements.\n * \n * The returned map preserves the entry iteration order of the keys produced from the
original collection.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n */\npublic inline
fun <T, K> Iterable<T>.groupBy(keySelector: (T) -> K): Map<K, List<T>> {\n    return
groupByTo(LinkedHashMap<K, MutableList<T>>(), keySelector)\n}\n\n/**\n * Groups values returned by the
[valueTransform] function applied to each element of the original collection\n * by the key returned by the given
[keySelector] function applied to the element\n * and returns a map where each group key is associated with a list of
corresponding values.\n * \n * The returned map preserves the entry iteration order of the keys produced from the
original collection.\n * \n * @sample samples.collections.Collections.Transformations.groupByKeysAndValues\n */\npublic inline fun <T, K, V> Iterable<T>.groupBy(keySelector: (T) -> K, valueTransform: (T) -> V): Map<K,
List<V>> {\n    return groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector,
valueTransform)\n}\n\n/**\n * Groups elements of the original collection by the key returned by the given
[keySelector] function\n * applied to each element and puts to the [destination] map each group key associated with
a list of corresponding elements.\n * \n * @return The [destination] map.\n * \n * @sample
samples.collections.Collections.Transformations.groupBy\n */\npublic inline fun <T, K, M : MutableMap<in K,
MutableList<T>>> Iterable<T>.groupByTo(destination: M, keySelector: (T) -> K): M {\n    for (element in this) {\n
        val key = keySelector(element)\n        val list = destination.getOrPut(key) { ArrayList<T>() }\n
list.add(element)\n    }\n    return destination\n}\n\n/**\n * Groups values returned by the [valueTransform] function
applied to each element of the original collection\n * by the key returned by the given [keySelector] function applied
to the element\n * and puts to the [destination] map each group key associated with a list of corresponding values.\n
* \n * @return The [destination] map.\n * \n * @sample
samples.collections.Collections.Transformations.groupByKeysAndValues\n */\npublic inline fun <T, K, V, M :
MutableMap<in K, MutableList<V>>> Iterable<T>.groupByTo(destination: M, keySelector: (T) -> K,
valueTransform: (T) -> V): M {\n    for (element in this) {\n        val key = keySelector(element)\n        val list =
destination.getOrPut(key) { ArrayList<V>() }\n        list.add(valueTransform(element))\n    }\n    return
destination\n}\n\n/**\n * Creates a [Grouping] source from a collection to be used later with one of group-and-fold
operations\n * using the specified [keySelector] function to extract a key from each element.\n * \n * @sample
samples.collections.Grouping.groupingByEachCount\n */\n@SinceKotlin("1.1")\npublic inline fun <T, K>
Iterable<T>.groupingBy(crossinline keySelector: (T) -> K): Grouping<T, K> {\n    return object : Grouping<T, K>
{\n        override fun sourceIterator(): Iterator<T> = this@groupingBy.iterator()\n        override fun keyOf(element:
T): K = keySelector(element)\n    }\n}\n\n/**\n * Returns a list containing the results of applying the given
[transform] function\n * to each element in the original collection.\n * \n * @sample
samples.collections.Collections.Transformations.map\n */\npublic inline fun <T, R> Iterable<T>.map(transform:
(T) -> R): List<R> {\n    return mapTo(ArrayList<R>(collectionSizeOrDefault(10)), transform)\n}\n\n/**\n *
Returns a list containing the results of applying the given [transform] function\n * to each element and its index in
the original collection.\n * @param [transform] function that takes the index of an element and the element itself\n *
and returns the result of the transform applied to the element.\n */\npublic inline fun <T, R>
Iterable<T>.mapIndexed(transform: (index: Int, T) -> R): List<R> {\n    return
mapIndexedTo(ArrayList<R>(collectionSizeOrDefault(10)), transform)\n}\n\n/**\n * Returns a list containing only
the non-null results of applying the given [transform] function\n * to each element and its index in the original
collection.\n * @param [transform] function that takes the index of an element and the element itself\n * and returns
the result of the transform applied to the element.\n */\npublic inline fun <T, R : Any>
Iterable<T>.mapIndexedNotNull(transform: (index: Int, T) -> R?): List<R> {\n    return
mapIndexedNotNullTo(ArrayList<R>(), transform)\n}\n\n/**\n * Applies the given [transform] function to each
element and its index in the original collection\n * and appends only the non-null results to the given [destination].\n
* @param [transform] function that takes the index of an element and the element itself\n * and returns the result of
the transform applied to the element.\n */\npublic inline fun <T, R : Any, C : MutableCollection<in R>>

```

```

Iterable<T>.mapIndexedNotNullTo(destination: C, transform: (index: Int, T) -> R?): C {
    forEachIndexed { index, element -> transform(index, element)?.let { destination.add(it) } }
    return destination
}

Applies the given [transform] function to each element and its index in the original collection
and appends the results to the given [destination].

@param [transform] function that takes the index of an element and the element itself
and returns the result of the transform applied to the element.

public inline fun <T, R, C : MutableCollection<in R>> Iterable<T>.mapIndexedTo(destination: C, transform: (index: Int, T) -> R): C {
    var index = 0
    for (item in this)
        destination.add(transform(checkIndexOverflow(index++), item))
    return destination
}

Returns a list containing only the non-null results of applying the given [transform] function
to each element in the original collection.

@sample
samples.collections.Collections.Transformations.mapNotNull

public inline fun <T, R : Any> Iterable<T>.mapNotNull(transform: (T) -> R?): List<R> {
    return mapNotNullTo(ArrayList<R>(), transform)
}

Applies the given [transform] function to each element in the original collection
and appends only the non-null results to the given [destination].

public inline fun <T, R : Any, C : MutableCollection<in R>> Iterable<T>.mapNotNullTo(destination: C, transform: (T) -> R?): C {
    forEach { element -> transform(element)?.let { destination.add(it) } }
    return destination
}

Applies the given [transform] function to each element of the original collection
and appends the results to the given [destination].

public inline fun <T, R, C : MutableCollection<in R>> Iterable<T>.mapTo(destination: C, transform: (T) -> R): C {
    for (item in this)
        destination.add(transform(item))
    return destination
}

Returns a lazy [Iterable] that wraps each element of the original collection
into an [IndexedValue] containing the index of that element and the element itself.

public fun <T> Iterable<T>.withIndex(): Iterable<IndexedValue<T>> {
    return IndexingIterable { iterator() }
}

Returns a list containing only distinct elements from the given collection.

Among equal elements of the given collection, only the first one will be present in the resulting list.

The elements in the resulting list are in the same order as they were in the source collection.

@sample
samples.collections.Collections.Transformations.distinctAndDistinctBy

public fun <T> Iterable<T>.distinct(): List<T> {
    return this.toMutableSet().toList()
}

Returns a list containing only elements from the given collection
having distinct keys returned by the given [selector] function.

Among elements of the given collection with equal keys, only the first one will be present in the resulting list.

The elements in the resulting list are in the same order as they were in the source collection.

@sample
samples.collections.Collections.Transformations.distinctAndDistinctBy

public inline fun <T, K> Iterable<T>.distinctBy(selector: (T) -> K): List<T> {
    val set = HashSet<K>()
    val list = ArrayList<T>()
    for (e in this) {
        val key = selector(e)
        if (set.add(key))
            list.add(e)
    }
    return list
}

Returns a set containing all elements that are contained by both this collection and the specified collection.

The returned set preserves the element iteration order of the original collection.

To get a set containing all elements that are contained at least in one of these collections use [union].

public infix fun <T> Iterable<T>.intersect(other: Iterable<T>): Set<T> {
    val set = this.toMutableSet()
    set.retainAll(other)
    return set
}

Returns a set containing all elements that are contained by this collection and not contained by the specified collection.

The returned set preserves the element iteration order of the original collection.

public infix fun <T> Iterable<T>.subtract(other: Iterable<T>): Set<T> {
    val set = this.toMutableSet()
    set.removeAll(other)
    return set
}

Returns a new [MutableSet] containing all distinct elements from the given collection.

The returned set preserves the element iteration order of the original collection.

public fun <T> Iterable<T>.toMutableSet(): MutableSet<T> {
    return when (this) {
        is Collection<T> -> LinkedHashSet(this)
        else -> toCollection(LinkedHashSet<T>())
    }
}

Returns a set containing all distinct elements from both collections.

The returned set preserves the element iteration order of the original collection.

Those elements of the [other] collection that are unique are iterated in the end
in the order of the [other] collection.

To get a set containing all elements that are contained in both collections use [intersect].

public infix fun <T> Iterable<T>.union(other: Iterable<T>): Set<T> {
    val set = this.toMutableSet()
    set.addAll(other)
    return set
}

Returns `true` if all elements match the

```

```

given [predicate].\n * \n * @sample samples.collections.Collections.Aggregates.all\n *\npublic inline fun <T>
Iterable<T>.all(predicate: (T) -> Boolean): Boolean {\n if (this is Collection && isEmpty()) return true\n for
(element in this) if (!predicate(element)) return false\n return true\n}\n\n/**\n * Returns `true` if collection has at
least one element.\n * \n * @sample samples.collections.Collections.Aggregates.any\n *\npublic inline fun <T>
Iterable<T>.any(): Boolean {\n if (this is Collection) return !isEmpty()\n return iterator().hasNext()\n}\n\n/**\n
* Returns `true` if at least one element matches the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.anyWithPredicate\n *\npublic inline fun <T>
Iterable<T>.any(predicate: (T) -> Boolean): Boolean {\n if (this is Collection && isEmpty()) return false\n for
(element in this) if (predicate(element)) return true\n return false\n}\n\n/**\n * Returns the number of elements in
this collection.\n *\npublic inline fun <T> Iterable<T>.count(): Int {\n if (this is Collection) return size\n var count =
0\n for (element in this) checkCountOverflow(++count)\n return count\n}\n\n/**\n * Returns the number of
elements in this collection.\n *\n@kotlin.internal.InlineOnly\npublic inline fun <T> Collection<T>.count(): Int {\n
return size\n}\n\n/**\n * Returns the number of elements matching the given [predicate].\n *\npublic inline fun <T>
Iterable<T>.count(predicate: (T) -> Boolean): Int {\n if (this is Collection && isEmpty()) return 0\n var count =
0\n for (element in this) if (predicate(element)) checkCountOverflow(++count)\n return count\n}\n\n/**\n
* Accumulates value starting with [initial] value and applying [operation] from left to right\n * to current accumulator
value and each element.\n * \n * Returns the specified [initial] value if the collection is empty.\n * \n * @param
[operation] function that takes current accumulator value and an element, and calculates the next accumulator
value.\n *\npublic inline fun <T, R> Iterable<T>.fold(initial: R, operation: (acc: R, T) -> R): R {\n var
accumulator = initial\n for (element in this) accumulator = operation(accumulator, element)\n return
accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from left to
right\n * to current accumulator value and each element with its index in the original collection.\n * \n * Returns the
specified [initial] value if the collection is empty.\n * \n * @param [operation] function that takes the index of an
element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n
*\npublic inline fun <T, R> Iterable<T>.foldIndexed(initial: R, operation: (index: Int, acc: R, T) -> R): R {\n var
index = 0\n var accumulator = initial\n for (element in this) accumulator =
operation(checkIndexOverflow(index++), accumulator, element)\n return accumulator\n}\n\n/**\n * Accumulates
value starting with [initial] value and applying [operation] from right to left\n * to each element and current
accumulator value.\n * \n * Returns the specified [initial] value if the list is empty.\n * \n * @param [operation]
function that takes an element and current accumulator value, and calculates the next accumulator value.\n
*\npublic inline fun <T, R> List<T>.foldRight(initial: R, operation: (T, acc: R) -> R): R {\n var accumulator =
initial\n if (!isEmpty()) {\n val iterator = listIterator(size)\n while (iterator.hasPrevious()) {\n
accumulator = operation(iterator.previous(), accumulator)\n }\n }\n return accumulator\n}\n\n/**\n
* Accumulates value starting with [initial] value and applying [operation] from right to left\n * to each element with
its index in the original list and current accumulator value.\n * \n * Returns the specified [initial] value if the list is
empty.\n * \n * @param [operation] function that takes the index of an element, the element itself\n * and current
accumulator value, and calculates the next accumulator value.\n *\npublic inline fun <T, R>
List<T>.foldRightIndexed(initial: R, operation: (index: Int, T, acc: R) -> R): R {\n var accumulator = initial\n if
(!isEmpty()) {\n val iterator = listIterator(size)\n while (iterator.hasPrevious()) {\n val index =
iterator.previousIndex()\n accumulator = operation(index, iterator.previous(), accumulator)\n }\n }\n
return accumulator\n}\n\n/**\n * Performs the given [action] on each element.\n
*\n@kotlin.internal.HidesMembers\npublic inline fun <T> Iterable<T>.forEach(action: (T) -> Unit): Unit {\n for
(element in this) action(element)\n}\n\n/**\n * Performs the given [action] on each element, providing sequential
index with the element.\n * \n * @param [action] function that takes the index of an element and the element itself\n
* and performs the action on the element.\n *\npublic inline fun <T> Iterable<T>.forEachIndexed(action: (index: Int,
T) -> Unit): Unit {\n var index = 0\n for (item in this) action(checkIndexOverflow(index++),
item)\n}\n\n@Deprecated("Use maxOrNull instead.")
ReplaceWith("this.maxOrNull()")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",

```

```

hiddenSince = `1.6`)@SinceKotlin("1.1")public fun Iterable<Double>.max(): Double? {
    return
    maxOrNull()
}
@Deprecated("Use maxOrNull instead.",
ReplaceWith("this.maxOrNull()"))@DeprecatedSinceKotlin(warningSince = `1.4`, errorSince = `1.5`,
hiddenSince = `1.6`)@SinceKotlin("1.1")public fun Iterable<Float>.max(): Float? {
    return
    maxOrNull()
}
@Deprecated("Use maxOrNull instead.",
ReplaceWith("this.maxOrNull()"))@DeprecatedSinceKotlin(warningSince = `1.4`, errorSince = `1.5`,
hiddenSince = `1.6`)public fun <T : Comparable<T>> Iterable<T>.max(): T? {
    return
    maxOrNull()
}
@Deprecated("Use maxByOrNull instead.",
ReplaceWith("this.maxByOrNull(selector)"))@DeprecatedSinceKotlin(warningSince = `1.4`, errorSince =
`1.5`, hiddenSince = `1.6`)public inline fun <T, R : Comparable<R>> Iterable<T>.maxBy(selector: (T) -> R):
T? {
    return maxByOrNull(selector)
}
/**
 * Returns the first element yielding the largest value of the given
 * function or `null` if there are no elements.
 */
@sample
samples.collections.Collections.Aggregates.maxByOrNull
@SinceKotlin("1.4")public inline fun <T, R :
Comparable<R>> Iterable<T>.maxByOrNull(selector: (T) -> R): T? {
    val iterator = iterator()
    if
    (!iterator.hasNext()) return null
    var maxElem = iterator.next()
    if (!iterator.hasNext()) return maxElem
    var
    maxV = selector(maxElem)
    do {
        val e = iterator.next()
        val v = selector(e)
        if (maxV <
v) {
            maxElem = e
            maxV = v
        }
    } while (iterator.hasNext())
    return
    maxElem
}
/**
 * Returns the largest value among all values produced by [selector] function
 * applied to
 * each element in the collection.
 * If any of values produced by [selector] function is `NaN`, the returned result
 * is `NaN`.
 * @throws NoSuchElementException if the collection is empty.
 */
@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnlypublic inline fun <T> Iterable<T>.maxOf(selector: (T) ->
Double): Double {
    val iterator = iterator()
    if (!iterator.hasNext()) throw NoSuchElementException()
    var
    maxV = selector(iterator.next())
    while (iterator.hasNext()) {
        val v = selector(iterator.next())
        maxV = maxOf(maxV, v)
    }
    return maxV
}
/**
 * Returns the largest value among all
 * values produced by [selector] function
 * applied to each element in the collection.
 * If any of values
 * produced by [selector] function is `NaN`, the returned result is `NaN`.
 * @throws NoSuchElementException
 * if the collection is empty.
 */
@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnlypublic inline fun <T> Iterable<T>.maxOf(selector: (T) ->
Float): Float {
    val iterator = iterator()
    if (!iterator.hasNext()) throw NoSuchElementException()
    var
    maxV = selector(iterator.next())
    while (iterator.hasNext()) {
        val v = selector(iterator.next())
        maxV = maxOf(maxV, v)
    }
    return maxV
}
/**
 * Returns the largest value among all
 * values produced by [selector] function
 * applied to each element in the collection.
 * @throws
 * NoSuchElementException if the collection is empty.
 */
@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnlypublic inline fun <T, R : Comparable<R>>
Iterable<T>.maxOf(selector: (T) -> R): R {
    val iterator = iterator()
    if (!iterator.hasNext()) throw
    NoSuchElementException()
    var maxV = selector(iterator.next())
    while (iterator.hasNext()) {
        val v
        = selector(iterator.next())
        if (maxV < v) {
            maxV = v
        }
    }
    return
    maxV
}
/**
 * Returns the largest value among all values produced by [selector] function
 * applied to
 * each element in the collection or `null` if there are no elements.
 * If any of values produced by [selector]
 * function is `NaN`, the returned result is `NaN`.
 */
@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@kotlin.internal.InlineOnlypublic inline fun <T> Iterable<T>.maxOfOrNull(selector: (T)
-> Double): Double? {
    val iterator = iterator()
    if (!iterator.hasNext()) return null
    var maxV =
    selector(iterator.next())
    while (iterator.hasNext()) {
        val v = selector(iterator.next())
        maxV =
        maxOf(maxV, v)
    }
    return maxV
}
/**
 * Returns the largest value among all values produced

```

by [selector] function\n * applied to each element in the collection or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n

```

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Iterable<T>.maxOrNull(selector: (T)
-> Float): Float? {\n    val iterator = iterator()\n    if (!iterator.hasNext()) return null\n    var max = selector(iterator.next())\n    while (iterator.hasNext()) {\n        val v = selector(iterator.next())\n        max = maxOf(max, v)\n    }\n    return max\n}\n\n*\n * Returns the largest value among all values produced
by [selector] function\n * applied to each element in the collection or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Comparable<R>>
Iterable<T>.maxOrNull(selector: (T) -> R): R? {\n    val iterator = iterator()\n    if (!iterator.hasNext()) return
null\n    var max = selector(iterator.next())\n    while (iterator.hasNext()) {\n        val v =
selector(iterator.next())\n        if (max < v) {\n            max = v\n        }\n    }\n    return
max\n}\n\n*\n * Returns the largest value according to the provided [comparator]\n * among all values
produced by [selector] function applied to each element in the collection.\n * \n * @throws
NoSuchElementException if the collection is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R>
Iterable<T>.maxWith(comparator: Comparator<in R>, selector: (T) -> R): R {\n    val iterator = iterator()\n    if
(!iterator.hasNext()) throw NoSuchElementException()\n    var max = selector(iterator.next())\n    while
(iterator.hasNext()) {\n        val v = selector(iterator.next())\n        if (comparator.compare(max, v) < 0) {\n
            max = v\n        }\n    }\n    return max\n}\n\n*\n * Returns the largest value according to the provided
[comparator]\n * among all values produced by [selector] function applied to each element in the collection or `null`
if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R>
Iterable<T>.maxWithOrNull(comparator: Comparator<in R>, selector: (T) -> R): R? {\n    val iterator =
iterator()\n    if (!iterator.hasNext()) return null\n    var max = selector(iterator.next())\n    while
(iterator.hasNext()) {\n        val v = selector(iterator.next())\n        if (comparator.compare(max, v) < 0) {\n
            max = v\n        }\n    }\n    return max\n}\n\n*\n * Returns the largest element or `null` if there are no
elements.\n * \n * If any of elements is `NaN` returns `NaN`.\n *\n@SinceKotlin("1.4")\npublic fun
Iterable<Double>.maxOrNull(): Double? {\n    val iterator = iterator()\n    if (!iterator.hasNext()) return null\n    var
max = iterator.next()\n    while (iterator.hasNext()) {\n        val e = iterator.next()\n        max = maxOf(max, e)\n
    }\n    return max\n}\n\n*\n * Returns the largest element or `null` if there are no elements.\n * \n * If any of
elements is `NaN` returns `NaN`.\n *\n@SinceKotlin("1.4")\npublic fun Iterable<Float>.maxOrNull(): Float? {\n
val iterator = iterator()\n    if (!iterator.hasNext()) return null\n    var max = iterator.next()\n    while
(iterator.hasNext()) {\n        val e = iterator.next()\n        max = maxOf(max, e)\n    }\n    return max\n}\n\n*\n *
Returns the largest element or `null` if there are no elements.\n *\n@SinceKotlin("1.4")\npublic fun <T :
Comparable<T>> Iterable<T>.maxOrNull(): T? {\n    val iterator = iterator()\n    if (!iterator.hasNext()) return null\n
var max = iterator.next()\n    while (iterator.hasNext()) {\n        val e = iterator.next()\n        if (max < e) max = e\n
    }\n    return max\n}\n\n@Deprecated("Use maxWithOrNull instead.")
ReplaceWith("this.maxWithOrNull(comparator)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun <T> Iterable<T>.maxWith(comparator: Comparator<in T>): T? {\n
return maxWithOrNull(comparator)\n}\n\n*\n * Returns the first element having the largest value according to the
provided [comparator] or `null` if there are no elements.\n *\n@SinceKotlin("1.4")\npublic fun <T>
Iterable<T>.maxWithOrNull(comparator: Comparator<in T>): T? {\n    val iterator = iterator()\n    if
(!iterator.hasNext()) return null\n    var max = iterator.next()\n    while (iterator.hasNext()) {\n        val e =
iterator.next()\n        if (comparator.compare(max, e) < 0) max = e\n    }\n    return max\n}\n\n@Deprecated("Use

```



```

minOf(minValue, v)\n } return minValue\n}\n\n**\n * Returns the smallest value among all values produced
by [selector] function\n * applied to each element in the collection or `null` if there are no elements.\n * \n * If any
of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Iterable<T>.minOfOrNull(selector: (T)
-> Float): Float? {\n val iterator = iterator()\n if (iterator.hasNext()) return null\n var minValue =
selector(iterator.next())\n while (iterator.hasNext()) {\n val v = selector(iterator.next())\n minValue =
minOf(minValue, v)\n }\n return minValue\n}\n\n**\n * Returns the smallest value among all values produced
by [selector] function\n * applied to each element in the collection or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Comparable<R>>
Iterable<T>.minOfOrNull(selector: (T) -> R): R? {\n val iterator = iterator()\n if (!iterator.hasNext()) return
null\n var minValue = selector(iterator.next())\n while (iterator.hasNext()) {\n val v =
selector(iterator.next())\n if (minValue > v) {\n minValue = v\n }\n }\n return
minValue\n}\n\n**\n * Returns the smallest value according to the provided [comparator]\n * among all values
produced by [selector] function applied to each element in the collection.\n * \n * @throws
NoSuchElementException if the collection is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R> Iterable<T>.minOfWith(comparator:
Comparator<in R>, selector: (T) -> R): R {\n val iterator = iterator()\n if (!iterator.hasNext()) throw
NoSuchElementException()\n var minValue = selector(iterator.next())\n while (iterator.hasNext()) {\n val v
= selector(iterator.next())\n if (comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n
return minValue\n}\n\n**\n * Returns the smallest value according to the provided [comparator]\n * among all
values produced by [selector] function applied to each element in the collection or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R>
Iterable<T>.minOfWithOrNull(comparator: Comparator<in R>, selector: (T) -> R): R? {\n val iterator =
iterator()\n if (!iterator.hasNext()) return null\n var minValue = selector(iterator.next())\n while
(iterator.hasNext()) {\n val v = selector(iterator.next())\n if (comparator.compare(minValue, v) > 0) {\n
minValue = v\n }\n }\n return minValue\n}\n\n**\n * Returns the smallest element or `null` if there are
no elements.\n * \n * If any of elements is `NaN` returns `NaN`.\n *\n@SinceKotlin("1.4")\npublic fun
Iterable<Double>.minOrNull(): Double? {\n val iterator = iterator()\n if (!iterator.hasNext()) return null\n var
min = iterator.next()\n while (iterator.hasNext()) {\n val e = iterator.next()\n min = minOf(min, e)\n }\n
return min\n}\n\n**\n * Returns the smallest element or `null` if there are no elements.\n * \n * If any of elements
is `NaN` returns `NaN`.\n *\n@SinceKotlin("1.4")\npublic fun Iterable<Float>.minOrNull(): Float? {\n val
iterator = iterator()\n if (!iterator.hasNext()) return null\n var min = iterator.next()\n while (iterator.hasNext())
{\n val e = iterator.next()\n min = minOf(min, e)\n }\n return min\n}\n\n**\n * Returns the smallest
element or `null` if there are no elements.\n *\n@SinceKotlin("1.4")\npublic fun <T : Comparable<T>>
Iterable<T>.minOrNull(): T? {\n val iterator = iterator()\n if (!iterator.hasNext()) return null\n var min =
iterator.next()\n while (iterator.hasNext()) {\n val e = iterator.next()\n if (min > e) min = e\n }\n return
min\n}\n\n@Deprecated("Use minWithOrNull instead.")
ReplaceWith("this.minWithOrNull(comparator)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun <T> Iterable<T>.minWith(comparator: Comparator<in T>): T? {\n
return minWithOrNull(comparator)\n}\n\n**\n * Returns the first element having the smallest value according to
the provided [comparator] or `null` if there are no elements.\n *\n@SinceKotlin("1.4")\npublic fun <T>
Iterable<T>.minWithOrNull(comparator: Comparator<in T>): T? {\n val iterator = iterator()\n if
(!iterator.hasNext()) return null\n var min = iterator.next()\n while (iterator.hasNext()) {\n val e =
iterator.next()\n if (comparator.compare(min, e) > 0) min = e\n }\n return min\n}\n\n**\n * Returns `true` if

```

```

the collection has no elements.\n * \n * @sample samples.collections.Collections.Aggregates.none\n * \n\npublic fun
<T> Iterable<T>.none(): Boolean {\n    if (this is Collection) return isEmpty()\n    return
!iterator().hasNext()\n}\n\n/**\n * Returns `true` if no elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.noneWithPredicate\n * \n\npublic inline fun <T>
Iterable<T>.none(predicate: (T) -> Boolean): Boolean {\n    if (this is Collection && isEmpty()) return true\n    for
(element in this) if (predicate(element)) return false\n    return true\n}\n\n/**\n * Performs the given [action] on each
element and returns the collection itself afterwards.\n * \n\n@SinceKotlin("1.1")\n\npublic inline fun <T, C :
Iterable<T>> C.onEach(action: (T) -> Unit): C {\n    return apply { for (element in this) action(element)
}\n}\n\n/**\n * Performs the given [action] on each element, providing sequential index with the element,\n * and
returns the collection itself afterwards.\n * \n * @param [action] function that takes the index of an element and the
element itself\n * and performs the action on the element.\n * \n\n@SinceKotlin("1.4")\n\npublic inline fun <T, C :
Iterable<T>> C.onEachIndexed(action: (index: Int, T) -> Unit): C {\n    return apply { forEachIndexed(action)
}\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation] from left to right\n * to
current accumulator value and each element.\n * \n * Throws an exception if this collection is empty. If the
collection can be empty in an expected way,\n * please use [reduceOrNull] instead. It returns `null` when its receiver
is empty.\n * \n * @param [operation] function that takes current accumulator value and an element,\n * and
calculates the next accumulator value.\n * \n * \n\n@sample samples.collections.Collections.Aggregates.reduce\n
*\n\npublic inline fun <S, T : S> Iterable<T>.reduce(operation: (acc: S, T) -> S): S {\n    val iterator = this.iterator()\n
    if (!iterator.hasNext()) throw UnsupportedOperationException("Empty collection can't be reduced.")\n    var
accumulator: S = iterator.next()\n    while (iterator.hasNext()) {\n        accumulator = operation(accumulator,
iterator.next())\n    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and
applying [operation] from left to right\n * to current accumulator value and each element with its index in the
original collection.\n * \n * Throws an exception if this collection is empty. If the collection can be empty in an
expected way,\n * please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n *
@param [operation] function that takes the index of an element, current accumulator value and the element itself,\n
* and calculates the next accumulator value.\n * \n * \n\n@sample samples.collections.Collections.Aggregates.reduce\n
*\n\npublic inline fun <S, T : S> Iterable<T>.reduceIndexed(operation: (index: Int, acc: S, T) -> S): S {\n    val
iterator = this.iterator()\n    if (!iterator.hasNext()) throw UnsupportedOperationException("Empty collection can't
be reduced.")\n    var index = 1\n    var accumulator: S = iterator.next()\n    while (iterator.hasNext()) {\n
accumulator = operation(checkIndexOverflow(index++), accumulator, iterator.next())\n    }\n    return
accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation] from left to
right\n * to current accumulator value and each element with its index in the original collection.\n * \n * Returns
`null` if the collection is empty.\n * \n * @param [operation] function that takes the index of an element, current
accumulator value and the element itself,\n * and calculates the next accumulator value.\n * \n * \n\n@sample
samples.collections.Collections.Aggregates.reduceOrNull\n *\n\n@SinceKotlin("1.4")\n\n@WasExperimental(ExperimentalStdlibApi::class)\n\npublic inline fun <S, T : S>
Iterable<T>.reduceIndexedOrNull(operation: (index: Int, acc: S, T) -> S): S? {\n    val iterator = this.iterator()\n
    if (!iterator.hasNext()) return null\n    var index = 1\n    var accumulator: S = iterator.next()\n    while
(iterator.hasNext()) {\n        accumulator = operation(checkIndexOverflow(index++), accumulator, iterator.next())\n
    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation]
from left to right\n * to current accumulator value and each element.\n * \n * Returns `null` if the collection is
empty.\n * \n * @param [operation] function that takes current accumulator value and an element,\n * and calculates
the next accumulator value.\n * \n * \n\n@sample samples.collections.Collections.Aggregates.reduceOrNull\n
*\n\n@SinceKotlin("1.4")\n\n@WasExperimental(ExperimentalStdlibApi::class)\n\npublic inline fun <S, T : S>
Iterable<T>.reduceOrNull(operation: (acc: S, T) -> S): S? {\n    val iterator = this.iterator()\n    if
(!iterator.hasNext()) return null\n    var accumulator: S = iterator.next()\n    while (iterator.hasNext()) {\n
accumulator = operation(accumulator, iterator.next())\n    }\n    return accumulator\n}\n\n/**\n * Accumulates value
starting with the last element and applying [operation] from right to left\n * to each element and current accumulator
value.\n * \n * Throws an exception if this list is empty. If the list can be empty in an expected way,\n * please use

```

[reduceRightOrNull] instead. It returns `null` when its receiver is empty.

* @param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.

* @sample

```

samples.collections.Collections.Aggregates.reduceRight
public inline fun <S, T : S>
List<T>.reduceRight(operation: (T, acc: S) -> S): S {
    val iterator = listIterator(size)
    if (!iterator.hasPrevious())
        throw UnsupportedOperationException("Empty list can't be reduced.")
    var accumulator: S = iterator.previous()
    while (iterator.hasPrevious()) {
        accumulator =
            operation(iterator.previous(), accumulator)
    }
    return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element with its index in the original list and current accumulator value.

* Throws an exception if this list is empty. If the list can be empty in an expected way, please use [reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.

* @param [operation] function that takes the index of an element, the element itself and current accumulator value, and calculates the next accumulator value.

* @sample

```

samples.collections.Collections.Aggregates.reduceRight
public inline fun <S, T : S>
List<T>.reduceRightIndexed(operation: (index: Int, T, acc: S) -> S): S {
    val iterator = listIterator(size)
    if (!iterator.hasPrevious())
        throw UnsupportedOperationException("Empty list can't be reduced.")
    var accumulator: S = iterator.previous()
    while (iterator.hasPrevious()) {
        val index = iterator.previousIndex()
        accumulator = operation(index, iterator.previous(), accumulator)
    }
    return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element with its index in the original list and current accumulator value.

* Returns `null` if the list is empty.

* @param [operation] function that takes the index of an element, the element itself and current accumulator value, and calculates the next accumulator value.

* @sample

```

samples.collections.Collections.Aggregates.reduceRightOrNull
@SinceKotlin("1.4")
public inline fun <S, T : S>
List<T>.reduceRightIndexedOrNull(operation: (index: Int, T, acc: S) -> S): S? {
    val iterator = listIterator(size)
    if (!iterator.hasPrevious())
        return null
    var accumulator: S = iterator.previous()
    while (iterator.hasPrevious()) {
        val index = iterator.previousIndex()
        accumulator = operation(index,
            iterator.previous(), accumulator)
    }
    return accumulator
}

```

Accumulates value starting with the last element and applying [operation] from right to left to each element and current accumulator value.

* Returns `null` if the list is empty.

* @param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.

* @sample

```

samples.collections.Collections.Aggregates.reduceRightOrNull
@SinceKotlin("1.4")
@WasExperimental(ExperimentalStdlibApi::class)
public inline fun <S, T : S>
List<T>.reduceRightOrNull(operation: (T, acc: S) -> S): S? {
    val iterator = listIterator(size)
    if (!iterator.hasPrevious())
        return null
    var accumulator: S = iterator.previous()
    while (iterator.hasPrevious()) {
        accumulator = operation(iterator.previous(), accumulator)
    }
    return accumulator
}

```

Returns a list containing successive accumulation values generated by applying [operation] from left to right to each element and current accumulator value that starts with [initial] value.

* Note that `acc` value passed to [operation] function should not be mutated; otherwise it would affect the previous value in resulting list.

* @param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.

* @sample

```

samples.collections.Collections.Aggregates.runningFold
@SinceKotlin("1.4")
public inline fun <T, R>
Iterable<T>.runningFold(initial: R, operation: (acc: R, T) -> R): List<R> {
    val estimatedSize = collectionSizeOrDefault(9)
    if (estimatedSize == 0) return listOf(initial)
    val result = ArrayList<R>(estimatedSize + 1).apply { add(initial) }
    var accumulator = initial
    for (element in this) {
        accumulator = operation(accumulator, element)
        result.add(accumulator)
    }
    return result
}

```

Returns a list containing successive accumulation values generated by applying [operation] from left to right to each element, its index in the original collection and current accumulator value that starts with [initial] value.

* Note that `acc` value passed to [operation] function should not be mutated; otherwise it would affect the previous value in resulting list.

* @param [operation] function that takes the index of an element, current

accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n * ^\n@SinceKotlin("1.4")\npublic inline fun <T, R> Iterable<T>.runningFold(initial: R, operation: (index: Int, acc: R, T) -> R): List<R> {\n val estimatedSize = collectionSizeOrDefault(9)\n if (estimatedSize == 0) return listOf(initial)\n val result = ArrayList<R>(estimatedSize + 1).apply { add(initial) }\n var index = 0\n var accumulator = initial\n for (element in this) {\n accumulator = operation(index++, accumulator, element)\n result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element and current accumulator value that starts with the first element of this collection.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value and the element, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningReduce\n * ^\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun <S, T : S> Iterable<T>.runningReduce(operation: (acc: S, T) -> S): List<S> {\n val iterator = this.iterator()\n if (!iterator.hasNext()) return emptyList()\n var accumulator: S = iterator.next()\n val result = ArrayList<S>(collectionSizeOrDefault(10)).apply { add(accumulator) }\n while (iterator.hasNext()) {\n accumulator = operation(accumulator, iterator.next())\n result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original collection and current accumulator value that starts with the first element of this collection.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningReduce\n * ^\n@SinceKotlin("1.4")\npublic inline fun <S, T : S> Iterable<T>.runningReduceIndexed(operation: (index: Int, acc: S, T) -> S): List<S> {\n val iterator = this.iterator()\n if (!iterator.hasNext()) return emptyList()\n var accumulator: S = iterator.next()\n val result = ArrayList<S>(collectionSizeOrDefault(10)).apply { add(accumulator) }\n var index = 1\n while (iterator.hasNext()) {\n accumulator = operation(index++, accumulator, iterator.next())\n result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n * ^\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun <T, R> Iterable<T>.scan(initial: R, operation: (acc: R, T) -> R): List<R> {\n return runningFold(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in the original collection and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n * ^\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun <T, R> Iterable<T>.scanIndexed(initial: R, operation: (index: Int, acc: R, T) -> R): List<R> {\n return runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the collection.\n * \n * @Deprecated("Use sumOf instead.")\n * ReplaceWith("this.sumOf(selector)")\n * @DeprecatedSinceKotlin(warningSince = "1.5")\n * public inline fun <T> Iterable<T>.sumBy(selector: (T) -> Int): Int {\n var sum: Int = 0\n for (element in this) {\n sum += selector(element)\n }\n return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function

applied to each element in the collection.

```

*\/n@Deprecated(\n *\/n@Deprecated(\n"Use sumOf instead.\n",
ReplaceWith(\n"this.sumOf(selector)\n"))n@DeprecatedSinceKotlin(warningSince = \n"1.5\n")npublic inline fun <T>
Iterable<T>.sumByDouble(selector: (T) -> Double): Double {\n  var sum: Double = 0.0\n  for (element in this)
{\n    sum += selector(element)\n  }\n  return sum\n}\n\n**\/n * Returns the sum of all values produced by
[selector] function applied to each element in the collection.\n
*\/n@SinceKotlin(\n"1.4\n")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@kotlin.jvm.JvmName(\n"sumOfDouble\n")n@kotlin.internal.InlineOnlynpublic inline fun
<T> Iterable<T>.sumOf(selector: (T) -> Double): Double {\n  var sum: Double = 0.toDouble()\n  for (element in
this) {\n    sum += selector(element)\n  }\n  return sum\n}\n\n**\/n * Returns the sum of all values produced by
[selector] function applied to each element in the collection.\n
*\/n@SinceKotlin(\n"1.4\n")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@kotlin.jvm.JvmName(\n"sumOfInt\n")n@kotlin.internal.InlineOnlynpublic inline fun <T>
Iterable<T>.sumOf(selector: (T) -> Int): Int {\n  var sum: Int = 0.toInt()\n  for (element in this) {\n    sum +=
selector(element)\n  }\n  return sum\n}\n\n**\/n * Returns the sum of all values produced by [selector] function
applied to each element in the collection.\n
*\/n@SinceKotlin(\n"1.4\n")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@kotlin.jvm.JvmName(\n"sumOfLong\n")n@kotlin.internal.InlineOnlynpublic inline fun
<T> Iterable<T>.sumOf(selector: (T) -> Long): Long {\n  var sum: Long = 0.toLong()\n  for (element in this) {\n
sum += selector(element)\n  }\n  return sum\n}\n\n**\/n * Returns the sum of all values produced by [selector]
function applied to each element in the collection.\n
*\/n@SinceKotlin(\n"1.5\n")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@kotlin.jvm.JvmName(\n"sumOfUInt\n")n@WasExperimental(ExperimentalUnsignedType
s::class)n@kotlin.internal.InlineOnlynpublic inline fun <T> Iterable<T>.sumOf(selector: (T) -> UInt): UInt {\n
var sum: UInt = 0.toUInt()\n  for (element in this) {\n    sum += selector(element)\n  }\n  return
sum\n}\n\n**\/n * Returns the sum of all values produced by [selector] function applied to each element in the
collection.\n
*\/n@SinceKotlin(\n"1.5\n")n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)n@OverloadResolution
ByLambdaReturnTypen@kotlin.jvm.JvmName(\n"sumOfULong\n")n@WasExperimental(ExperimentalUnsignedTy
pes::class)n@kotlin.internal.InlineOnlynpublic inline fun <T> Iterable<T>.sumOf(selector: (T) -> ULong): ULong
{\n  var sum: ULong = 0.toULong()\n  for (element in this) {\n    sum += selector(element)\n  }\n  return
sum\n}\n\n**\/n * Returns an original collection containing all the non-`null` elements, throwing an
[IllegalArgumentException] if there are any `null` elements.\n *\/npublic fun <T : Any>
Iterable<T?>.requireNotNulls(): Iterable<T> {\n  for (element in this) {\n    if (element == null) {\n      throw
IllegalArgumentException(\n"null element found in $this.\n")\n    }\n  }\n  @Suppress(\n"UNCHECKED_CAST\n")\n  return this as Iterable<T>\n}\n\n**\/n * Returns an original collection
containing all the non-`null` elements, throwing an [IllegalArgumentException] if there are any `null` elements.\n
*\/npublic fun <T : Any> List<T?>.requireNotNulls(): List<T> {\n  for (element in this) {\n    if (element ==
null) {\n      throw IllegalArgumentException(\n"null element found in $this.\n")\n    }\n  }\n  @Suppress(\n"UNCHECKED_CAST\n")\n  return this as List<T>\n}\n\n**\/n * Splits this collection into a list of
lists each not exceeding the given [size].\n *\/n * The last list in the resulting list may have fewer elements than the
given [size].\n *\/n * @param size the number of elements to take in each list, must be positive and can be greater
than the number of elements in this collection.\n *\/n * @sample
samples.collections.Collections.Transformations.chunked\n *\/n@SinceKotlin(\n"1.2\n")npublic fun <T>
Iterable<T>.chunked(size: Int): List<List<T>> {\n  return windowed(size, size, partialWindows = true)\n}\n\n**\/n
* Splits this collection into several lists each not exceeding the given [size]\n * and applies the given [transform]
function to an each.\n *\/n * @return list of results of the [transform] applied to an each list.\n *\/n * Note that the
list passed to the [transform] function is ephemeral and is valid only inside that function.\n *\/n * You should not store it
or allow it to escape in some way, unless you made a snapshot of it.\n *\/n * The last list may have fewer elements than

```

the given [size].\n * \n * @param size the number of elements to take in each list, must be positive and can be greater than the number of elements in this collection.\n * \n * @sample samples.text.Strings.chunkedTransform\n * \n * @SinceKotlin("1.2")\n public fun <T, R> Iterable<T>.chunked(size: Int, transform: (List<T>) -> R): List<R> {\n * \n * return windowed(size, size, partialWindows = true, transform = transform)\n * \n * \n * Returns a list containing all elements of the original collection without the first occurrence of the given [element].\n * \n * \n * public operator fun <T> Iterable<T>.minus(element: T): List<T> {\n * \n * val result = ArrayList<T>(collectionSizeOrDefault(10))\n * \n * var removed = false\n * \n * return this.filterTo(result) { if (!removed && it == element) { removed = true; false } else true }\n * \n * \n * Returns a list containing all elements of the original collection except the elements contained in the given [elements] array.\n * \n * \n * Before Kotlin 1.6, the [elements] array may have been converted to a [HashSet] to speed up the operation, thus the elements were required to have\n * \n * a correct and stable implementation of `hashCode()` that didn't change between successive invocations.\n * \n * On JVM, you can enable this behavior back with the system property `kotlin.collections.convert_arg_to_set_in_removeAll` set to `true`.\n * \n * \n * public operator fun <T> Iterable<T>.minus(elements: Array<out T>): List<T> {\n * \n * if (elements.isEmpty()) return this.toList()\n * \n * val other = elements.convertToSetForSetOperation()\n * \n * return this.filterNot { it in other }\n * \n * \n * Returns a list containing all elements of the original collection except the elements contained in the given [elements] collection.\n * \n * \n * Before Kotlin 1.6, the [elements] collection may have been converted to a [HashSet] to speed up the operation, thus the elements were required to have\n * \n * a correct and stable implementation of `hashCode()` that didn't change between successive invocations.\n * \n * On JVM, you can enable this behavior back with the system property `kotlin.collections.convert_arg_to_set_in_removeAll` set to `true`.\n * \n * \n * public operator fun <T> Iterable<T>.minus(elements: Iterable<T>): List<T> {\n * \n * val other = elements.convertToSetForSetOperationWith(this)\n * \n * if (other.isEmpty())\n * \n * return this.toList()\n * \n * return this.filterNot { it in other }\n * \n * \n * Returns a list containing all elements of the original collection except the elements contained in the given [elements] sequence.\n * \n * \n * Before Kotlin 1.6, the [elements] sequence may have been converted to a [HashSet] to speed up the operation, thus the elements were required to have\n * \n * a correct and stable implementation of `hashCode()` that didn't change between successive invocations.\n * \n * On JVM, you can enable this behavior back with the system property `kotlin.collections.convert_arg_to_set_in_removeAll` set to `true`.\n * \n * \n * public operator fun <T> Iterable<T>.minus(elements: Sequence<T>): List<T> {\n * \n * val other = elements.convertToSetForSetOperation()\n * \n * if (other.isEmpty())\n * \n * return this.toList()\n * \n * return this.filterNot { it in other }\n * \n * \n * Returns a list containing all elements of the original collection without the first occurrence of the given [element].\n * \n * \n * @kotlin.internal.InlineOnly\n * \n * public inline fun <T> Iterable<T>.minusElement(element: T): List<T> {\n * \n * return minus(element)\n * \n * \n * Splits the original collection into pair of lists,\n * \n * where *first* list contains elements for which [predicate] yielded `true`,\n * \n * while *second* list contains elements for which [predicate] yielded `false`.\n * \n * \n * @sample samples.collections.Iterables.Operations.partition\n * \n * \n * public inline fun <T> Iterable<T>.partition(predicate: (T) -> Boolean): Pair<List<T>, List<T>> {\n * \n * val first = ArrayList<T>()\n * \n * val second = ArrayList<T>()\n * \n * for (element in this) {\n * \n * if (predicate(element)) {\n * \n * first.add(element)\n * \n * } else {\n * \n * second.add(element)\n * \n * }\n * \n * }\n * \n * return Pair(first, second)\n * \n * \n * Returns a list containing all elements of the original collection and then the given [element].\n * \n * \n * public operator fun <T> Iterable<T>.plus(element: T): List<T> {\n * \n * if (this is Collection) return this.plus(element)\n * \n * val result = ArrayList<T>()\n * \n * result.addAll(this)\n * \n * result.add(element)\n * \n * return result\n * \n * \n * Returns a list containing all elements of the original collection and then the given [element].\n * \n * \n * public operator fun <T> Collection<T>.plus(element: T): List<T> {\n * \n * val result = ArrayList<T>(size + 1)\n * \n * result.addAll(this)\n * \n * result.add(element)\n * \n * return result\n * \n * \n * Returns a list containing all elements of the original collection and then all elements of the given [elements] array.\n * \n * \n * public operator fun <T> Iterable<T>.plus(elements: Array<out T>): List<T> {\n * \n * if (this is Collection) return this.plus(elements)\n * \n * val result = ArrayList<T>()\n * \n * result.addAll(this)\n * \n * result.addAll(elements)\n * \n * return result\n * \n * \n * Returns a list containing all elements of the original collection and then all elements of the given [elements] array.\n * \n * \n * public operator fun <T>

```

Collection<T>.plus(elements: Array<out T>): List<T> {\n  val result = ArrayList<T>(this.size + elements.size)\n
result.addAll(this)\n  result.addAll(elements)\n  return result\n}\n\n/**\n * Returns a list containing all elements
of the original collection and then all elements of the given [elements] collection.\n */\npublic operator fun <T>
Iterable<T>.plus(elements: Iterable<T>): List<T> {\n  if (this is Collection) return this.plus(elements)\n  val
result = ArrayList<T>()\n  result.addAll(this)\n  result.addAll(elements)\n  return result\n}\n\n/**\n * Returns a
list containing all elements of the original collection and then all elements of the given [elements] collection.\n
*/\npublic operator fun <T> Collection<T>.plus(elements: Iterable<T>): List<T> {\n  if (elements is Collection)
{\n    val result = ArrayList<T>(this.size + elements.size)\n    result.addAll(this)\n
result.addAll(elements)\n    return result\n  } else {\n    val result = ArrayList<T>(this)\n
result.addAll(elements)\n    return result\n  }\n}\n\n/**\n * Returns a list containing all elements of the original
collection and then all elements of the given [elements] sequence.\n */\npublic operator fun <T>
Iterable<T>.plus(elements: Sequence<T>): List<T> {\n  val result = ArrayList<T>()\n  result.addAll(this)\n
result.addAll(elements)\n  return result\n}\n\n/**\n * Returns a list containing all elements of the original
collection and then all elements of the given [elements] sequence.\n */\npublic operator fun <T>
Collection<T>.plus(elements: Sequence<T>): List<T> {\n  val result = ArrayList<T>(this.size + 10)\n
result.addAll(this)\n  result.addAll(elements)\n  return result\n}\n\n/**\n * Returns a list containing all elements
of the original collection and then the given [element].\n */\n@kotlin.internal.InlineOnly\npublic inline fun <T>
Iterable<T>.plusElement(element: T): List<T> {\n  return plus(element)\n}\n\n/**\n * Returns a list containing all
elements of the original collection and then the given [element].\n */\n@kotlin.internal.InlineOnly\npublic inline fun
<T> Collection<T>.plusElement(element: T): List<T> {\n  return plus(element)\n}\n\n/**\n * Returns a list of
snapshots of the window of the given [size]\n * sliding along this collection with the given [step], where each\n *
snapshot is a list.\n * \n * Several last lists may have fewer elements than the given [size].\n * \n * Both [size] and
[step] must be positive and can be greater than the number of elements in this collection.\n * @param size the
number of elements to take in each window\n * @param step the number of elements to move the window forward
by on an each step, by default 1\n * @param partialWindows controls whether or not to keep partial windows in the
end if any,\n * by default `false` which means partial windows won't be preserved\n * \n * @sample
samples.collections.Sequences.Transformations.takeWindows\n */\n@SinceKotlin("1.2")\npublic fun <T>
Iterable<T>.windowed(size: Int, step: Int = 1, partialWindows: Boolean = false): List<List<T>> {\n
checkWindowSizeStep(size, step)\n  if (this is RandomAccess && this is List) {\n    val thisSize = this.size\n
val resultCapacity = thisSize / step + if (thisSize % step == 0) 0 else 1\n    val result =
ArrayList<List<T>>(resultCapacity)\n    var index = 0\n    while (index in 0 until thisSize) {\n      val
windowSize = size.coerceAtMost(thisSize - index)\n      if (windowSize < size && !partialWindows) break\n
result.add(List(windowSize) { this[it + index] })\n      index += step\n    }\n    return result\n  }\n  val
result = ArrayList<List<T>>()\n  windowedIterator(iterator(), size, step, partialWindows, reuseBuffer =
false).forEach {\n    result.add(it)\n  }\n  return result\n}\n\n/**\n * Returns a list of results of applying the
given [transform] function to\n * an each list representing a view over the window of the given [size]\n * sliding
along this collection with the given [step].\n * \n * Note that the list passed to the [transform] function is ephemeral
and is valid only inside that function.\n * You should not store it or allow it to escape in some way, unless you made
a snapshot of it.\n * Several last lists may have fewer elements than the given [size].\n * \n * Both [size] and [step]
must be positive and can be greater than the number of elements in this collection.\n * @param size the number of
elements to take in each window\n * @param step the number of elements to move the window forward by on an
each step, by default 1\n * @param partialWindows controls whether or not to keep partial windows in the end if
any,\n * by default `false` which means partial windows won't be preserved\n * \n * @sample
samples.collections.Sequences.Transformations.averageWindows\n */\n@SinceKotlin("1.2")\npublic fun <T, R>
Iterable<T>.windowed(size: Int, step: Int = 1, partialWindows: Boolean = false, transform: (List<T>) -> R):
List<R> {\n  checkWindowSizeStep(size, step)\n  if (this is RandomAccess && this is List) {\n    val thisSize =
this.size\n    val resultCapacity = thisSize / step + if (thisSize % step == 0) 0 else 1\n    val result =
ArrayList<R>(resultCapacity)\n    val window = MovingSubList(this)\n    var index = 0\n    while (index in 0

```

```

until thisSize) {\n        val windowSize = size.coerceAtMost(thisSize - index)\n        if (!partialWindows &&
windowSize < size) break\n        window.move(index, index + windowSize)\n
result.add(transform(window))\n        index += step\n    }\n    return result\n }\n    val result =
ArrayList<R>()\n    windowedIterator(iterator(), size, step, partialWindows, reuseBuffer = true).forEach {\n
result.add(transform(it))\n    }\n    return result\n}\n\n/**\n * Returns a list of pairs built from the elements of `this`
collection and the [other] array with the same index.\n * The returned list has length of the shortest collection.\n * \n
* @sample samples.collections.Iterables.Operations.zipIterable\n */\npublic infix fun <T, R> Iterable<T>.zip(other:
Array<out R>): List<Pair<T, R>> {\n    return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of values
built from the elements of `this` collection and the [other] array with the same index\n * using the provided
[transform] function applied to each pair of elements.\n * The returned list has length of the shortest collection.\n * \n
* @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n */\npublic inline fun <T, R, V>
Iterable<T>.zip(other: Array<out R>, transform: (a: T, b: R) -> V): List<V> {\n    val arraySize = other.size\n    val
list = ArrayList<V>(minOf(collectionSizeOrDefault(10), arraySize))\n    var i = 0\n    for (element in this) {\n        if
(i >= arraySize) break\n        list.add(transform(element, other[i++]))\n    }\n    return list\n}\n\n/**\n * Returns a list
of pairs built from the elements of `this` collection and [other] collection with the same index.\n * The returned list
has length of the shortest collection.\n * \n
* @sample samples.collections.Iterables.Operations.zipIterable\n */\npublic infix fun <T, R> Iterable<T>.zip(other: Iterable<R>): List<Pair<T, R>> {\n    return zip(other) { t1, t2 ->
t1 to t2 }\n}\n\n/**\n * Returns a list of values built from the elements of `this` collection and the [other] collection
with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned
list has length of the shortest collection.\n * \n
* @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n */\npublic inline fun <T, R, V>
Iterable<T>.zip(other: Iterable<R>, transform: (a: T, b: R) -> V): List<V> {\n    val first = iterator()\n    val second
= other.iterator()\n    val list = ArrayList<V>(minOf(collectionSizeOrDefault(10),
other.collectionSizeOrDefault(10)))\n    while (first.hasNext() && second.hasNext()) {\n
list.add(transform(first.next(), second.next()))\n    }\n    return list\n}\n\n/**\n * Returns a list of pairs of each two
adjacent elements in this collection.\n * \n
* The returned list is empty if this collection contains less than two
elements.\n * \n
* @sample samples.collections.Collections.Transformations.zipWithNext\n
*/\n@SinceKotlin("1.2")\npublic fun <T> Iterable<T>.zipWithNext(): List<Pair<T, T>> {\n    return zipWithNext
{ a, b -> a to b }\n}\n\n/**\n * Returns a list containing the results of applying the given [transform] function\n * to
an each pair of two adjacent elements in this collection.\n * \n
* The returned list is empty if this collection contains
less than two elements.\n * \n
* @sample
samples.collections.Collections.Transformations.zipWithNextToFindDeltas\n */\n@SinceKotlin("1.2")\npublic
inline fun <T, R> Iterable<T>.zipWithNext(transform: (a: T, b: T) -> R): List<R> {\n    val iterator = iterator()\n    if
(!iterator.hasNext()) return emptyList()\n    val result = mutableListOf<R>()\n    var current = iterator.next()\n
while (iterator.hasNext()) {\n        val next = iterator.next()\n        result.add(transform(current, next))\n        current
= next\n    }\n    return result\n}\n\n/**\n * Appends the string from all the elements separated using [separator] and
using the given [prefix] and [postfix] if supplied.\n * \n
* If the collection could be huge, you can specify a non-
negative value of [limit], in which case only the first [limit]\n * elements will be appended, followed by the
[truncated] string (which defaults to `"...`").\n * \n
* @sample
samples.collections.Collections.Transformations.joinTo\n */\npublic fun <T, A : Appendable>
Iterable<T>.joinTo(buffer: A, separator: CharSequence = ``, prefix: CharSequence = ``, postfix: CharSequence
= ``, limit: Int = -1, truncated: CharSequence = `"...`", transform: ((T) -> CharSequence)? = null): A {\n
buffer.append(prefix)\n    var count = 0\n    for (element in this) {\n        if (++count > 1) buffer.append(separator)\n
        if (limit < 0 || count <= limit) {\n            buffer.appendElement(element, transform)\n        } else break\n    }\n    if
(limit >= 0 && count > limit) buffer.append(truncated)\n    buffer.append(postfix)\n    return buffer\n}\n\n/**\n *
Creates a string from all the elements separated using [separator] and using the given [prefix] and [postfix] if
supplied.\n * \n
* If the collection could be huge, you can specify a non-negative value of [limit], in which case only
the first [limit]\n * elements will be appended, followed by the [truncated] string (which defaults to `"...`").\n * \n
*

```



```

@sample samples.collections.Collections.Transformations.joinToString\n *^\\npublic fun <T>
Iterable<T>.joinToString(separator: CharSequence = \", \", prefix: CharSequence = \"\", postfix: CharSequence =
\"\", limit: Int = -1, truncated: CharSequence = \"...\", transform: ((T) -> CharSequence)? = null): String {\n    return
joinTo(StringBuilder(), separator, prefix, postfix, limit, truncated, transform).toString()\n}\n\n/**\n * Returns this
collection as an [Iterable].\n */\n@kotlin.internal.InlineOnly\npublic inline fun <T> Iterable<T>.asIterable():
Iterable<T> {\n    return this\n}\n\n/**\n * Creates a [Sequence] instance that wraps the original collection returning
its elements when being iterated.\n */\n * @sample
samples.collections.Sequences.Building.sequenceFromCollection\n *^\\npublic fun <T> Iterable<T>.asSequence():
Sequence<T> {\n    return Sequence { this.iterator() }\n}\n\n/**\n * Returns an average value of elements in the
collection.\n */\n@kotlin.jvm.JvmName(\"averageOfByte\")\npublic fun Iterable<Byte>.average(): Double {\n    var
sum: Double = 0.0\n    var count: Int = 0\n    for (element in this) {\n        sum += element\n
checkCountOverflow(++count)\n    }\n    return if (count == 0) Double.NaN else sum / count\n}\n\n/**\n * Returns
an average value of elements in the collection.\n */\n@kotlin.jvm.JvmName(\"averageOfShort\")\npublic fun
Iterable<Short>.average(): Double {\n    var sum: Double = 0.0\n    var count: Int = 0\n    for (element in this) {\n
sum += element\n    checkCountOverflow(++count)\n    }\n    return if (count == 0) Double.NaN else sum /
count\n}\n\n/**\n * Returns an average value of elements in the collection.\n */\n@kotlin.jvm.JvmName(\"averageOfInt\")\npublic fun Iterable<Int>.average(): Double {\n    var sum: Double =
0.0\n    var count: Int = 0\n    for (element in this) {\n        sum += element\n        checkCountOverflow(++count)\n
}\n    return if (count == 0) Double.NaN else sum / count\n}\n\n/**\n * Returns an average value of elements in the
collection.\n */\n@kotlin.jvm.JvmName(\"averageOfLong\")\npublic fun Iterable<Long>.average(): Double {\n
var sum: Double = 0.0\n    var count: Int = 0\n    for (element in this) {\n        sum += element\n
checkCountOverflow(++count)\n    }\n    return if (count == 0) Double.NaN else sum / count\n}\n\n/**\n * Returns
an average value of elements in the collection.\n */\n@kotlin.jvm.JvmName(\"averageOfFloat\")\npublic fun
Iterable<Float>.average(): Double {\n    var sum: Double = 0.0\n    var count: Int = 0\n    for (element in this) {\n
sum += element\n    checkCountOverflow(++count)\n    }\n    return if (count == 0) Double.NaN else sum /
count\n}\n\n/**\n * Returns an average value of elements in the collection.\n */\n@kotlin.jvm.JvmName(\"averageOfDouble\")\npublic fun Iterable<Double>.average(): Double {\n    var sum:
Double = 0.0\n    var count: Int = 0\n    for (element in this) {\n        sum += element\n
checkCountOverflow(++count)\n    }\n    return if (count == 0) Double.NaN else sum / count\n}\n\n/**\n * Returns
the sum of all elements in the collection.\n */\n@kotlin.jvm.JvmName(\"sumOfByte\")\npublic fun
Iterable<Byte>.sum(): Int {\n    var sum: Int = 0\n    for (element in this) {\n        sum += element\n    }\n    return
sum\n}\n\n/**\n * Returns the sum of all elements in the collection.\n */\n@kotlin.jvm.JvmName(\"sumOfShort\")\npublic fun Iterable<Short>.sum(): Int {\n    var sum: Int = 0\n    for
(element in this) {\n        sum += element\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all elements in the
collection.\n */\n@kotlin.jvm.JvmName(\"sumOfInt\")\npublic fun Iterable<Int>.sum(): Int {\n    var sum: Int = 0\n    for
(element in this) {\n        sum += element\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all elements in
the collection.\n */\n@kotlin.jvm.JvmName(\"sumOfLong\")\npublic fun Iterable<Long>.sum(): Long {\n    var
sum: Long = 0L\n    for (element in this) {\n        sum += element\n    }\n    return sum\n}\n\n/**\n * Returns the
sum of all elements in the collection.\n */\n@kotlin.jvm.JvmName(\"sumOfFloat\")\npublic fun
Iterable<Float>.sum(): Float {\n    var sum: Float = 0.0f\n    for (element in this) {\n        sum += element\n    }\n
return sum\n}\n\n/**\n * Returns the sum of all elements in the collection.\n */\n@kotlin.jvm.JvmName(\"sumOfDouble\")\npublic fun Iterable<Double>.sum(): Double {\n    var sum: Double
= 0.0\n    for (element in this) {\n        sum += element\n    }\n    return sum\n}\n\n/**\n * Copyright 2010-2018
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.collections\n\nimport
kotlin.comparisons.naturalOrder\n\nimport kotlin.random.Random\n\n/**\n * Returns the array if it's not `null`, or an
empty array otherwise.\n */\n * @sample samples.collections.Arrays.Usage.arrayOrEmpty\n
*/\n@kotlin.internal.InlineOnly\npublic actual inline fun <T> Array<out T>?.orEmpty(): Array<out T> = this ?

```

```

emptyArray<T>()\n\n/**\n * Returns a *typed* array containing all of the elements of this collection.\n *\n * Allocates an array of runtime type `T` having its size equal to the size of this collection\n * and populates the array with the elements of this collection.\n * @sample
samples.collections.Collections.Collections.collectionToTypedArray\n */\n@kotlin.internal.InlineOnly\npublic
actual inline fun <T> Collection<T>.toArray(): Array<T> =
copyToArray(this)\n\n@JsName("copyToArray")\n@PublishedApi\ninternal fun <T> copyToArray(collection:
Collection<T>): Array<T> {\n    return if (collection.asDynamic().toArray !== undefined)\n        collection.asDynamic().toArray().unsafeCast<Array<T>>()\n    else\n        copyToArrayImpl(collection).unsafeCast<Array<T>>()\n}\n\n@JsName("copyToArrayImpl")\ninternal actual fun
copyToArrayImpl(collection: Collection<*>): Array<Any?> {\n    val array = emptyArray<Any?>()\n    val iterator
= collection.iterator()\n    while (iterator.hasNext())\n        array.asDynamic().push(iterator.next())\n    return
array\n}\n\n@JsName("copyToExistingArrayImpl")\ninternal actual fun <T> copyToArrayImpl(collection:
Collection<*>, array: Array<T>): Array<T> {\n    if (array.size < collection.size)\n        return
copyToArrayImpl(collection).unsafeCast<Array<T>>()\n    val iterator = collection.iterator()\n    var index = 0\n    while (iterator.hasNext()) {\n        array[index++] = iterator.next().unsafeCast<T>()\n    }\n    if (index < array.size)\n        {\n            array[index] = null.unsafeCast<T>()\n        }\n    return array\n}\n\n\n/**\n * Returns an immutable list
containing only the specified object [element].\n *\npublic fun <T> listOf(element: T): List<T> =
arrayListOf(element)\n\n@PublishedApi\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\ninternal actual
inline fun <E> buildListInternal(builderAction: MutableList<E>().->Unit): List<E> {\n    return
ArrayList<E>().apply(builderAction).build()\n}\n\n@PublishedApi\n@SinceKotlin("1.3")\n@kotlin.internal.Inlin
eOnly\ninternal actual inline fun <E> buildListInternal(capacity: Int, builderAction: MutableList<E>().->Unit):
List<E> {\n    checkBuilderCapacity(capacity)\n    return
ArrayList<E>(capacity).apply(builderAction).build()\n}\n\n\n/**\n * Returns an immutable set containing only the
specified object [element].\n *\npublic fun <T> setOf(element: T): Set<T> =
hashSetOf(element)\n\n@PublishedApi\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\ninternal actual inline
fun <E> buildSetInternal(builderAction: MutableSet<E>().->Unit): Set<E> {\n    return
LinkedHashSet<E>().apply(builderAction).build()\n}\n\n@PublishedApi\n@SinceKotlin("1.3")\n@kotlin.internal.
InlineOnly\ninternal actual inline fun <E> buildSetInternal(capacity: Int, builderAction: MutableSet<E>().->Unit):
Set<E> {\n    return LinkedHashSet<E>(capacity).apply(builderAction).build()\n}\n\n\n/**\n * Returns an
immutable map, mapping only the specified key to the\n * specified value.\n *\npublic fun <K, V> mapOf(pair:
Pair<K, V>): Map<K, V> =
hashMapOf(pair)\n\n@PublishedApi\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\ninternal actual inline
fun <K, V> buildMapInternal(builderAction: MutableMap<K, V>().->Unit): Map<K, V> {\n    return
LinkedHashMap<K,
V>().apply(builderAction).build()\n}\n\n@PublishedApi\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\ninte
rnal actual inline fun <K, V> buildMapInternal(capacity: Int, builderAction: MutableMap<K, V>().->Unit):
Map<K, V> {\n    return LinkedHashMap<K, V>(capacity).apply(builderAction).build()\n}\n\n\n/**\n * Fills the
list with the provided [value].\n *\n * Each element in the list gets replaced with the [value].\n
*\n\n@SinceKotlin("1.2")\npublic actual fun <T> MutableList<T>.fill(value: T): Unit {\n    for (index in
0..lastIndex) {\n        this[index] = value\n    }\n}\n\n\n/**\n * Randomly shuffles elements in this list.\n *\n * See:
https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\_shuffle#The\_modern\_algorithm\n
*\n\n@SinceKotlin("1.2")\npublic actual fun <T> MutableList<T>.shuffle(): Unit = shuffle(Random)\n}\n\n\n/**\n * Returns a new list with the elements of this list randomly shuffled.\n *\n@SinceKotlin("1.2")\npublic actual fun
<T> Iterable<T>.shuffled(): List<T> = toMutableList().apply { shuffle() }\n}\n\n\n/**\n * Sorts elements in the list in-
place according to their natural sort order.\n *\n * The sort is _stable_. It means that equal elements preserve their
order relative to each other after sorting.\n *\n * @sample samples.collections.Collections.Sorting.sortMutableList\n
*\n\npublic actual fun <T : Comparable<T>> MutableList<T>.sort(): Unit {\n    collectionsSort(this,
naturalOrder())\n}\n\n\n/**\n * Sorts elements in the list in-place according to the order specified with [comparator].\n

```

```

*\n * The sort is _stable_. It means that equal elements preserve their order relative to each other after sorting.\n *\n
* @sample samples.collections.Collections.Sorting.sortMutableListWith\n *^\npublic actual fun <T>
MutableList<T>.sortWith(comparator: Comparator<in T>): Unit {\n  collectionsSort(this,
comparator)\n}\n\nprivate fun <T> collectionsSort(list: MutableList<T>, comparator: Comparator<in T>) {\n  if
(list.size <= 1) return\n\n  val array = copyToArray(list)\n  sortArrayWith(array, comparator)\n\n  for (i in 0 until
array.size) {\n    list[i] = array[i]\n  }\n}\n\ninternal actual fun <T> arrayOfNulls(reference: Array<T>, size: Int):
Array<T> {\n  return
arrayOfNulls<Any>(size).unsafeCast<Array<T>>()\n}\n\n@SinceKotlin("1.3")\n@PublishedApi\n@JsName("arrayCopy")\ninternal fun <T> arrayCopy(source: Array<out T>, destination: Array<in T>, destinationOffset: Int,
startIndex: Int, endIndex: Int) {\n  AbstractList.checkRangeIndexes(startIndex, endIndex, source.size)\n  val
rangeSize = endIndex - startIndex\n  AbstractList.checkRangeIndexes(destinationOffset, destinationOffset +
rangeSize, destination.size)\n\n  if (js("ArrayBuffer").isView(destination) &&
js("ArrayBuffer").isView(source)) {\n    val subrange = source.asDynamic().subarray(startIndex, endIndex)\n
destination.asDynamic().set(subrange, destinationOffset)\n  } else {\n    if (source !== destination ||
destinationOffset <= startIndex) {\n      for (index in 0 until rangeSize) {\n
destination[destinationOffset + index] = source[startIndex + index]\n      }\n    } else {\n      for (index in
rangeSize - 1 downTo 0) {\n        destination[destinationOffset + index] = source[startIndex + index]\n
      }\n    }\n  }\n}\n\n// no singleton map implementation in js, return map as
is\n@Suppress("NOTHING_TO_INLINE")\ninternal actual inline fun <K, V> Map<K,
V>.toSingletonMapOrSelf(): Map<K, V> = this\n\n@Suppress("NOTHING_TO_INLINE")\ninternal actual inline
fun <K, V> Map<out K, V>.toSingletonMap(): Map<K, V> =
this.toMutableMap()\n\n@Suppress("NOTHING_TO_INLINE")\ninternal actual inline fun <T> Array<out
T>.copyToArrayOfAny(isVarargs: Boolean): Array<out Any?> =\n  if (isVarargs)\n    // no need to copy vararg
array in JS\n    this\n  else\n    this.copyOf()\n\n\n@PublishedApi\ninternal actual fun
checkIndexOverflow(index: Int): Int {\n  if (index < 0) {\n    throwIndexOverflow()\n  }\n  return
index\n}\n\n@PublishedApi\ninternal actual fun checkCountOverflow(count: Int): Int {\n  if (count < 0) {\n
throwCountOverflow()\n  }\n  return count\n}\n\n\n**\n * JS map and set implementations do not make use of
capacities or load factors.\n *^\n@PublishedApi\ninternal actual fun mapCapacity(expectedSize: Int) =
expectedSize\n\n\n**\n * Checks a collection builder function capacity argument.\n * In JS no validation is made in
Map/Set constructor yet.\n *^\n@SinceKotlin("1.3")\n@PublishedApi\ninternal fun
checkBuilderCapacity(capacity: Int) {\n  require(capacity >= 0) { "capacity must be non-negative."
}\n}\n\n\ninternal actual fun brittleContainsOptimizationEnabled(): Boolean = false", "/*\n * Copyright 2010-2018
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("CollectionsKt")\n\npackage
kotlin.collections\n\n\n**\n * Returns the given iterator itself. This allows to use an instance of iterator in a `for`
loop.\n * @sample samples.collections.Iterators.iterator\n *^\n@kotlin.internal.InlineOnly\npublic inline operator
fun <T> Iterator<T>.iterator(): Iterator<T> = this\n\n\n**\n * Returns an [Iterator] that wraps each element produced
by the original iterator\n * into an [IndexedValue] containing the index of that element and the element itself.\n *\n
* @sample samples.collections.Iterators.withIndexIterator\n *^\npublic fun <T> Iterator<T>.withIndex():
Iterator<IndexedValue<T>> = IndexingIterator(this)\n\n\n**\n * Performs the given [operation] on each element of
this [Iterator].\n * @sample samples.collections.Iterators.forEachIterator\n *^\npublic inline fun <T>
Iterator<T>.forEach(operation: (T) -> Unit): Unit {\n  for (element in this) operation(element)\n}\n\n\n**\n *
Iterator transforming original `iterator` into iterator of [IndexedValue], counting index from zero.\n *\n\ninternal class
IndexingIterator<out T>(private val iterator: Iterator<T>) : Iterator<IndexedValue<T>> {\n  private var index =
0\n  final override fun hasNext(): Boolean = iterator.hasNext()\n  final override fun next(): IndexedValue<T> =
IndexedValue(checkIndexOverflow(index++), iterator.next())\n}\n\n", "/*\n * Copyright 2010-2021 JetBrains s.r.o.
and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license

```

that can be found in the license/LICENSE.txt file.\n

```
*\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("\nComparisonsKt")\n\npackage\nkotlin.comparisons\n\n/\n\n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt\n// See:\nhttps://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\n/\n\nimport kotlin.random.*\n\n/**\n * Returns the\n greater of two values.\n * \n * If values are equal, returns the first one.\n */\n@SinceKotlin("1.1")\npublic expect\nfun <T : Comparable<T>> maxOf(a: T, b: T): T\n\n/**\n * Returns the greater of two values.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline fun maxOf(a: Byte, b: Byte):\nByte\n\n/**\n * Returns the greater of two values.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline fun maxOf(a: Short, b: Short): Short\n\n/**\n * Returns the greater of two values.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline fun maxOf(a: Int, b: Int): Int\n\n/**\n * Returns the greater of two values.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline fun maxOf(a: Long, b: Long): Long\n\n/**\n * Returns the greater of two values.\n * \n * If either value is `NaN`,\n returns `NaN`.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline fun maxOf(a: Float, b: Float): Float\n\n/**\n * Returns the greater of two values.\n * \n * If either value is `NaN`, returns `NaN`.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline fun maxOf(a: Double, b: Double):\nDouble\n\n/**\n * Returns the greater of three values.\n * \n * If there are multiple equal maximal values, returns the\n first of them.\n */\n@SinceKotlin("1.1")\npublic expect fun <T : Comparable<T>> maxOf(a: T, b: T, c: T):\nT\n\n/**\n * Returns the greater of three values.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline fun maxOf(a: Byte, b: Byte, c: Byte): Byte\n\n/**\n * Returns the greater of three values.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline fun maxOf(a: Short, b: Short, c:\nShort): Short\n\n/**\n * Returns the greater of three values.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline fun maxOf(a: Int, b: Int, c: Int):\nInt\n\n/**\n * Returns the greater of three values.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline fun maxOf(a: Long, b: Long, c: Long): Long\n\n/**\n * Returns the greater of three values.\n * \n * If any value is `NaN`, returns `NaN`.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline fun maxOf(a: Float, b: Float, c: Float): Float\n\n/**\n * Returns the greater of three values.\n * \n * If any value is\n `NaN`, returns `NaN`.\n */\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic expect inline fun maxOf(a: Double, b: Double, c: Double): Double\n\n/**\n * Returns the greater of three values according to the order\n specified by the given [comparator].\n * \n * If there are multiple equal maximal values, returns the first of them.\n */\n@SinceKotlin("1.1")\npublic fun <T> maxOf(a: T, b: T, c: T, comparator: Comparator<in T>): T {\n    return\n maxOf(a, maxOf(b, c, comparator), comparator)\n}\n\n/**\n * Returns the greater of two values according to the\n order specified by the given [comparator].\n * \n * If values are equal, returns the first one.\n */\n@SinceKotlin("1.1")\npublic fun <T> maxOf(a: T, b: T, comparator: Comparator<in T>): T {\n    return if\n (comparator.compare(a, b) >= 0) a else b\n}\n\n/**\n * Returns the greater of the given values.\n * \n * If there are\n multiple equal maximal values, returns the first of them.\n */\n@SinceKotlin("1.4")\npublic expect fun <T : Comparable<T>> maxOf(a: T, vararg other: T): T\n\n/**\n * Returns the greater of the given values.\n */\n@SinceKotlin("1.4")\npublic expect fun maxOf(a: Byte, vararg other: Byte): Byte\n\n/**\n * Returns the\n greater of the given values.\n */\n@SinceKotlin("1.4")\npublic expect fun maxOf(a: Short, vararg other: Short):\nShort\n\n/**\n * Returns the greater of the given values.\n */\n@SinceKotlin("1.4")\npublic expect fun maxOf(a: Int, vararg other: Int): Int\n\n/**\n * Returns the greater of the given values.\n */\n@SinceKotlin("1.4")\npublic expect fun maxOf(a: Long, vararg other: Long): Long\n\n/**\n * Returns the greater of the given values.\n * \n * If\n any value is `NaN`, returns `NaN`.\n */\n@SinceKotlin("1.4")\npublic expect fun maxOf(a: Float, vararg other:\nFloat): Float\n\n/**\n * Returns the greater of the given values.\n * \n * If any value is `NaN`, returns `NaN`.\n */\n@SinceKotlin("1.4")\npublic expect fun maxOf(a: Double, vararg other: Double): Double\n\n/**\n * Returns\n the greater of the given values according to the order specified by the given [comparator].\n * \n * If there are\n multiple equal maximal values, returns the first of them.\n */\n@SinceKotlin("1.4")\npublic fun <T> maxOf(a: T,\n vararg other: T, comparator: Comparator<in T>): T {\n    var max = a\n    for (e in other) if\n (comparator.compare(max, e) < 0) max = e\n    return max\n}\n\n/**\n * Returns the smaller of two values.\n * \n * \n */
```

If values are equal, returns the first one.

```

@SinceKotlin("1.1")
public expect fun <T : Comparable<T>>
minOf(a: T, b: T): T

```

Returns the smaller of two values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Byte, b: Byte):
Byte

```

Returns the smaller of two values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Short, b: Short):
Short

```

Returns the smaller of two values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Int, b: Int): Int

```

Returns the smaller of two values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Long, b: Long): Long

```

Returns the smaller of two values.

If either value is `NaN`, returns `NaN`.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Float, b: Float): Float

```

Returns the smaller of two values.

If either value is `NaN`, returns `NaN`.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Double, b: Double):
Double

```

Returns the smaller of two values.

If there are multiple equal minimal values, returns the first of them.

```

@SinceKotlin("1.1")
public expect fun <T : Comparable<T>> minOf(a: T, b: T, c: T):
T

```

Returns the smaller of three values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Byte, b: Byte, c: Byte): Byte

```

Returns the smaller of three values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Short, b: Short, c:
Short): Short

```

Returns the smaller of three values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Int, b: Int, c: Int):
Int

```

Returns the smaller of three values.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Long, b: Long, c: Long): Long

```

Returns the smaller of three values.

If any value is `NaN`, returns `NaN`.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Float, b: Float, c: Float): Float

```

Returns the smaller of three values.

If any value is `NaN`, returns `NaN`.

```

@SinceKotlin("1.1")
@kotlin.internal.InlineOnly
public expect inline fun minOf(a: Double, b: Double, c: Double): Double

```

Returns the smaller of three values according to the order specified by the given `comparator`.

If there are multiple equal minimal values, returns the first of them.

```

@SinceKotlin("1.1")
public fun <T> minOf(a: T, b: T, c: T, comparator: Comparator<in T>): T {
    return minOf(a, minOf(b, c, comparator), comparator)
}

```

Returns the smaller of two values according to the order specified by the given `comparator`.

If values are equal, returns the first one.

```

@SinceKotlin("1.1")
public fun <T> minOf(a: T, b: T, comparator: Comparator<in T>): T {
    return if (comparator.compare(a, b) <= 0) a else b
}

```

Returns the smaller of the given values.

If there are multiple equal minimal values, returns the first of them.

```

@SinceKotlin("1.4")
public expect fun <T : Comparable<T>> minOf(a: T, vararg other: T): T

```

Returns the smaller of the given values.

```

@SinceKotlin("1.4")
public expect fun minOf(a: Byte, vararg other: Byte): Byte

```

Returns the smaller of the given values.

```

@SinceKotlin("1.4")
public expect fun minOf(a: Short, vararg other: Short): Short

```

Returns the smaller of the given values.

```

@SinceKotlin("1.4")
public expect fun minOf(a: Int, vararg other: Int): Int

```

Returns the smaller of the given values.

```

@SinceKotlin("1.4")
public expect fun minOf(a: Long, vararg other: Long): Long

```

Returns the smaller of the given values.

If any value is `NaN`, returns `NaN`.

```

@SinceKotlin("1.4")
public expect fun minOf(a: Float, vararg other: Float): Float

```

Returns the smaller of the given values.

If any value is `NaN`, returns `NaN`.

```

@SinceKotlin("1.4")
public expect fun minOf(a: Double, vararg other: Double): Double

```

Returns the smaller of the given values according to the order specified by the given `comparator`.

If there are multiple equal minimal values, returns the first of them.

```

@SinceKotlin("1.4")
public fun <T> minOf(a: T, vararg other: T, comparator: Comparator<in T>): T {
    var min = a
    for (e in other) if (comparator.compare(min, e) > 0) min = e
    return min
}

```

Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.

Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.

```

@file:kotlin.jvm.JvmMultifileClass
@file:kotlin.jvm.JvmName("MapsKt")
package

```

kotlin.collections\n\n/\n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt\n// See:

```

R>> Map<out K, V>.mapNotNullTo(destination: C, transform: (Map.Entry<K, V>) -> R?): C {\n  forEach {
element -> transform(element)?.let { destination.add(it) } }\n  return destination}\n\n/**\n * Applies the given
[transform] function to each entry of the original map\n * and appends the results to the given [destination].\n
*\npublic inline fun <K, V, R, C : MutableCollection<in R>> Map<out K, V>.mapTo(destination: C, transform:
(Map.Entry<K, V>) -> R): C {\n  for (item in this)\n    destination.add(transform(item))\n  return
destination}\n\n/**\n * Returns `true` if all entries match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.all\n *\npublic inline fun <K, V> Map<out K, V>.all(predicate:
(Map.Entry<K, V>) -> Boolean): Boolean {\n  if (isEmpty()) return true\n  for (element in this) if
(!predicate(element)) return false\n  return true}\n\n/**\n * Returns `true` if map has at least one entry.\n * \n *
@sample samples.collections.Collections.Aggregates.any\n *\npublic fun <K, V> Map<out K, V>.any(): Boolean
{\n  return !isEmpty()\n}\n\n/**\n * Returns `true` if at least one entry matches the given [predicate].\n * \n *
@sample samples.collections.Collections.Aggregates.anyWithPredicate\n *\npublic inline fun <K, V> Map<out K,
V>.any(predicate: (Map.Entry<K, V>) -> Boolean): Boolean {\n  if (isEmpty()) return false\n  for (element in
this) if (predicate(element)) return true\n  return false}\n\n/**\n * Returns the number of entries in this map.\n
*\n@kotlin.internal.InlineOnly\npublic inline fun <K, V> Map<out K, V>.count(): Int {\n  return size}\n\n/**\n
 * Returns the number of entries matching the given [predicate].\n *\npublic inline fun <K, V> Map<out K,
V>.count(predicate: (Map.Entry<K, V>) -> Boolean): Int {\n  if (isEmpty()) return 0\n  var count = 0\n  for
(element in this) if (predicate(element)) ++count\n  return count}\n\n/**\n * Performs the given [action] on each
entry.\n *\n@kotlin.internal.HidesMembers\npublic inline fun <K, V> Map<out K, V>.forEach(action:
(Map.Entry<K, V>) -> Unit): Unit {\n  for (element in this) action(element)}\n\n@Deprecated("Use
maxByOrNull instead.", ReplaceWith("this.maxByOrNull(selector)"))\n@DeprecatedSinceKotlin(warningSince =
"1.4", errorSince = "1.5", hiddenSince = "1.6")\n@kotlin.internal.InlineOnly\npublic inline fun <K, V, R :
Comparable<R>> Map<out K, V>.maxBy(selector: (Map.Entry<K, V>) -> R): Map.Entry<K, V>? {\n  return
maxByOrNull(selector)\n}\n\n/**\n * Returns the first entry yielding the largest value of the given function or `null`
if there are no entries.\n * \n * @sample samples.collections.Collections.Aggregates.maxByOrNull\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <K, V, R : Comparable<R>> Map<out
K, V>.maxByOrNull(selector: (Map.Entry<K, V>) -> R): Map.Entry<K, V>? {\n  return
entries.maxByOrNull(selector)\n}\n\n/**\n * Returns the largest value among all values produced by [selector]
function\n * applied to each entry in the map.\n * \n * If any of values produced by [selector] function is `NaN`, the
returned result is `NaN`.\n * \n * @throws NoSuchElementException if the map is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <K, V> Map<out K, V>.maxOf(selector:
(Map.Entry<K, V>) -> Double): Double {\n  return entries.maxOf(selector)\n}\n\n/**\n * Returns the largest value
among all values produced by [selector] function\n * applied to each entry in the map.\n * \n * If any of values
produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException
if the map is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <K, V> Map<out K, V>.maxOf(selector:
(Map.Entry<K, V>) -> Float): Float {\n  return entries.maxOf(selector)\n}\n\n/**\n * Returns the largest value
among all values produced by [selector] function\n * applied to each entry in the map.\n * \n * @throws
NoSuchElementException if the map is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <K, V, R : Comparable<R>> Map<out K,
V>.maxOf(selector: (Map.Entry<K, V>) -> R): R {\n  return entries.maxOf(selector)\n}\n\n/**\n * Returns the
largest value among all values produced by [selector] function\n * applied to each entry in the map or `null` if there
are no entries.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <K, V> Map<out K,

```

```

V>.maxOfOrNull(selector: (Map.Entry<K, V>) -> Double): Double? {\n  return
entries.maxOfOrNull(selector)\n}\n\n/**\n * Returns the largest value among all values produced by [selector]
function\n * applied to each entry in the map or `null` if there are no entries.\n * \n * If any of values produced by
[selector] function is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <K, V> Map<out K,
V>.maxOfOrNull(selector: (Map.Entry<K, V>) -> Float): Float? {\n  return
entries.maxOfOrNull(selector)\n}\n\n/**\n * Returns the largest value among all values produced by [selector]
function\n * applied to each entry in the map or `null` if there are no entries.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <K, V, R : Comparable<R>> Map<out K,
V>.maxOfOrNull(selector: (Map.Entry<K, V>) -> R): R? {\n  return entries.maxOfOrNull(selector)\n}\n\n/**\n *
Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]
function applied to each entry in the map.\n * \n * @throws NoSuchElementException if the map is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <K, V, R> Map<out K,
V>.maxOfWith(comparator: Comparator<in R>, selector: (Map.Entry<K, V>) -> R): R {\n  return
entries.maxOfWith(comparator, selector)\n}\n\n/**\n * Returns the largest value according to the provided
[comparator]\n * among all values produced by [selector] function applied to each entry in the map or `null` if there
are no entries.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <K, V, R> Map<out K,
V>.maxOfWithOrNull(comparator: Comparator<in R>, selector: (Map.Entry<K, V>) -> R): R? {\n  return
entries.maxOfWithOrNull(comparator, selector)\n}\n\n@Deprecated("Use maxWithOrNull instead.",
ReplaceWith("this.maxWithOrNull(comparator)"))\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\n@kotlin.internal.InlineOnly\npublic inline fun <K, V> Map<out K,
V>.maxWith(comparator: Comparator<in Map.Entry<K, V>>): Map.Entry<K, V>? {\n  return
maxWithOrNull(comparator)\n}\n\n/**\n * Returns the first entry having the largest value according to the provided
[comparator] or `null` if there are no entries.\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic
inline fun <K, V> Map<out K, V>.maxWithOrNull(comparator: Comparator<in Map.Entry<K, V>>):
Map.Entry<K, V>? {\n  return entries.maxWithOrNull(comparator)\n}\n\n@Deprecated("Use minByOrNull
instead.", ReplaceWith("this.minByOrNull(selector)"))\n@DeprecatedSinceKotlin(warningSince = "1.4",
errorSince = "1.5", hiddenSince = "1.6")\npublic inline fun <K, V, R : Comparable<R>> Map<out K,
V>.minBy(selector: (Map.Entry<K, V>) -> R): Map.Entry<K, V>? {\n  return minByOrNull(selector)\n}\n\n/**\n *
Returns the first entry yielding the smallest value of the given function or `null` if there are no entries.\n * \n *
@sample samples.collections.Collections.Aggregates.minByOrNull\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <K, V, R : Comparable<R>> Map<out
K, V>.minByOrNull(selector: (Map.Entry<K, V>) -> R): Map.Entry<K, V>? {\n  return
entries.minByOrNull(selector)\n}\n\n/**\n * Returns the smallest value among all values produced by [selector]
function\n * applied to each entry in the map.\n * \n * If any of values produced by [selector] function is `NaN`, the
returned result is `NaN`.\n * \n * @throws NoSuchElementException if the map is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <K, V> Map<out K, V>.minOf(selector:
(Map.Entry<K, V>) -> Double): Double {\n  return entries.minOf(selector)\n}\n\n/**\n * Returns the smallest
value among all values produced by [selector] function\n * applied to each entry in the map.\n * \n * If any of values
produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException
if the map is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution

```



```

ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <K, V> Map<out K, V>.minOf(selector:
(Map.Entry<K, V>) -> Float): Float {\n    return entries.minOf(selector)\n}\n\n/**\n * Returns the smallest value
among all values produced by [selector] function\n * applied to each entry in the map.\n * \n * @throws
NoSuchElementException if the map is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <K, V, R : Comparable<R>> Map<out K,
V>.minOf(selector: (Map.Entry<K, V>) -> R): R {\n    return entries.minOf(selector)\n}\n\n/**\n * Returns the
smallest value among all values produced by [selector] function\n * applied to each entry in the map or `null` if
there are no entries.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <K, V> Map<out K,
V>.minOfOrNull(selector: (Map.Entry<K, V>) -> Double): Double? {\n    return
entries.minOfOrNull(selector)\n}\n\n/**\n * Returns the smallest value among all values produced by [selector]
function\n * applied to each entry in the map or `null` if there are no entries.\n * \n * If any of values produced by
[selector] function is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <K, V> Map<out K,
V>.minOfOrNull(selector: (Map.Entry<K, V>) -> Float): Float? {\n    return
entries.minOfOrNull(selector)\n}\n\n/**\n * Returns the smallest value among all values produced by [selector]
function\n * applied to each entry in the map or `null` if there are no entries.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <K, V, R : Comparable<R>> Map<out K,
V>.minOfOrNull(selector: (Map.Entry<K, V>) -> R): R? {\n    return entries.minOfOrNull(selector)\n}\n\n/**\n *
Returns the smallest value according to the provided [comparator]\n * among all values produced by [selector]
function applied to each entry in the map.\n * \n * @throws NoSuchElementException if the map is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <K, V, R> Map<out K,
V>.minOfWith(comparator: Comparator<in R>, selector: (Map.Entry<K, V>) -> R): R {\n    return
entries.minOfWith(comparator, selector)\n}\n\n/**\n * Returns the smallest value according to the provided
[comparator]\n * among all values produced by [selector] function applied to each entry in the map or `null` if there
are no entries.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <K, V, R> Map<out K,
V>.minOfWithOrNull(comparator: Comparator<in R>, selector: (Map.Entry<K, V>) -> R): R? {\n    return
entries.minOfWithOrNull(comparator, selector)\n}\n\n@Deprecated("Use minWithOrNull instead.",
ReplaceWith("this.minWithOrNull(comparator)"))\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun <K, V> Map<out K, V>.minWith(comparator: Comparator<in
Map.Entry<K, V>>): Map.Entry<K, V>? {\n    return minWithOrNull(comparator)\n}\n\n/**\n * Returns the first
entry having the smallest value according to the provided [comparator] or `null` if there are no entries.\n
*\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline fun <K, V> Map<out K,
V>.minWithOrNull(comparator: Comparator<in Map.Entry<K, V>>): Map.Entry<K, V>? {\n    return
entries.minWithOrNull(comparator)\n}\n\n/**\n * Returns `true` if the map has no entries.\n * \n * @sample
samples.collections.Collections.Aggregates.none\n *\npublic fun <K, V> Map<out K, V>.none(): Boolean {\n
return isEmpty()\n}\n\n/**\n * Returns `true` if no entries match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.noneWithPredicate\n *\npublic inline fun <K, V> Map<out K,
V>.none(predicate: (Map.Entry<K, V>) -> Boolean): Boolean {\n    if (isEmpty()) return true\n    for (element in
this) if (predicate(element)) return false\n    return true\n}\n\n/**\n * Performs the given [action] on each entry and
returns the map itself afterwards.\n *\n@SinceKotlin("1.1")\npublic inline fun <K, V, M : Map<out K, V>>

```

```

M.onEach(action: (Map.Entry<K, V>) -> Unit): M { \n    return apply { for (element in this) action(element)
} \n } \n \n /** \n * Performs the given [action] on each entry, providing sequential index with the entry, \n * and returns
the map itself afterwards. \n * @param [action] function that takes the index of an entry and the entry itself \n * and
performs the action on the entry. \n * ^\n @SinceKotlin("1.4") \n public inline fun <K, V, M : Map<out K, V>>
M.onEachIndexed(action: (index: Int, Map.Entry<K, V>) -> Unit): M { \n    return apply {
entries.forEachIndexed(action) } \n } \n \n /** \n * Creates an [Iterable] instance that wraps the original map returning
its entries when being iterated. \n * ^\n @kotlin.internal.InlineOnly \n public inline fun <K, V> Map<out K,
V>.asIterable(): Iterable<Map.Entry<K, V>> { \n    return entries \n } \n \n /** \n * Creates a [Sequence] instance that
wraps the original map returning its entries when being iterated. \n * ^\n public fun <K, V> Map<out K,
V>.asSequence(): Sequence<Map.Entry<K, V>> { \n    return entries.asSequence() \n } \n \n ", /* \n * Copyright 2010-
2021 JetBrains s.r.o. and Kotlin Programming Language contributors. \n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file. \n * ^\n \n package kotlin.text \n \n \n // NOTE:
THIS FILE IS AUTO-GENERATED by the GenerateUnicodeData.kt \n // See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib \n \n \n // 10 mappings totally \n \n internal fun
Char.titlecaseImpl(): String { \n    val uppercase = uppercase() \n    if (uppercase.length > 1) { \n        return if (this ==
"\u0149") uppercase else uppercase[0] + uppercase.substring(1).lowercase() \n    } \n    return
titlecaseChar().toString() \n } \n \n ", /* \n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language
contributors. \n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file. \n * ^\n \n package kotlin.text \n \n \n /** \n * Converts this character to lower case using Unicode
mapping rules of the invariant locale. \n * ^\n @Deprecated("Use lowercaseChar() instead.",
ReplaceWith("lowercaseChar()")) \n @DeprecatedSinceKotlin(warningSince =
"1.5") \n @kotlin.internal.InlineOnly \n public actual inline fun Char.toLowerCase(): Char =
lowercaseChar() \n \n /** \n * Converts this character to lower case using Unicode mapping rules of the invariant
locale. \n * \n * This function performs one-to-one character mapping. \n * To support one-to-many character
mapping use the [lowercase] function. \n * If this character has no mapping equivalent, the character itself is
returned. \n * \n * @sample samples.text.Chars.toLowerCase \n
*\n @SinceKotlin("1.5") \n @WasExperimental(ExperimentalStdlibApi::class) \n @kotlin.internal.InlineOnly \n publi
c actual inline fun Char.lowercaseChar(): Char = lowercase()[0] \n \n /** \n * Converts this character to lower case
using Unicode mapping rules of the invariant locale. \n * \n * This function supports one-to-many character mapping,
thus the length of the returned string can be greater than one. \n * For example, ``\u0130'.toLowerCase()` returns
``\u0069\u0307``, \n * where ``\u0130`` is the LATIN CAPITAL LETTER I WITH DOT ABOVE character
(`\u0130`). \n * If this character has no lower case mapping, the result of `toString()` of this char is returned. \n * \n *
@sample samples.text.Chars.toLowerCase \n
*\n @SinceKotlin("1.5") \n @WasExperimental(ExperimentalStdlibApi::class) \n @kotlin.internal.InlineOnly \n publi
c actual inline fun Char.lowercase(): String = toString().asDynamic().toLowerCase().unsafeCast<String>() \n \n /** \n
* Converts this character to upper case using Unicode mapping rules of the invariant locale. \n
*\n @Deprecated("Use uppercaseChar() instead.",
ReplaceWith("uppercaseChar()")) \n @DeprecatedSinceKotlin(warningSince =
"1.5") \n @kotlin.internal.InlineOnly \n public actual inline fun Char.toUpperCase(): Char =
uppercaseChar() \n \n /** \n * Converts this character to upper case using Unicode mapping rules of the invariant
locale. \n * \n * This function performs one-to-one character mapping. \n * To support one-to-many character
mapping use the [uppercase] function. \n * If this character has no mapping equivalent, the character itself is
returned. \n * \n * @sample samples.text.Chars.toUpperCase \n
*\n @SinceKotlin("1.5") \n @WasExperimental(ExperimentalStdlibApi::class) \n public actual fun
Char.uppercaseChar(): Char { \n    val uppercase = uppercase() \n    return if (uppercase.length > 1) this else
uppercase[0] \n } \n \n /** \n * Converts this character to upper case using Unicode mapping rules of the invariant
locale. \n * \n * This function supports one-to-many character mapping, thus the length of the returned string can be
greater than one. \n * For example, ``\uFB00'.uppercase()` returns ``\u0046\u0046``, \n * where ``\uFB00`` is the

```

LATIN SMALL LIGATURE FF character (`\u00ff`).
 * If this character has no upper case mapping, the result of `toString()` of this char is returned.
 * @sample samples.text.Chars.uppercase

```

*^@SinceKotlin("1.5")
@WasExperimental(ExperimentalStdlibApi::class)
@kotlin.internal.InlineOnly
public actual inline fun Char.uppercase(): String = toString().asDynamic().toUpperCase().unsafeCast<String>()

```

* Converts this character to title case using Unicode mapping rules of the invariant locale.
 * This function performs one-to-one character mapping.
 * To support one-to-many character mapping use the `titlecase` function.
 * If this character has no mapping equivalent, the result of calling `uppercaseChar` is returned.
 * @sample samples.text.Chars.titlecase

```

*^@SinceKotlin("1.5")
public actual fun Char.titlecaseChar(): Char = titlecaseCharImpl()

```

* Returns `true` if this character is a Unicode high-surrogate code unit (also known as leading-surrogate code unit).
 * @sample samples.text.Chars.isHighSurrogate

```

*^@SinceKotlin("1.5")
public actual fun Char.isHighSurrogate(): Boolean = this in Char.MIN_HIGH_SURROGATE..Char.MAX_HIGH_SURROGATE

```

* Returns `true` if this character is a Unicode low-surrogate code unit (also known as trailing-surrogate code unit).
 * @sample samples.text.Chars.isLowSurrogate

```

*^@SinceKotlin("1.5")
public actual fun Char.isLowSurrogate(): Boolean = this in Char.MIN_LOW_SURROGATE..Char.MAX_LOW_SURROGATE

```

* Returns the Unicode general category of this character.
 * @sample samples.text.Chars.category

```

*^@SinceKotlin("1.5")
public actual val Char.category: CharCategory
get() = CharCategory.valueOf(getCategoryValue())

```

* Returns `true` if this character (Unicode code point) is defined in Unicode.
 * A character is considered to be defined in Unicode if its `category` is not `CharCategory.UNASSIGNED`.
 * @sample samples.text.Chars.isDefined

```

*^@SinceKotlin("1.5")
public actual fun Char.isDefined(): Boolean {
    if (this < '\u0080') return true
    return getCategoryValue() != CharCategory.UNASSIGNED.value
}

```

* Returns `true` if this character is a letter.
 * A character is considered to be a letter if its `category` is `CharCategory.UPPERCASE_LETTER`, `CharCategory.LOWERCASE_LETTER`, `CharCategory.TITLECASE_LETTER`, `CharCategory.MODIFIER_LETTER`, or `CharCategory.OTHER_LETTER`.
 * @sample samples.text.Chars.isLetter

```

*^@SinceKotlin("1.5")
public actual fun Char.isLetter(): Boolean {
    if (this in 'a'..'z' || this in 'A'..'Z') return true
    if (this < '\u0080') return false
    return isLetterImpl()
}

```

* Returns `true` if this character is a letter or digit.
 * @see `isLetter`
 * @see `isDigit`
 * @sample samples.text.Chars.isLetterOrDigit

```

*^@SinceKotlin("1.5")
public actual fun Char.isLetterOrDigit(): Boolean {
    if (this in 'a'..'z' || this in 'A'..'Z' || this in '0'..'9') return true
    if (this < '\u0080') return false
    return isDigitImpl() || isLetterImpl()
}

```

* Returns `true` if this character is a digit.
 * A character is considered to be a digit if its `category` is `CharCategory.DECIMAL_DIGIT_NUMBER`.
 * @sample samples.text.Chars.isDigit

```

*^@SinceKotlin("1.5")
public actual fun Char.isDigit(): Boolean {
    if (this in '0'..'9') return true
    if (this < '\u0080') return false
    return isDigitImpl()
}

```

* Returns `true` if this character is upper case.
 * A character is considered to be an upper case character if its `category` is `CharCategory.UPPERCASE_LETTER`, or it has contributory property `Other_Uppercase` as defined by the Unicode Standard.
 * @sample samples.text.Chars.isUpperCase

```

*^@SinceKotlin("1.5")
public actual fun Char.isUpperCase(): Boolean {
    if (this in 'A'..'Z') return true
    if (this < '\u0080') return false
    return isUpperCaseImpl()
}

```

* Returns `true` if this character is lower case.
 * A character is considered to be a lower case character if its `category` is `CharCategory.LOWERCASE_LETTER`, or it has contributory property `Other_Lowercase` as defined by the Unicode Standard.
 * @sample samples.text.Chars.isLowerCase

```

*^@SinceKotlin("1.5")
public actual fun Char.isLowerCase(): Boolean {
    if (this in 'a'..'z') return true
    if (this < '\u0080') return false
    return isLowerCaseImpl()
}

```

* Returns `true` if this character is a title case letter.
 * A character is considered to be a title case letter if its `category` is `CharCategory.TITLECASE_LETTER`.
 * @sample samples.text.Chars.isTitleCase

```

*^@SinceKotlin("1.5")
public actual fun Char.isTitleCase(): Boolean {
    if (this < '\u0080') return false
    return getCategoryValue() == CharCategory.TITLECASE_LETTER.value
}

```

* Returns `true` if this character is an ISO control character.
 * A character is considered to be an ISO control character if its `category` is

```

[CharCategory.CONTROL],\n * meaning the Char is in the range '\u0000'..'u001F' or in the range
'\u007F'..'u009F'.\n *\n * @sample samples.text.Chars.isISOControl\n *\n@SinceKotlin("1.5")\n\npublic actual
fun Char.isISOControl(): Boolean {\n    return this <= '\u001F' || this in '\u007F'..'u009F'\n}\n\n/**\n *
Determines whether a character is whitespace according to the Unicode standard.\n * Returns `true` if the character
is whitespace.\n *\n * @sample samples.text.Chars.isWhitespace\n *\n@public actual fun Char.isWhitespace():
Boolean = isWhitespaceImpl(),"/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n *\n\npackage kotlin.text\n\nimport kotlin.js.RegExp\n\n/**\n * Converts the characters
in the specified array to a string.\n *\n@SinceKotlin("1.2")\n\n@Deprecated("Use CharArray.concatToString()
instead", ReplaceWith("chars.concatToString()"))\n\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5")\n\npublic actual fun String(chars: CharArray): String {\n    var result = ""\n    for (char in chars) {\n
result += char\n    }\n    return result\n}\n\n/**\n * Converts the characters from a portion of the specified array to a
string.\n *\n * @throws IndexOutOfBoundsException if either [offset] or [length] are less than zero\n * or `offset +
length` is out of [chars] array bounds.\n *\n@SinceKotlin("1.2")\n\n@Deprecated("Use
CharArray.concatToString(startIndex, endIndex) instead", ReplaceWith("chars.concatToString(offset, offset +
length)"))\n\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5")\n\npublic actual fun String(chars:
CharArray, offset: Int, length: Int): String {\n    if (offset < 0 || length < 0 || chars.size - offset < length)\n        throw
IndexOutOfBoundsException("size: ${chars.size}; offset: $offset; length: $length")\n    var result = ""\n    for
(index in offset until offset + length) {\n        result += chars[index]\n    }\n    return result\n}\n\n/**\n *
Concatenates characters in this [CharArray] into a String.\n
\n *\n@SinceKotlin("1.4")\n\n@WasExperimental(ExperimentalStdlibApi::class)\n\npublic actual fun
CharArray.concatToString(): String {\n    var result = ""\n    for (char in this) {\n        result += char\n    }\n
return result\n}\n\n/**\n * Concatenates characters in this [CharArray] or its subrange into a String.\n *\n * @param
startIndex the beginning (inclusive) of the subrange of characters, 0 by default.\n * @param endIndex the end
(exclusive) of the subrange of characters, size of this array by default.\n *\n * @throws
IndexOutOfBoundsException if [startIndex] is less than zero or [endIndex] is greater than the size of this array.\n *
\n *\n@throws IllegalArgumentException if [startIndex] is greater than [endIndex].\n
\n *\n@SinceKotlin("1.4")\n\n@WasExperimental(ExperimentalStdlibApi::class)\n\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\n\npublic actual fun CharArray.concatToString(startIndex: Int = 0,
endIndex: Int = this.size): String {\n    AbstractList.checkBoundsIndexes(startIndex, endIndex, this.size)\n    var
result = ""\n    for (index in startIndex until endIndex) {\n        result += this[index]\n    }\n    return
result\n}\n\n/**\n * Returns a [CharArray] containing characters of this string.\n
\n *\n@SinceKotlin("1.4")\n\n@WasExperimental(ExperimentalStdlibApi::class)\n\npublic actual fun
String.toCharArray(): CharArray {\n    return CharArray(length) { get(it) }\n}\n\n/**\n * Returns a [CharArray]
containing characters of this string or its substring.\n *\n * @param startIndex the beginning (inclusive) of the
substring, 0 by default.\n * @param endIndex the end (exclusive) of the substring, length of this string by default.\n
\n *\n * @throws IndexOutOfBoundsException if [startIndex] is less than zero or [endIndex] is greater than the length
of this string.\n * @throws IllegalArgumentException if [startIndex] is greater than [endIndex].\n
\n *\n@SinceKotlin("1.4")\n\n@WasExperimental(ExperimentalStdlibApi::class)\n\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\n\npublic actual fun String.toCharArray(startIndex: Int = 0, endIndex: Int
= this.length): CharArray {\n    AbstractList.checkBoundsIndexes(startIndex, endIndex, length)\n    return
CharArray(endIndex - startIndex) { get(startIndex + it) }\n}\n\n/**\n * Decodes a string from the bytes in UTF-8
encoding in this array.\n *\n * Malformed byte sequences are replaced by the replacement char '\uFFFD'.\n
\n *\n@SinceKotlin("1.4")\n\n@WasExperimental(ExperimentalStdlibApi::class)\n\npublic actual fun
ByteArray.decodeToString(): String {\n    return decodeUtf8(this, 0, size, false)\n}\n\n/**\n * Decodes a string from
the bytes in UTF-8 encoding in this array or its subrange.\n *\n * @param startIndex the beginning (inclusive) of the
subrange to decode, 0 by default.\n * @param endIndex the end (exclusive) of the subrange to decode, size of this
array by default.\n * @param throwOnInvalidSequence specifies whether to throw an exception on malformed byte

```

sequence or replace it by the replacement char `\\uFFFF`.
`@throws IndexOutOfBoundsException` if `[startIndex]` is less than zero or `[endIndex]` is greater than the size of this array.
`@throws IllegalArgumentException` if `[startIndex]` is greater than `[endIndex]`.
`@throws CharacterCodingException` if the byte array contains malformed UTF-8 byte sequence and `[throwOnInvalidSequence]` is true.

```

*\\n@SinceKotlin("1.4")\\n@WasExperimental(ExperimentalStdlibApi::class)\\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\\npublic actual fun ByteArray.decodeToString(\\n    startIndex: Int = 0,\\n    endIndex: Int = this.size,\\n    throwOnInvalidSequence: Boolean = false)\\n): String {\\n    AbstractList.checkBoundsIndexes(startIndex, endIndex, this.size)\\n    return decodeUtf8(this, startIndex, endIndex, throwOnInvalidSequence)\\n}\\n\\n/**\\n * Encodes this string to an array of bytes in UTF-8 encoding.\\n * Any malformed char sequence is replaced by the replacement byte sequence.\\n */\\n@SinceKotlin("1.4")\\n@WasExperimental(ExperimentalStdlibApi::class)\\npublic actual fun String.encodeToByteArray(): ByteArray {\\n    return encodeUtf8(this, 0, length, false)\\n}\\n\\n/**\\n * Encodes this string or its substring to an array of bytes in UTF-8 encoding.\\n * @param startIndex the beginning (inclusive) of the substring to encode, 0 by default.\\n * @param endIndex the end (exclusive) of the substring to encode, length of this string by default.\\n * @param throwOnInvalidSequence specifies whether to throw an exception on malformed char sequence or replace.\\n * @throws IndexOutOfBoundsException if [startIndex] is less than zero or [endIndex] is greater than the length of this string.\\n * @throws IllegalArgumentException if [startIndex] is greater than [endIndex].\\n * @throws CharacterCodingException if this string contains malformed char sequence and [throwOnInvalidSequence] is true.\\n */\\n@SinceKotlin("1.4")\\n@WasExperimental(ExperimentalStdlibApi::class)\\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\\npublic actual fun String.encodeToByteArray(\\n    startIndex: Int = 0,\\n    endIndex: Int = this.length,\\n    throwOnInvalidSequence: Boolean = false)\\n): ByteArray {\\n    AbstractList.checkBoundsIndexes(startIndex, endIndex, length)\\n    return encodeUtf8(this, startIndex, endIndex, throwOnInvalidSequence)\\n}\\n\\n/**\\n * Returns a copy of this string converted to upper case using the rules of the default locale.\\n */\\n@Deprecated("Use uppercase() instead.", ReplaceWith("uppercase()"))\\n@DeprecatedSinceKotlin(warningSince = "1.5")\\n@kotlin.internal.InlineOnly\\npublic actual inline fun String.toUpperCase(): String = asDynamic().toUpperCase()\\n\\n/**\\n * Returns a copy of this string converted to upper case using Unicode mapping rules of the invariant locale.\\n * This function supports one-to-many and many-to-one character mapping,\\n * thus the length of the returned string can be different from the length of the original string.\\n * @sample samples.text.Strings.uppercase\\n */\\n@SinceKotlin("1.5")\\n@WasExperimental(ExperimentalStdlibApi::class)\\n@kotlin.internal.InlineOnly\\npublic actual inline fun String.toUpperCase(): String = asDynamic().toUpperCase()\\n\\n/**\\n * Returns a copy of this string converted to lower case using the rules of the default locale.\\n */\\n@Deprecated("Use lowercase() instead.", ReplaceWith("lowercase()"))\\n@DeprecatedSinceKotlin(warningSince = "1.5")\\n@kotlin.internal.InlineOnly\\npublic actual inline fun String.toLowerCase(): String = asDynamic().toLowerCase()\\n\\n/**\\n * Returns a copy of this string converted to lower case using Unicode mapping rules of the invariant locale.\\n * This function supports one-to-many and many-to-one character mapping,\\n * thus the length of the returned string can be different from the length of the original string.\\n * @sample samples.text.Strings.lowercase\\n */\\n@SinceKotlin("1.5")\\n@WasExperimental(ExperimentalStdlibApi::class)\\n@kotlin.internal.InlineOnly\\npublic actual inline fun String.toLowerCase(): String = asDynamic().toLowerCase()\\n\\n@kotlin.internal.InlineOnly\\ninternal actual inline fun String.nativeIndexOf(str: String, fromIndex: Int): Int = asDynamic().indexOf(str, fromIndex)\\n\\n@kotlin.internal.InlineOnly\\ninternal actual inline fun String.nativeLastIndexOf(str: String, fromIndex: Int): Int = asDynamic().lastIndexOf(str, fromIndex)\\n\\n@kotlin.internal.InlineOnly\\ninternal inline fun String.nativeStartsWith(s: String, position: Int): Boolean = asDynamic().startsWith(s, position)\\n\\n@kotlin.internal.InlineOnly\\ninternal inline fun String.nativeEndsWith(s: String): Boolean = asDynamic().endsWith(s)\\n\\n@kotlin.internal.InlineOnly\\npublic actual inline fun String.substring(startIndex: Int):

```

```

String = asDynamic().substring(startIndex)\n\n@kotlin.internal.InlineOnly\npublic actual inline fun
String.substring(startIndex: Int, endIndex: Int): String = asDynamic().substring(startIndex,
endIndex)\n\n@Deprecated("Use String.plus() instead", ReplaceWith("this +
str"))\n\n@DeprecatedSinceKotlin(warningSince = "1.6")\n\n@kotlin.internal.InlineOnly\npublic inline fun
String.concat(str: String): String = asDynamic().concat(str)\n\n@Deprecated("Use Regex.findAll() instead or
invoke matches() on String dynamically:
this.asDynamic().match(regex)")\n\n@DeprecatedSinceKotlin(warningSince =
"1.6")\n\n@kotlin.internal.InlineOnly\npublic inline fun String.match(regex: String): Array<String>? =
asDynamic().match(regex)\n\n//native public fun String.trim(): String\n\n//TODO: String.replace to implement
effective trimLeading and trimTrailing\n\n@kotlin.internal.InlineOnly\n\ninternal inline fun
String.nativeReplace(pattern: RegExp, replacement: String): String = asDynamic().replace(pattern,
replacement)\n\n/n/**\n * Compares two strings lexicographically, optionally ignoring case differences.\n * If
[ignoreCase] is true, the result of `Char.toUpperCaseChar().toLowerCaseChar()` on each character is compared.\n
*\n\n@SinceKotlin("1.2")\n\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\n\npublic
actual fun String.compareTo(other: String, ignoreCase: Boolean = false): Int {\n    if (ignoreCase) {\n        val n1 =
this.length\n        val n2 = other.length\n        val min = minOf(n1, n2)\n        if (min == 0) return n1 - n2\n        for
(index in 0 until min) {\n            var thisChar = this[index]\n            var otherChar = other[index]\n            if
(thisChar != otherChar) {\n                thisChar = thisChar.toUpperCaseChar()\n                otherChar =
otherChar.toUpperCaseChar()\n                if (thisChar != otherChar) {\n                    thisChar =
thisChar.toLowerCaseChar()\n                    otherChar = otherChar.toLowerCaseChar()\n                    if (thisChar !=
otherChar) {\n                        return thisChar.compareTo(otherChar)\n                    }\n                }\n            }
        }\n        return n1 - n2\n    } else {\n        return compareTo(other)\n    }\n}\n\n/**\n * Returns `true` if the contents
of this char sequence are equal to the contents of the specified [other],\n * i.e. both char sequences contain the same
number of the same characters in the same order.\n *\n * @sample samples.text.Strings.contentEquals\n
*\n\n@SinceKotlin("1.5")\n\npublic actual infix fun CharSequence?.contentEquals(other: CharSequence?): Boolean =
contentEqualsImpl(other)\n\n/**\n * Returns `true` if the contents of this char sequence are equal to the contents of
the specified [other], optionally ignoring case difference.\n *\n * @param ignoreCase `true` to ignore character case
when comparing contents.\n *\n * @sample samples.text.Strings.contentEquals\n
*\n\n@SinceKotlin("1.5")\n\npublic
actual fun CharSequence?.contentEquals(other: CharSequence?, ignoreCase: Boolean): Boolean {\n    return if
(ignoreCase)\n        this.contentEqualsIgnoreCaseImpl(other)\n    else\n        this.contentEqualsImpl(other)\n}\n\n\nprivate val STRING_CASE_INSENSITIVE_ORDER = Comparator<String>
{ a, b -> a.compareTo(b, ignoreCase = true) }\n\n@SinceKotlin("1.2")\n\npublic actual val
String.Companion.CASE_INSENSITIVE_ORDER: Comparator<String>\n    get() =
STRING_CASE_INSENSITIVE_ORDER\n\n"/**\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n
*\n\n@file:kotlin.jvm.JvmMultifileClass\n\n@file:kotlin.jvm.JvmName("CharsKt")\n\n\npackage kotlin.text\n\n/**\n
 * Returns the numeric value of the decimal digit that this Char represents.\n * Throws an exception if this Char is
not a valid decimal digit.\n *\n * A Char is considered to represent a decimal digit if [isDigit] is true for the Char.\n
*\n * In this case, the Unicode decimal digit value of the character is returned.\n *\n * @sample
samples.text.Chars.digitToInt\n
*\n\n@SinceKotlin("1.5")\n\n@WasExperimental(ExperimentalStdlibApi::class)\n\npublic fun Char.digitToInt(): Int
{\n    return digitOf(this, 10).also {\n        if (it < 0) throw IllegalArgumentException("Char $this is not a decimal
digit")\n    }\n}\n\n/**\n * Returns the numeric value of the digit that this Char represents in the specified [radix].\n
*\n * Throws an exception if the [radix] is not in the range `2..36` or if this Char is not a valid digit in the
specified [radix].\n *\n * A Char is considered to represent a digit in the specified [radix] if at least one of the
following is true:\n * - [isDigit] is `true` for the Char and the Unicode decimal digit value of the character is
less than the specified [radix]. In this case the decimal digit value is returned.\n * - The Char is one of the
uppercase Latin letters

```

'A' through 'Z' and its [code] is less than ``radix + 'A'.code - 10``. In this case, ``this.code - 'A'.code + 10`` is returned.
 * - The Char is one of the lowercase Latin letters 'a' through 'z' and its [code] is less than ``radix + 'a'.code - 10``. In this case, ``this.code - 'a'.code + 10`` is returned.
 * - The Char is one of the fullwidth Latin capital letters '\uFF21' through '\uFF3A' and its [code] is less than ``radix + 0xFF21 - 10``. In this case, ``this.code - 0xFF21 + 10`` is returned.
 * - The Char is one of the fullwidth Latin small letters '\uFF41' through '\uFF5A' and its [code] is less than ``radix + 0xFF41 - 10``. In this case, ``this.code - 0xFF41 + 10`` is returned.

`@sample samples.text.Chars.digitToInt`

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun Char.digitToInt(radix: Int): Int {\n    return digitToIntOrNull(radix) ?: throw IllegalArgumentException("\Char $this is not a digit in the given radix=$radix")\n}\n\n/**\n * Returns the numeric value of the decimal digit that this Char represents, or `null` if this Char is not a valid decimal digit.\n * A Char is considered to represent a decimal digit if [isDigit] is true for the Char.\n * In this case, the Unicode decimal digit value of the character is returned.\n */\n * @sample samples.text.Chars.digitToIntOrNull
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun Char.digitToIntOrNull(): Int? {\n    return digitOf(this, 10).takeIf { it >= 0 }\n}\n\n/**\n * Returns the numeric value of the digit that this Char represents in the specified [radix], or `null` if this Char is not a valid digit in the specified [radix].\n * Throws an exception if the [radix] is not in the range `2..36`.\n * A Char is considered to represent a digit in the specified [radix] if at least one of the following is true:\n * - [isDigit] is `true` for the Char and the Unicode decimal digit value of the character is less than the specified [radix]. In this case the decimal digit value is returned.\n * - The Char is one of the uppercase Latin letters 'A' through 'Z' and its [code] is less than `radix + 'A'.code - 10`. In this case, `this.code - 'A'.code + 10` is returned.\n * - The Char is one of the lowercase Latin letters 'a' through 'z' and its [code] is less than `radix + 'a'.code - 10`. In this case, `this.code - 'a'.code + 10` is returned.\n * - The Char is one of the fullwidth Latin capital letters '\uFF21' through '\uFF3A' and its [code] is less than `radix + 0xFF21 - 10`. In this case, `this.code - 0xFF21 + 10` is returned.\n * - The Char is one of the fullwidth Latin small letters '\uFF41' through '\uFF5A' and its [code] is less than `radix + 0xFF41 - 10`. In this case, `this.code - 0xFF41 + 10` is returned.\n */\n * @sample samples.text.Chars.digitToIntOrNull
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun Char.digitToIntOrNull(radix: Int): Int? {\n    checkRadix(radix)\n    return digitOf(this, radix).takeIf { it >= 0 }\n}\n\n/**\n * Returns the Char that represents this decimal digit.\n * Throws an exception if this value is not in the range `0..9`.\n * If this value is in `0..9`, the decimal digit Char with code `0'.code + this` is returned.\n */\n * @sample samples.text.Chars.digitToChar
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun Int.digitToChar(): Char {\n    if (this in 0..9) {\n        return '0' + this\n    }\n    throw IllegalArgumentException("\Int $this is not a decimal digit")\n}\n\n/**\n * Returns the Char that represents this numeric digit value in the specified [radix].\n * Throws an exception if the [radix] is not in the range `2..36` or if this value is not in the range `0` until radix`.  

  * If this value is less than `10`, the decimal digit Char with code `0'.code + this` is returned.  

  * Otherwise, the uppercase Latin letter with code `A'.code + this - 10` is returned.\n */\n * @sample samples.text.Chars.digitToChar
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun Int.digitToChar(radix: Int): Char {\n    if (radix !in 2..36) {\n        throw IllegalArgumentException("Invalid radix: $radix. Valid radix values are in range 2..36")\n    }\n    if (this < 0 || this >= radix) {\n        throw IllegalArgumentException("Digit $this does not represent a valid digit in radix $radix")\n    }\n    return if (this < 10) {\n        '0' + this\n    } else {\n        'A' + this - 10\n    }\n}\n\n/**\n * Converts this character to lower case using Unicode mapping rules of the invariant locale.\n */\n * @Deprecated("Use lowercaseChar() instead.")
```

```
ReplaceWith("lowercaseChar()")\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic expect fun Char.toLowerCase(): Char\n\n/**\n * Converts this character to lower case using Unicode mapping rules of the invariant locale.\n * This function performs one-to-one character mapping.\n * To support one-to-many character mapping use the [toLowerCase] function.\n * If this character has no mapping equivalent, the character itself is returned.\n */\n * @sample samples.text.Chars.toLowerCase
```

```

*^@SinceKotlin("1.5")^@WasExperimental(ExperimentalStdlibApi::class)^npublic expect fun
Char.lowercaseChar(): Char\n\n/**\n * Converts this character to lower case using Unicode mapping rules of the
invariant locale.\n *\n * This function supports one-to-many character mapping, thus the length of the returned
string can be greater than one.\n * For example, `'\u0130'.lowercase()` returns `'\u0069\u0307'`,\n * where
'\u0130` is the LATIN CAPITAL LETTER I WITH DOT ABOVE character (`\ufffd\u0130`).\n * If this character
has no lower case mapping, the result of `toString()` of this char is returned.\n *\n * @sample
samples.text.Chars.lowercase\n
*^@SinceKotlin("1.5")^@WasExperimental(ExperimentalStdlibApi::class)^npublic expect fun
Char.lowercase(): String\n\n/**\n * Converts this character to upper case using Unicode mapping rules of the
invariant locale.\n *\n * @Deprecated("Use uppercaseChar() instead.")
ReplaceWith("uppercaseChar()")^@DeprecatedSinceKotlin(warningSince = "1.5")^npublic expect fun
Char.toUpperCase(): Char\n\n/**\n * Converts this character to upper case using Unicode mapping rules of the
invariant locale.\n *\n * This function performs one-to-one character mapping.\n * To support one-to-many
character mapping use the [uppercase] function.\n * If this character has no mapping equivalent, the character itself
is returned.\n *\n * @sample samples.text.Chars.uppercase\n
*^@SinceKotlin("1.5")^@WasExperimental(ExperimentalStdlibApi::class)^npublic expect fun
Char.uppercaseChar(): Char\n\n/**\n * Converts this character to upper case using Unicode mapping rules of the
invariant locale.\n *\n * This function supports one-to-many character mapping, thus the length of the returned
string can be greater than one.\n * For example, `'\uFB00'.uppercase()` returns `'\u0046\u0046'`,\n * where
'\uFB00` is the LATIN SMALL LIGATURE FF character (`\ufffd\u0046`).\n * If this character has no upper
case mapping, the result of `toString()` of this char is returned.\n *\n * @sample samples.text.Chars.uppercase\n
*^@SinceKotlin("1.5")^@WasExperimental(ExperimentalStdlibApi::class)^npublic expect fun
Char.uppercase(): String\n\n/**\n * Converts this character to title case using Unicode mapping rules of the
invariant locale.\n *\n * This function performs one-to-one character mapping.\n * To support one-to-many
character mapping use the [titlecase] function.\n * If this character has no mapping equivalent, the result of calling
[uppercaseChar] is returned.\n *\n * @sample samples.text.Chars.titlecase\n
*^@SinceKotlin("1.5")^npublic expect fun Char.titlecaseChar(): Char\n\n/**\n * Converts this character to title case using Unicode mapping rules of
the invariant locale.\n *\n * This function supports one-to-many character mapping, thus the length of the returned
string can be greater than one.\n * For example, `'\uFB00'.titlecase()` returns `'\u0046\u0066'`,\n * where
'\uFB00` is the LATIN SMALL LIGATURE FF character (`\ufffd\u0066`).\n * If this character has no title
case mapping, the result of [uppercase] is returned instead.\n *\n * @sample samples.text.Chars.titlecase\n
*^@SinceKotlin("1.5")^npublic fun Char.titlecase(): String = titlecaseImpl()\n\n/**\n * Concatenates this Char
and a String.\n *\n * @sample samples.text.Chars.plus\n
*^@kotlin.internal.InlineOnly^npublic inline operator fun
Char.plus(other: String): String = this.toString() + other\n\n/**\n * Returns `true` if this character is equal to the
[other] character, optionally ignoring character case.\n *\n * Two characters are considered equal ignoring case if
`Char.uppercaseChar().lowercaseChar()` on each character produces the same result.\n *\n * @param ignoreCase
`true` to ignore character case when comparing characters. By default `false`.\n *\n * @sample
samples.text.Chars.equals\n
*^npublic fun Char.equals(other: Char, ignoreCase: Boolean = false): Boolean {\n    if
(this == other) return true\n    if (!ignoreCase) return false\n\n    val thisUpper = this.uppercaseChar()\n    val
otherUpper = other.uppercaseChar()\n\n    return thisUpper == otherUpper || thisUpper.lowercaseChar() ==
otherUpper.lowercaseChar()\n}\n\n/**\n * Returns `true` if this character is a Unicode surrogate code unit.\n
*^npublic fun Char.isSurrogate(): Boolean = this in Char.MIN_SURROGATE..Char.MAX_SURROGATE\n\n/**\n
* Returns the Unicode general category of this character.\n
*^@SinceKotlin("1.5")^npublic expect val
Char.category: CharCategory\n\n/**\n * Returns `true` if this character (Unicode code point) is defined in
Unicode.\n *\n * A character is considered to be defined in Unicode if its [category] is not
[CharCategory.UNASSIGNED].\n
*^@SinceKotlin("1.5")^npublic expect fun Char.isDefined():
Boolean\n\n/**\n * Returns `true` if this character is a letter.\n *\n * A character is considered to be a letter if its
[category] is [CharCategory.UPPERCASE_LETTER],\n * [CharCategory.LOWERCASE_LETTER],

```



```

[CharCategory.TITLECASE_LETTER], [CharCategory.MODIFIER_LETTER], or
[CharCategory.OTHER_LETTER].\n *\n * @sample samples.text.Chars.isLetter\n
*\n@SinceKotlin("1.5")\npublic expect fun Char.isLetter(): Boolean\n\n/**\n * Returns `true` if this character is a
letter or digit.\n *\n * @see isLetter\n * @see isDigit\n *\n * @sample samples.text.Chars.isLetterOrDigit\n
*\n@SinceKotlin("1.5")\npublic expect fun Char.isLetterOrDigit(): Boolean\n\n/**\n * Returns `true` if this
character is a digit.\n *\n * A character is considered to be a digit if its [category] is
[CharCategory.DECIMAL_DIGIT_NUMBER].\n *\n * @sample samples.text.Chars.isDigit\n
*\n@SinceKotlin("1.5")\npublic expect fun Char.isDigit(): Boolean\n\n/**\n * Returns `true` if this character is
upper case.\n *\n * A character is considered to be an upper case character if its [category] is
[CharCategory.UPPERCASE_LETTER],\n *\n * or it has contributory property Other_Uppercase as defined by the
Unicode Standard.\n *\n * @sample samples.text.Chars.isUpperCase\n *\n@SinceKotlin("1.5")\npublic expect
fun Char.isUpperCase(): Boolean\n\n/**\n * Returns `true` if this character is lower case.\n *\n * A character is
considered to be a lower case character if its [category] is [CharCategory.LOWERCASE_LETTER],\n *\n * or it has
contributory property Other_Lowercase as defined by the Unicode Standard.\n *\n * @sample
samples.text.Chars.isLowerCase\n *\n@SinceKotlin("1.5")\npublic expect fun Char.isLowerCase():
Boolean\n\n/**\n * Returns `true` if this character is a title case letter.\n *\n * A character is considered to be a title
case letter if its [category] is [CharCategory.TITLECASE_LETTER].\n *\n * @sample
samples.text.Chars.isTitleCase\n *\n@SinceKotlin("1.5")\npublic expect fun Char.isTitleCase(): Boolean\n\n/**\n
 * Returns `true` if this character is an ISO control character.\n *\n * A character is considered to be an ISO control
character if its [category] is [CharCategory.CONTROL],\n *\n * meaning the Char is in the range ``\u0000'..' \u001F``
or in the range ``\u007F'..' \u009F``.\n *\n * @sample samples.text.Chars.isISOControl\n
*\n@SinceKotlin("1.5")\npublic expect fun Char.isISOControl(): Boolean\n\n/**\n * Determines whether a
character is whitespace according to the Unicode standard.\n * Returns `true` if the character is whitespace.\n *\n *
@\n * @sample samples.text.Chars.isWhitespace\n *\npublic expect fun Char.isWhitespace(): Boolean\n", /*\n *
Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is
governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n *\n@npackage
kotlin\n\n/**\n * Creates a Char with the specified [code], or throws an exception if the [code] is out of
`Char.MIN_VALUE.code..Char.MAX_VALUE.code`.\n *\n * If the program that calls this function is written in a
way that only valid [code] is passed as the argument,\n *\n * using the overload that takes a [UShort] argument is
preferable (`Char(intValue.toUShort())`).\n *\n * That overload doesn't check validity of the argument, and may
improve program performance when the function is called routinely inside a loop.\n *\n * @sample
samples.text.Chars.charFromCode\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npubli
c inline fun Char(code: Int): Char {
    if (code < Char.MIN_VALUE.code || code > Char.MAX_VALUE.code) {
        throw IllegalArgumentException("Invalid Char code: $code")
    }
    return code.toChar()
}\n\n/**\n *
Creates a Char with the specified [code].\n *\n * @sample samples.text.Chars.charFromCode\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\n@Suppress("NO_ACTUAL_FOR
_EXPECT")\npublic expect fun Char(code: UShort): Char\n\n/**\n * Returns the code of this Char.\n *\n * Code of
a Char is the value it was constructed with, and the UTF-16 code unit corresponding to this Char.\n *\n * @sample
samples.text.Chars.code\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\n@Su
ppress("DEPRECATION")\npublic inline val Char.code: Int get() = this.toInt()\n", /*\n * Copyright 2010-2021
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*\n@n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("SequencesKt")\n\npackage
kotlin.sequences\n\n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\nimport kotlin.random.*\n\n/**\n * Returns
`true` if [element] is found in the sequence.\n *\n * The operation is _terminal_.\n *\npublic operator fun

```

```

<@kotlin.internal.OnlyInputTypes T> Sequence<T>.contains(element: T): Boolean {\n  return indexOf(element)
>= 0}\n}\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the
[index] is out of bounds of this sequence.\n *\n * The operation is _terminal_.\n *\n * @sample
samples.collections.Collections.Elements.elementAt\n */\npublic fun <T> Sequence<T>.elementAt(index: Int): T
{\n  return elementAtOrElse(index) { throw IndexOutOfBoundsException("Sequence doesn't contain element at
index $index.") }\n}\n\n/**\n * Returns an element at the given [index] or the result of calling the [defaultValue]
function if the [index] is out of bounds of this sequence.\n *\n * The operation is _terminal_.\n *\n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n */\npublic fun <T>
Sequence<T>.elementAtOrElse(index: Int, defaultValue: (Int) -> T): T {\n  if (index < 0)\n    return
defaultValue(index)\n  val iterator = iterator()\n  var count = 0\n  while (iterator.hasNext()) {\n    val element
= iterator.next()\n    if (index == count++)\n      return element\n  }\n  return
defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or `null` if the [index] is out of bounds of
this sequence.\n *\n * The operation is _terminal_.\n *\n * @sample
samples.collections.Collections.Elements.elementAtOrNull\n */\npublic fun <T>
Sequence<T>.elementOrNull(index: Int): T? {\n  if (index < 0)\n    return null\n  val iterator = iterator()\n
var count = 0\n  while (iterator.hasNext()) {\n    val element = iterator.next()\n    if (index == count++)\n
return element\n  }\n  return null\n}\n\n/**\n * Returns the first element matching the given [predicate], or `null`
if no such element was found.\n *\n * The operation is _terminal_.\n *\n * @sample
samples.collections.Collections.Elements.find\n */\n@kotlin.internal.InlineOnly\npublic inline fun <T>
Sequence<T>.find(predicate: (T) -> Boolean): T? {\n  return firstOrNull(predicate)\n}\n\n/**\n * Returns the last
element matching the given [predicate], or `null` if no such element was found.\n *\n * The operation is
_terminal_.\n *\n * @sample samples.collections.Collections.Elements.find\n
*/\n@kotlin.internal.InlineOnly\npublic inline fun <T> Sequence<T>.findLast(predicate: (T) -> Boolean): T? {\n
return lastOrNull(predicate)\n}\n\n/**\n * Returns first element.\n *\n * @throws [NoSuchElementException] if the
sequence is empty.\n *\n * The operation is _terminal_.\n */\npublic fun <T> Sequence<T>.first(): T {\n  val
iterator = iterator()\n  if (!iterator.hasNext())\n    throw NoSuchElementException("Sequence is empty.")\n
return iterator.next()\n}\n\n/**\n * Returns the first element matching the given [predicate].\n *\n * @throws
[NoSuchElementException] if no such element is found.\n *\n * The operation is _terminal_.\n */\npublic inline fun
<T> Sequence<T>.first(predicate: (T) -> Boolean): T {\n  for (element in this) if (predicate(element)) return
element\n  throw NoSuchElementException("Sequence contains no element matching the predicate.")\n}\n\n/**\n * Returns the first non-null value produced by [transform] function being applied to elements of this sequence in
iteration order.\n * or throws [NoSuchElementException] if no non-null value was produced.\n *\n * The operation
is _terminal_.\n *\n * @sample samples.collections.Collections.Transformations.firstNotNullOf\n
*/\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Any>
Sequence<T>.firstNotNullOf(transform: (T) -> R?): R {\n  return firstNotNullOfOrNull(transform) ?: throw
NoSuchElementException("No element of the sequence was transformed to a non-null value.")\n}\n\n/**\n * Returns the first non-null value produced by [transform] function being applied to elements of this sequence in
iteration order.\n * or `null` if no non-null value was produced.\n *\n * The operation is _terminal_.\n *\n *
@sample samples.collections.Collections.Transformations.firstNotNullOf\n
*/\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Any>
Sequence<T>.firstNotNullOfOrNull(transform: (T) -> R?): R? {\n  for (element in this) {\n    val result =
transform(element)\n    if (result != null) {\n      return result\n    }\n  }\n  return null\n}\n\n/**\n * Returns the first element, or `null` if the sequence is empty.\n *\n * The operation is _terminal_.\n */\npublic fun
<T> Sequence<T>.firstOrNull(): T? {\n  val iterator = iterator()\n  if (!iterator.hasNext())\n    return null\n
return iterator.next()\n}\n\n/**\n * Returns the first element matching the given [predicate], or `null` if element was
not found.\n *\n * The operation is _terminal_.\n */\npublic inline fun <T> Sequence<T>.firstOrNull(predicate: (T)
-> Boolean): T? {\n  for (element in this) if (predicate(element)) return element\n  return null\n}\n\n/**\n * Returns first index of [element], or -1 if the sequence does not contain element.\n *\n * The operation is

```

```

_terminal_.\n *^\npublic fun <@kotlin.internal.OnlyInputTypes T> Sequence<T>.indexOf(element: T): Int {\n  var
index = 0\n  for (item in this) {\n    checkIndexOverflow(index)\n    if (element == item)\n      return
index\n    index++\n  }\n  return -1}\n\n/**\n * Returns index of the first element matching the given
[predicate], or -1 if the sequence does not contain such element.\n *\n * The operation is _terminal_.\n *^\npublic
inline fun <T> Sequence<T>.indexOfFirst(predicate: (T) -> Boolean): Int {\n  var index = 0\n  for (item in this)
{\n    checkIndexOverflow(index)\n    if (predicate(item))\n      return index\n    index++\n  }\n  return -
1}\n\n/**\n * Returns index of the last element matching the given [predicate], or -1 if the sequence does not
contain such element.\n *\n * The operation is _terminal_.\n *^\npublic inline fun <T>
Sequence<T>.indexOfLast(predicate: (T) -> Boolean): Int {\n  var lastIndex = -1\n  var index = 0\n  for (item in
this) {\n    checkIndexOverflow(index)\n    if (predicate(item))\n      lastIndex = index\n    index++\n  }\n
return lastIndex}\n\n/**\n * Returns the last element.\n *\n * The operation is _terminal_.\n *^\n * @throws
NoSuchElementException if the sequence is empty.\n *\n * @sample
samples.collections.Collections.Elements.last\n *^\npublic fun <T> Sequence<T>.last(): T {\n  val iterator =
iterator()\n  if (!iterator.hasNext())\n    throw NoSuchElementException("Sequence is empty.")\n  var last =
iterator.next()\n  while (iterator.hasNext())\n    last = iterator.next()\n  return last}\n\n/**\n * Returns the last
element matching the given [predicate].\n *\n * The operation is _terminal_.\n *^\n * @throws
NoSuchElementException if no such element is found.\n *\n * @sample
samples.collections.Collections.Elements.last\n *^\npublic inline fun <T> Sequence<T>.last(predicate: (T) ->
Boolean): T {\n  var last: T? = null\n  var found = false\n  for (element in this) {\n    if (predicate(element))
{\n      last = element\n      found = true\n    }\n  }\n  if (!found) throw
NoSuchElementException("Sequence contains no element matching the predicate.")\n  @Suppress("UNCHECKED_CAST")\n  return last as T}\n\n/**\n * Returns last index of [element], or -1 if the
sequence does not contain element.\n *\n * The operation is _terminal_.\n *^\npublic fun
<@kotlin.internal.OnlyInputTypes T> Sequence<T>.lastIndexOf(element: T): Int {\n  var lastIndex = -1\n  var
index = 0\n  for (item in this) {\n    checkIndexOverflow(index)\n    if (element == item)\n      lastIndex =
index\n    index++\n  }\n  return lastIndex}\n\n/**\n * Returns the last element, or `null` if the sequence is
empty.\n *\n * The operation is _terminal_.\n *^\n * @sample samples.collections.Collections.Elements.last\n *^\npublic
fun <T> Sequence<T>.lastOrNull(): T? {\n  val iterator = iterator()\n  if (!iterator.hasNext())\n    return null\n
var last = iterator.next()\n  while (iterator.hasNext())\n    last = iterator.next()\n  return
last}\n\n/**\n * Returns the last element matching the given [predicate], or `null` if no such element was found.\n
*\n * The operation is _terminal_.\n *^\n * @sample samples.collections.Collections.Elements.last\n *^\npublic
inline fun <T> Sequence<T>.lastOrNull(predicate: (T) -> Boolean): T? {\n  var last: T? = null\n  for (element in
this) {\n    if (predicate(element)) {\n      last = element\n    }\n  }\n  return last}\n\n/**\n * Returns the
single element, or throws an exception if the sequence is empty or has more than one element.\n *\n * The operation
is _terminal_.\n *^\npublic fun <T> Sequence<T>.single(): T {\n  val iterator = iterator()\n  if
(!iterator.hasNext())\n    throw NoSuchElementException("Sequence is empty.")\n  val single =
iterator.next()\n  if (iterator.hasNext())\n    throw IllegalArgumentException("Sequence has more than one
element.")\n  return single}\n\n/**\n * Returns the single element matching the given [predicate], or throws
exception if there is no or more than one matching element.\n *\n * The operation is _terminal_.\n *^\npublic inline
fun <T> Sequence<T>.single(predicate: (T) -> Boolean): T {\n  var single: T? = null\n  var found = false\n  for
(element in this) {\n    if (predicate(element)) {\n      if (found) throw IllegalArgumentException("Sequence
contains more than one matching element.")\n      single = element\n      found = true\n    }\n  }\n  if
(!found) throw NoSuchElementException("Sequence contains no element matching the predicate.")\n  @Suppress("UNCHECKED_CAST")\n  return single as T}\n\n/**\n * Returns single element, or `null` if the
sequence is empty or has more than one element.\n *\n * The operation is _terminal_.\n *^\npublic fun <T>
Sequence<T>.singleOrNull(): T? {\n  val iterator = iterator()\n  if (!iterator.hasNext())\n    return null\n  val
single = iterator.next()\n  if (iterator.hasNext())\n    return null\n  return single}\n\n/**\n * Returns the single
element matching the given [predicate], or `null` if element was not found or more than one element was found.\n

```

```

*\n * The operation is _terminal_.\n *\npublic inline fun <T> Sequence<T>.singleOrNull(predicate: (T) ->
Boolean): T? {\n    var single: T? = null\n    var found = false\n    for (element in this) {\n        if (predicate(element))\n        {\n            if (found) return null\n            single = element\n            found = true\n        }\n        if (!found) return\n        null\n    }\n    return single\n}\n\n**\n * Returns a sequence containing all elements except first [n] elements.\n *\n * The
operation is _intermediate_ and _stateless_.\n *\n * @throws IllegalArgumentException if [n] is negative.\n *\n *
@sample samples.collections.Collections.Transformations.drop\n *\npublic fun <T> Sequence<T>.drop(n: Int):
Sequence<T> {\n    require(n >= 0) { \"Requested element count $n is less than zero.\" }\n    return when {\n        n
== 0 -> this\n        this is DropTakeSequence -> this.drop(n)\n        else -> DropSequence(this, n)\n    }\n}\n\n**\n *
Returns a sequence containing all elements except first elements that satisfy the given [predicate].\n *\n * The
operation is _intermediate_ and _stateless_.\n *\n * @sample
samples.collections.Collections.Transformations.drop\n *\npublic fun <T> Sequence<T>.dropWhile(predicate: (T)
-> Boolean): Sequence<T> {\n    return DropWhileSequence(this, predicate)\n}\n\n**\n * Returns a sequence
containing only elements matching the given [predicate].\n *\n * The operation is _intermediate_ and _stateless_.\n
*\n * @sample samples.collections.Collections.Filtering.filter\n *\npublic fun <T> Sequence<T>.filter(predicate:
(T) -> Boolean): Sequence<T> {\n    return FilteringSequence(this, true, predicate)\n}\n\n**\n * Returns a sequence
containing only elements matching the given [predicate].\n *\n * @param [predicate] function that takes the index of an
element and the element itself\n * and returns the result of predicate evaluation on the element.\n *\n * The
operation is _intermediate_ and _stateless_.\n *\n * @sample
samples.collections.Collections.Filtering.filterIndexed\n *\npublic fun <T> Sequence<T>.filterIndexed(predicate:
(index: Int, T) -> Boolean): Sequence<T> {\n    // TODO: Rewrite with generalized MapFilterIndexingSequence\n
return TransformingSequence(FilteringSequence(IndexingSequence(this), true, { predicate(it.index, it.value) }), {
it.value })\n}\n\n**\n * Appends all elements matching the given [predicate] to the given [destination].\n *\n * @param
[predicate] function that takes the index of an element and the element itself\n * and returns the result of predicate
evaluation on the element.\n *\n * The operation is _terminal_.\n *\n * @sample
samples.collections.Collections.Filtering.filterIndexedTo\n *\npublic inline fun <T, C : MutableCollection<in T>>
Sequence<T>.filterIndexedTo(destination: C, predicate: (index: Int, T) -> Boolean): C {\n    forEachIndexed {\n
index, element ->\n        if (predicate(index, element)) destination.add(element)\n    }\n    return
destination\n}\n\n**\n * Returns a sequence containing all elements that are instances of specified type parameter
R.\n *\n * The operation is _intermediate_ and _stateless_.\n *\n * @sample
samples.collections.Collections.Filtering.filterIsInstance\n *\npublic inline fun <reified R>
Sequence<*>.filterIsInstance(): Sequence<@kotlin.internal.NoInfer R> {\n
@Suppress(\"UNCHECKED_CAST\")\n    return filter { it is R } as Sequence<R>\n}\n\n**\n * Appends all
elements that are instances of specified type parameter R to the given [destination].\n *\n * The operation is
_terminal_.\n *\n * @sample samples.collections.Collections.Filtering.filterIsInstanceTo\n *\npublic inline fun
<reified R, C : MutableCollection<in R>> Sequence<*>.filterIsInstanceTo(destination: C): C {\n    for (element in
this) if (element is R) destination.add(element)\n    return destination\n}\n\n**\n * Returns a sequence containing
all elements not matching the given [predicate].\n *\n * The operation is _intermediate_ and _stateless_.\n *\n *
@sample samples.collections.Collections.Filtering.filter\n *\npublic fun <T> Sequence<T>.filterNot(predicate: (T)
-> Boolean): Sequence<T> {\n    return FilteringSequence(this, false, predicate)\n}\n\n**\n * Returns a sequence
containing all elements that are not `null`.\n *\n * The operation is _intermediate_ and _stateless_.\n *\n * @sample
samples.collections.Collections.Filtering.filterNotNull\n *\npublic fun <T : Any> Sequence<T?>.filterNotNull():
Sequence<T> {\n    @Suppress(\"UNCHECKED_CAST\")\n    return filterNot { it == null } as
Sequence<T>\n}\n\n**\n * Appends all elements that are not `null` to the given [destination].\n *\n * The operation
is _terminal_.\n *\n * @sample samples.collections.Collections.Filtering.filterNotNullTo\n *\npublic fun <C :
MutableCollection<in T>, T : Any> Sequence<T?>.filterNotNullTo(destination: C): C {\n    for (element in this) if
(element != null) destination.add(element)\n    return destination\n}\n\n**\n * Appends all elements not matching
the given [predicate] to the given [destination].\n *\n * The operation is _terminal_.\n *\n * @sample
samples.collections.Collections.Filtering.filterTo\n *\npublic inline fun <T, C : MutableCollection<in T>>

```

Sequence<T>.filterNotTo(destination: C, predicate: (T) -> Boolean): C {
 for (element in this) if
 (!predicate(element)) destination.add(element)
 return destination
 }
 Appends all elements matching the given [predicate] to the given [destination].
 The operation is `_terminal_`.
 @sample samples.collections.Collections.Filtering.filterTo
 public inline fun <T, C : MutableCollection<in T>>

Sequence<T>.filterTo(destination: C, predicate: (T) -> Boolean): C {
 for (element in this) if (predicate(element))
 destination.add(element)
 return destination
 }
 Returns a sequence containing first [n] elements.
 The operation is `_intermediate_` and `_stateless_`.
 @throws IllegalArgumentException if [n] is negative.
 @sample samples.collections.Collections.Transformations.take
 public fun <T> Sequence<T>.take(n: Int):

Sequence<T> {
 require(n >= 0) { "Requested element count \$n is less than zero." }
 return when {
 n == 0 -> emptySequence()
 this is DropTakeSequence -> this.take(n)
 else -> TakeSequence(this, n)
 }
 }
 Returns a sequence containing first elements satisfying the given [predicate].
 The operation is `_intermediate_` and `_stateless_`.
 @sample samples.collections.Collections.Transformations.take
 public fun <T> Sequence<T>.takeWhile(predicate: (T) -> Boolean): Sequence<T> {
 return
 TakeWhileSequence(this, predicate)
 }
 Returns a sequence that yields elements of this sequence sorted according to their natural sort order.
 The sort is `_stable_`. It means that equal elements preserve their order relative to each other after sorting.
 The operation is `_intermediate_` and `_stateful_`.
 public fun <T : Comparable<T>> Sequence<T>.sorted(): Sequence<T> {
 return object : Sequence<T> {
 override fun
 iterator(): Iterator<T> {
 val sortedList = this@sorted.toMutableList()
 sortedList.sort()
 return sortedList.iterator()
 }
 }
 }
 Returns a sequence that yields elements of this sequence sorted according to natural sort order of the value returned by specified [selector] function.
 The sort is `_stable_`. It means that equal elements preserve their order relative to each other after sorting.
 The operation is `_intermediate_` and `_stateful_`.
 @sample samples.collections.Collections.Sorting.sortedBy
 public inline fun <T, R : Comparable<R>> Sequence<T>.sortedBy(crossinline selector: (T) -> R?): Sequence<T> {
 return sortedWith(compareBy(selector))
 }
 Returns a sequence that yields elements of this sequence sorted descending according to natural sort order of the value returned by specified [selector] function.
 The sort is `_stable_`. It means that equal elements preserve their order relative to each other after sorting.
 The operation is `_intermediate_` and `_stateful_`.
 public inline fun <T, R : Comparable<R>>

Sequence<T>.sortedByDescending(crossinline selector: (T) -> R?): Sequence<T> {
 return
 sortedWith(compareByDescending(selector))
 }
 Returns a sequence that yields elements of this sequence sorted descending according to their natural sort order.
 The sort is `_stable_`. It means that equal elements preserve their order relative to each other after sorting.
 The operation is `_intermediate_` and `_stateful_`.
 public fun <T : Comparable<T>> Sequence<T>.sortedDescending(): Sequence<T> {
 return
 sortedWith(reverseOrder())
 }
 Returns a sequence that yields elements of this sequence sorted according to the specified [comparator].
 The sort is `_stable_`. It means that equal elements preserve their order relative to each other after sorting.
 The operation is `_intermediate_` and `_stateful_`.
 public fun <T>

Sequence<T>.sortedWith(comparator: Comparator<in T>): Sequence<T> {
 return object : Sequence<T> {
 override fun
 iterator(): Iterator<T> {
 val sortedList = this@sortedWith.toMutableList()
 sortedList.sortWith(comparator)
 return sortedList.iterator()
 }
 }
 }
 Returns a [Map] containing key-value pairs provided by [transform] function applied to elements of the given sequence.
 If any of two pairs would have the same key the last one gets added to the map.
 The returned map preserves the entry iteration order of the original sequence.
 The operation is `_terminal_`.
 @sample samples.collections.Collections.Transformations.associate
 public inline fun <T, K, V>

Sequence<T>.associate(transform: (T) -> Pair<K, V>): Map<K, V> {
 return associateTo(LinkedHashMap<K, V>(), transform)
 }
 Returns a [Map] containing the elements from the given sequence indexed by the key returned from [keySelector] function applied to each element.
 If any two elements would have the same key returned by [keySelector] the last one gets added to the map.
 The returned map preserves the entry iteration order of the original sequence.
 The operation is `_terminal_`.
 @sample samples.collections.Collections.Transformations.associateBy
 public inline fun <T, K>

```

Sequence<T>.associateBy(keySelector: (T) -> K): Map<K, T> {\n  return associateByTo(LinkedHashMap<K,
T>(), keySelector)\n}\n\n/**\n * Returns a [Map] containing the values provided by [valueTransform] and indexed
by [keySelector] functions applied to elements of the given sequence.\n * \n * If any two elements would have the
same key returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the entry
iteration order of the original sequence.\n *\n * The operation is _terminal_.\n *\n * @sample
samples.collections.Collections.Transformations.associateByWithValueTransform\n */\npublic inline fun <T, K, V>
Sequence<T>.associateBy(keySelector: (T) -> K, valueTransform: (T) -> V): Map<K, V> {\n  return
associateByTo(LinkedHashMap<K, V>(), keySelector, valueTransform)\n}\n\n/**\n * Populates and returns the
[destination] mutable map with key-value pairs,\n * where key is provided by the [keySelector] function applied to
each element of the given sequence\n * and value is the element itself.\n * \n * If any two elements would have the
same key returned by [keySelector] the last one gets added to the map.\n *\n * The operation is _terminal_.\n *\n * @sample
samples.collections.Collections.Transformations.associateByTo\n */\npublic inline fun <T, K, M :
MutableMap<in K, in T>> Sequence<T>.associateByTo(destination: M, keySelector: (T) -> K): M {\n  for
(element in this) {\n    destination.put(keySelector(element), element)\n  }\n  return destination\n}\n\n/**\n *
Populates and returns the [destination] mutable map with key-value pairs,\n * where key is provided by the
[keySelector] function and\n * and value is provided by the [valueTransform] function applied to elements of the
given sequence.\n * \n * If any two elements would have the same key returned by [keySelector] the last one gets
added to the map.\n *\n * The operation is _terminal_.\n *\n * @sample
samples.collections.Collections.Transformations.associateByToWithValueTransform\n */\npublic inline fun <T, K,
V, M : MutableMap<in K, in V>> Sequence<T>.associateByTo(destination: M, keySelector: (T) -> K,
valueTransform: (T) -> V): M {\n  for (element in this) {\n    destination.put(keySelector(element),
valueTransform(element))\n  }\n  return destination\n}\n\n/**\n * Populates and returns the [destination] mutable
map with key-value pairs\n * provided by [transform] function applied to each element of the given sequence.\n * \n *
If any of two pairs would have the same key the last one gets added to the map.\n *\n * The operation is
_terminal_.\n *\n * @sample samples.collections.Collections.Transformations.associateTo\n */\npublic inline fun
<T, K, V, M : MutableMap<in K, in V>> Sequence<T>.associateTo(destination: M, transform: (T) -> Pair<K, V>):
M {\n  for (element in this) {\n    destination += transform(element)\n  }\n  return destination\n}\n\n/**\n *
Returns a [Map] where keys are elements from the given sequence and values are\n * produced by the
[valueSelector] function applied to each element.\n * \n * If any two elements are equal, the last one gets added to
the map.\n * \n * The returned map preserves the entry iteration order of the original sequence.\n *\n * The
operation is _terminal_.\n *\n * @sample samples.collections.Collections.Transformations.associateWith\n */\n@SinceKotlin("1.3")\npublic inline fun <K, V> Sequence<K>.associateWith(valueSelector: (K) -> V):
Map<K, V> {\n  val result = LinkedHashMap<K, V>()\n  return associateWithTo(result,
valueSelector)\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs for each
element of the given sequence,\n * where key is the element itself and value is provided by the [valueSelector]
function applied to that key.\n * \n * If any two elements are equal, the last one overwrites the former value in the
map.\n *\n * The operation is _terminal_.\n *\n * @sample
samples.collections.Collections.Transformations.associateWithTo\n */\n@SinceKotlin("1.3")\npublic inline fun
<K, V, M : MutableMap<in K, in V>> Sequence<K>.associateWithTo(destination: M, valueSelector: (K) -> V): M
{\n  for (element in this) {\n    destination.put(element, valueSelector(element))\n  }\n  return
destination\n}\n\n/**\n * Appends all elements to the given [destination] collection.\n *\n * The operation is
_terminal_.\n */\npublic fun <T, C : MutableCollection<in T>> Sequence<T>.toCollection(destination: C): C {\n
for (item in this) {\n  destination.add(item)\n }\n  return destination\n}\n\n/**\n * Returns a new [HashSet] of
all elements.\n *\n * The operation is _terminal_.\n */\npublic fun <T> Sequence<T>.toHashSet(): HashSet<T> {\n
return toCollection(HashSet<T>())\n}\n\n/**\n * Returns a [List] containing all elements.\n *\n * The operation is
_terminal_.\n */\npublic fun <T> Sequence<T>.toList(): List<T> {\n  return
this.toMutableList().optimizeReadOnlyList()\n}\n\n/**\n * Returns a new [MutableList] filled with all elements of
this sequence.\n *\n * The operation is _terminal_.\n */\npublic fun <T> Sequence<T>.toMutableList():

```

```

MutableList<T> {\n    return toCollection(ArrayList<T>())\n}\n\n/**\n * Returns a [Set] of all elements.\n * \n *\n * The returned set preserves the element iteration order of the original sequence.\n * \n *\n * The operation is\n * _terminal_.\n */\npublic fun <T> Sequence<T>.toSet(): Set<T> {\n    return\n    toCollection(LinkedHashSet<T>()).optimizeReadOnlySet()\n}\n\n/**\n * Returns a single sequence of all elements\n * from results of [transform] function being invoked on each element of original sequence.\n * \n *\n * The operation is\n * _intermediate_ and _stateless_.\n * \n * @sample samples.collections.Collections.Transformations.flatMap\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIterable")\npublic fun <T, R>\nSequence<T>.flatMap(transform: (T) -> Iterable<R>): Sequence<R> {\n    return FlatteningSequence(this,\n    transform, Iterable<R>::iterator)\n}\n\n/**\n * Returns a single sequence of all elements from results of [transform]\n * function being invoked on each element of original sequence.\n * \n *\n * The operation is\n * _intermediate_ and\n * _stateless_.\n * \n * @sample samples.collections.Collections.Transformations.flatMap\n */\npublic fun <T, R>\nSequence<T>.flatMap(transform: (T) -> Sequence<R>): Sequence<R> {\n    return FlatteningSequence(this,\n    transform, Sequence<R>::iterator)\n}\n\n/**\n * Returns a single sequence of all elements yielded from results of\n * [transform] function being invoked on each element\n * and its index in the original sequence.\n * \n *\n * The operation\n * is\n * _intermediate_ and\n * _stateless_.\n * \n * @sample\n * samples.collections.Collections.Transformations.flatMapIndexed\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterable")\npublic fun <T, R>\nSequence<T>.flatMapIndexed(transform: (index: Int, T) -> Iterable<R>): Sequence<R> {\n    return\n    flatMapIndexed(this, transform, Iterable<R>::iterator)\n}\n\n/**\n * Returns a single sequence of all elements\n * yielded from results of [transform] function being invoked on each element\n * and its index in the original\n * sequence.\n * \n *\n * The operation is\n * _intermediate_ and\n * _stateless_.\n * \n * @sample\n * samples.collections.Collections.Transformations.flatMapIndexed\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedSequence")\npublic fun <T, R>\nSequence<T>.flatMapIndexed(transform: (index: Int, T) -> Sequence<R>): Sequence<R> {\n    return\n    flatMapIndexed(this, transform, Sequence<R>::iterator)\n}\n\n/**\n * Appends all elements yielded from results of\n * [transform] function being invoked on each element\n * and its index in the original sequence, to the given\n * [destination].\n * \n *\n * The operation is\n * _terminal_.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterableTo")\n@kotlin.internal.InlineOnly\npublic inline fun <T, R, C : MutableCollection<in R>> Sequence<T>.flatMapIndexedTo(destination: C, transform:\n(index: Int, T) -> Iterable<R>): C {\n    var index = 0\n    for (element in this) {\n        val list =\n        transform(checkIndexOverflow(index++), element)\n        destination.addAll(list)\n    }\n    return\n    destination\n}\n\n/**\n * Appends all elements yielded from results of [transform] function being invoked on each\n * element\n * and its index in the original sequence, to the given [destination].\n * \n *\n * The operation is\n * _terminal_.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedSequenceTo")\n@kotlin.internal.InlineOnly\npublic inline fun <T, R, C : MutableCollection<in R>> Sequence<T>.flatMapIndexedTo(destination: C, transform:\n(index: Int, T) -> Sequence<R>): C {\n    var index = 0\n    for (element in this) {\n        val list =\n        transform(checkIndexOverflow(index++), element)\n        destination.addAll(list)\n    }\n    return\n    destination\n}\n\n/**\n * Appends all elements yielded from results of [transform] function being invoked on each\n * element of original sequence, to the given [destination].\n * \n *\n * The operation is\n * _terminal_.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIterableTo")\npublic inline fun <T, R, C :\nMutableCollection<in R>> Sequence<T>.flatMapTo(destination: C, transform: (T) -> Iterable<R>): C {\n    for\n    (element in this) {\n        val list = transform(element)\n        destination.addAll(list)\n    }\n    return

```

```

destination\n}\n\n/**\n * Appends all elements yielded from results of [transform] function being invoked on each
element of original sequence, to the given [destination].\n * \n * The operation is _terminal_.\n * \n\npublic inline fun
<T, R, C : MutableCollection<in R>> Sequence<T>.flatMapTo(destination: C, transform: (T) -> Sequence<R>): C
{\n  for (element in this) {\n    val list = transform(element)\n    destination.addAll(list)\n  }\n  return
destination\n}\n\n/**\n * Groups elements of the original sequence by the key returned by the given [keySelector]
function\n * applied to each element and returns a map where each group key is associated with a list of
corresponding elements.\n * \n * The returned map preserves the entry iteration order of the keys produced from the
original sequence.\n * \n * The operation is _terminal_.\n * \n * @sample
samples.collections.Collections.Transformations.groupBy\n * \n\npublic inline fun <T, K>
Sequence<T>.groupBy(keySelector: (T) -> K): Map<K, List<T>> {\n  return groupByTo(LinkedHashMap<K,
MutableList<T>>(), keySelector)\n}\n\n/**\n * Groups values returned by the [valueTransform] function applied to
each element of the original sequence\n * by the key returned by the given [keySelector] function applied to the
element\n * and returns a map where each group key is associated with a list of corresponding values.\n * \n * The
returned map preserves the entry iteration order of the keys produced from the original sequence.\n * \n * The
operation is _terminal_.\n * \n * @sample
samples.collections.Collections.Transformations.groupByKeysAndValues\n * \n\npublic inline fun <T, K, V>
Sequence<T>.groupBy(keySelector: (T) -> K, valueTransform: (T) -> V): Map<K, List<V>> {\n  return
groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n}\n\n/**\n * Groups elements
of the original sequence by the key returned by the given [keySelector] function\n * applied to each element and
puts to the [destination] map each group key associated with a list of corresponding elements.\n * \n * @return The
[destination] map.\n * \n * The operation is _terminal_.\n * \n * @sample
samples.collections.Collections.Transformations.groupBy\n * \n\npublic inline fun <T, K, M : MutableMap<in K,
MutableList<T>>> Sequence<T>.groupByTo(destination: M, keySelector: (T) -> K): M {\n  for (element in this)
{\n    val key = keySelector(element)\n    val list = destination.getOrPut(key) { ArrayList<T>() }\n
list.add(element)\n  }\n  return destination\n}\n\n/**\n * Groups values returned by the [valueTransform] function
applied to each element of the original sequence\n * by the key returned by the given [keySelector] function applied
to the element\n * and puts to the [destination] map each group key associated with a list of corresponding values.\n
* \n * @return The [destination] map.\n * \n * The operation is _terminal_.\n * \n * @sample
samples.collections.Collections.Transformations.groupByKeysAndValues\n * \n\npublic inline fun <T, K, V, M :
MutableMap<in K, MutableList<V>>> Sequence<T>.groupByTo(destination: M, keySelector: (T) -> K,
valueTransform: (T) -> V): M {\n  for (element in this) {\n    val key = keySelector(element)\n    val list =
destination.getOrPut(key) { ArrayList<V>() }\n    list.add(valueTransform(element))\n  }\n  return
destination\n}\n\n/**\n * Creates a [Grouping] source from a sequence to be used later with one of group-and-fold
operations\n * using the specified [keySelector] function to extract a key from each element.\n * \n * The operation is
_intermediate_ and _stateless_.\n * \n * @sample samples.collections.Grouping.groupingByEachCount\n
* \n\n@SinceKotlin("1.1")\n\npublic inline fun <T, K> Sequence<T>.groupingBy(crossinline keySelector: (T) -> K):
Grouping<T, K> {\n  return object : Grouping<T, K> {\n    override fun sourceIterator(): Iterator<T> =
this@groupingBy.iterator()\n    override fun keyOf(element: T): K = keySelector(element)\n  }\n}\n\n/**\n * Returns a sequence containing the results of applying the given [transform] function\n * to each element in the
original sequence.\n * \n * The operation is _intermediate_ and _stateless_.\n * \n * @sample
samples.collections.Collections.Transformations.map\n * \n\npublic fun <T, R> Sequence<T>.map(transform: (T) ->
R): Sequence<R> {\n  return TransformingSequence(this, transform)\n}\n\n/**\n * Returns a sequence containing
the results of applying the given [transform] function\n * to each element and its index in the original sequence.\n *
* @param [transform] function that takes the index of an element and the element itself\n * and returns the result of
the transform applied to the element.\n * \n * The operation is _intermediate_ and _stateless_.\n * \n\npublic fun <T,
R> Sequence<T>.mapIndexed(transform: (index: Int, T) -> R): Sequence<R> {\n  return
TransformingIndexedSequence(this, transform)\n}\n\n/**\n * Returns a sequence containing only the non-null
results of applying the given [transform] function\n * to each element and its index in the original sequence.\n *

```


@param [transform] function that takes the index of an element and the element itself\n * and returns the result of the transform applied to the element.\n *\n * The operation is _intermediate_ and _stateless_.\n */\n public fun <T, R : Any> Sequence<T>.mapIndexedNotNull(transform: (index: Int, T) -> R?): Sequence<R> {\n return TransformingIndexedSequence(this, transform).filterNotNull()\n }\n *\n * Applies the given [transform] function to each element and its index in the original sequence\n * and appends only the non-null results to the given [destination].\n *\n * @param [transform] function that takes the index of an element and the element itself\n * and returns the result of the transform applied to the element.\n *\n * The operation is _terminal_.\n */\n public inline fun <T, R : Any, C : MutableCollection<in R>> Sequence<T>.mapIndexedNotNullTo(destination: C, transform: (index: Int, T) -> R?): C {\n forEachIndexed { index, element -> transform(index, element)?.let { destination.add(it) } }\n return destination\n }\n *\n * Applies the given [transform] function to each element and its index in the original sequence\n * and appends the results to the given [destination].\n *\n * @param [transform] function that takes the index of an element and the element itself\n * and returns the result of the transform applied to the element.\n *\n * The operation is _terminal_.\n */\n public inline fun <T, R, C : MutableCollection<in R>> Sequence<T>.mapIndexedTo(destination: C, transform: (index: Int, T) -> R): C {\n var index = 0\n for (item in this)\n destination.add(transform(checkIndexOverflow(index++), item))\n return destination\n }\n *\n * Returns a sequence containing only the non-null results of applying the given [transform] function\n * to each element in the original sequence.\n *\n * The operation is _intermediate_ and _stateless_.\n */\n @sample samples.collections.Collections.Transformations.mapNotNull\n */\n public fun <T, R : Any> Sequence<T>.mapNotNull(transform: (T) -> R?): Sequence<R> {\n return TransformingSequence(this, transform).filterNotNull()\n }\n *\n * Applies the given [transform] function to each element in the original sequence\n * and appends only the non-null results to the given [destination].\n *\n * The operation is _terminal_.\n */\n public inline fun <T, R : Any, C : MutableCollection<in R>> Sequence<T>.mapNotNullTo(destination: C, transform: (T) -> R?): C {\n forEach { element -> transform(element)?.let { destination.add(it) } }\n return destination\n }\n *\n * Applies the given [transform] function to each element of the original sequence\n * and appends the results to the given [destination].\n *\n * The operation is _terminal_.\n */\n public inline fun <T, R, C : MutableCollection<in R>> Sequence<T>.mapTo(destination: C, transform: (T) -> R): C {\n for (item in this)\n destination.add(transform(item))\n return destination\n }\n *\n * Returns a sequence that wraps each element of the original sequence\n * into an [IndexedValue] containing the index of that element and the element itself.\n *\n * The operation is _intermediate_ and _stateless_.\n */\n public fun <T> Sequence<T>.withIndex(): Sequence<IndexedValue<T>> {\n return IndexingSequence(this)\n }\n *\n * Returns a sequence containing only distinct elements from the given sequence.\n *\n * Among equal elements of the given sequence, only the first one will be present in the resulting sequence.\n *\n * The elements in the resulting sequence are in the same order as they were in the source sequence.\n *\n * The operation is _intermediate_ and _stateful_.\n */\n @sample samples.collections.Collections.Transformations.distinctAndDistinctBy\n */\n public fun <T> Sequence<T>.distinct(): Sequence<T> {\n return this.distinctBy { it }\n }\n *\n * Returns a sequence containing only elements from the given sequence\n * having distinct keys returned by the given [selector] function.\n *\n * Among elements of the given sequence with equal keys, only the first one will be present in the resulting sequence.\n *\n * The elements in the resulting sequence are in the same order as they were in the source sequence.\n *\n * The operation is _intermediate_ and _stateful_.\n */\n @sample samples.collections.Collections.Transformations.distinctAndDistinctBy\n */\n public fun <T, K> Sequence<T>.distinctBy(selector: (T) -> K): Sequence<T> {\n return DistinctSequence(this, selector)\n }\n *\n * Returns a new [MutableSet] containing all distinct elements from the given sequence.\n *\n * The returned set preserves the element iteration order of the original sequence.\n *\n * The operation is _terminal_.\n */\n public fun <T> Sequence<T>.toMutableSet(): MutableSet<T> {\n val set = LinkedHashSet<T>()\n for (item in this) set.add(item)\n return set\n }\n *\n * Returns `true` if all elements match the given [predicate].\n *\n * The operation is _terminal_.\n */\n @sample samples.collections.Collections.Aggregates.all\n */\n public inline fun <T> Sequence<T>.all(predicate: (T) -> Boolean): Boolean {\n for (element in this) if (!predicate(element)) return false\n return true\n }\n *\n * Returns `true` if sequence has at least one element.\n *\n * The operation is

```

_terminal_.\n * \n * @sample samples.collections.Collections.Aggregates.any\n * \n\npublic fun <T>
Sequence<T>.any(): Boolean {\n    return iterator().hasNext()\n}\n\n/**\n * Returns `true` if at least one element
matches the given [predicate].\n * \n * The operation is _terminal_.\n * \n * @sample
samples.collections.Collections.Aggregates.anyWithPredicate\n * \n\npublic inline fun <T>
Sequence<T>.any(predicate: (T) -> Boolean): Boolean {\n    for (element in this) if (predicate(element)) return
true\n    return false\n}\n\n/**\n * Returns the number of elements in this sequence.\n * \n * The operation is
_terminal_.\n * \n\npublic fun <T> Sequence<T>.count(): Int {\n    var count = 0\n    for (element in this)
checkCountOverflow(++count)\n    return count\n}\n\n/**\n * Returns the number of elements matching the given
[predicate].\n * \n * The operation is _terminal_.\n * \n\npublic inline fun <T> Sequence<T>.count(predicate: (T) ->
Boolean): Int {\n    var count = 0\n    for (element in this) if (predicate(element)) checkCountOverflow(++count)\n
return count\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from left to
right\n * to current accumulator value and each element.\n * \n * Returns the specified [initial] value if the sequence
is empty.\n * \n * @param [operation] function that takes current accumulator value and an element, and calculates
the next accumulator value.\n * \n * The operation is _terminal_.\n * \n\npublic inline fun <T, R>
Sequence<T>.fold(initial: R, operation: (acc: R, T) -> R): R {\n    var accumulator = initial\n    for (element in this)
accumulator = operation(accumulator, element)\n    return accumulator\n}\n\n/**\n * Accumulates value starting
with [initial] value and applying [operation] from left to right\n * to current accumulator value and each element
with its index in the original sequence.\n * \n * Returns the specified [initial] value if the sequence is empty.\n * \n *
@param [operation] function that takes the index of an element, current accumulator value\n * and the element
itself, and calculates the next accumulator value.\n * \n * The operation is _terminal_.\n * \n\npublic inline fun <T, R>
Sequence<T>.foldIndexed(initial: R, operation: (index: Int, acc: R, T) -> R): R {\n    var index = 0\n    var
accumulator = initial\n    for (element in this) accumulator = operation(checkIndexOverflow(index++), accumulator,
element)\n    return accumulator\n}\n\n/**\n * Performs the given [action] on each element.\n * \n * The operation is
_terminal_.\n * \n\npublic inline fun <T> Sequence<T>.forEach(action: (T) -> Unit): Unit {\n    for (element in this)
action(element)\n}\n\n/**\n * Performs the given [action] on each element, providing sequential index with the
element.\n * \n * @param [action] function that takes the index of an element and the element itself\n * and performs the
action on the element.\n * \n * The operation is _terminal_.\n * \n\npublic inline fun <T>
Sequence<T>.forEachIndexed(action: (index: Int, T) -> Unit): Unit {\n    var index = 0\n    for (item in this)
action(checkIndexOverflow(index++), item)\n}\n\n@Deprecated("Use maxOrNull instead.")
ReplaceWith("this.maxOrNull()")\n\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")\n\n@SinceKotlin("1.1")\n\npublic fun Sequence<Double>.max(): Double? {\n    return
maxOrNull()\n}\n\n@Deprecated("Use maxOrNull instead.")
ReplaceWith("this.maxOrNull()")\n\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")\n\n@SinceKotlin("1.1")\n\npublic fun Sequence<Float>.max(): Float? {\n    return
maxOrNull()\n}\n\n@Deprecated("Use maxOrNull instead.")
ReplaceWith("this.maxOrNull()")\n\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")\n\npublic fun <T : Comparable<T>> Sequence<T>.max(): T? {\n    return
maxOrNull()\n}\n\n@Deprecated("Use maxByOrNull instead.")
ReplaceWith("this.maxByOrNull(selector)")\n\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince =
"1.5", hiddenSince = "1.6")\n\npublic inline fun <T, R : Comparable<R>> Sequence<T>.maxBy(selector: (T) ->
R): T? {\n    return maxByOrNull(selector)\n}\n\n/**\n * Returns the first element yielding the largest value of the
given function or `null` if there are no elements.\n * \n * The operation is _terminal_.\n * \n * @sample
samples.collections.Collections.Aggregates.maxByOrNull\n * \n\n@SinceKotlin("1.4")\n\npublic inline fun <T, R :
Comparable<R>> Sequence<T>.maxByOrNull(selector: (T) -> R): T? {\n    val iterator = iterator()\n    if
(!iterator.hasNext()) return null\n    var maxElem = iterator.next()\n    if (!iterator.hasNext()) return maxElem\n    var
maxValue = selector(maxElem)\n    do {\n        val e = iterator.next()\n        val v = selector(e)\n        if (maxValue <
v) {\n            maxElem = e\n            maxValue = v\n        }\n    } while (iterator.hasNext())\n    return
maxElem\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to

```

each element in the sequence.
If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.
@throws NoSuchElementException if the sequence is empty.
The operation is

terminal

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Sequence<T>.maxOf(selector: (T) -> Double): Double {\n    val iterator = iterator()\n    if (!iterator.hasNext()) throw NoSuchElementException()\n    var\n    max\n    Value = selector(iterator.next())\n    while (iterator.hasNext()) {\n        val v = selector(iterator.next())\n        max\n        Value = maxOf(max\n        Value, v)\n    }\n    return max\n    Value\n}\n\n/**\n * Returns the largest value among all\n * values produced by [selector] function\n * applied to each element in the sequence.\n * If any of values\n * produced by [selector] function is `NaN`, the returned result is `NaN`.\n * @throws NoSuchElementException\n * if the sequence is empty.\n * The operation is _terminal_.
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Sequence<T>.maxOf(selector: (T) -> Float): Float {\n    val iterator = iterator()\n    if (!iterator.hasNext()) throw NoSuchElementException()\n    var\n    max\n    Value = selector(iterator.next())\n    while (iterator.hasNext()) {\n        val v = selector(iterator.next())\n        max\n        Value = maxOf(max\n        Value, v)\n    }\n    return max\n    Value\n}\n\n/**\n * Returns the largest value among all\n * values produced by [selector] function\n * applied to each element in the sequence.\n * @throws\n * NoSuchElementException if the sequence is empty.\n * The operation is _terminal_.
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Comparable<R>>\nSequence<T>.maxOf(selector: (T) -> R): R {\n    val iterator = iterator()\n    if (!iterator.hasNext()) throw\n    NoSuchElementException()\n    var\n    max\n    Value = selector(iterator.next())\n    while (iterator.hasNext()) {\n        val v\n        = selector(iterator.next())\n        if (max\n        Value < v) {\n            max\n            Value = v\n        }\n    }\n    return\n    max\n    Value\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to\n * each element in the sequence or `null` if there are no elements.\n * If any of values produced by [selector]\n * function is `NaN`, the returned result is `NaN`.\n * The operation is _terminal_.
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Sequence<T>.maxOfOrNull(selector:\n(T) -> Double): Double? {\n    val iterator = iterator()\n    if (!iterator.hasNext()) return null\n    var\n    max\n    Value =\n    selector(iterator.next())\n    while (iterator.hasNext()) {\n        val v = selector(iterator.next())\n        max\n        Value =\n        maxOf(max\n        Value, v)\n    }\n    return max\n    Value\n}\n\n/**\n * Returns the largest value among all values produced\n * by [selector] function\n * applied to each element in the sequence or `null` if there are no elements.\n * If any of\n * values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * The operation is _terminal_.
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T> Sequence<T>.maxOfOrNull(selector:\n(T) -> Float): Float? {\n    val iterator = iterator()\n    if (!iterator.hasNext()) return null\n    var\n    max\n    Value =\n    selector(iterator.next())\n    while (iterator.hasNext()) {\n        val v = selector(iterator.next())\n        max\n        Value =\n        maxOf(max\n        Value, v)\n    }\n    return max\n    Value\n}\n\n/**\n * Returns the largest value among all values produced\n * by [selector] function\n * applied to each element in the sequence or `null` if there are no elements.\n * The\n * operation is _terminal_.
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R : Comparable<R>>\nSequence<T>.maxOfOrNull(selector: (T) -> R): R? {\n    val iterator = iterator()\n    if (!iterator.hasNext()) return\n    null\n    var\n    max\n    Value = selector(iterator.next())\n    while (iterator.hasNext()) {\n        val v =\n        selector(iterator.next())\n        if (max\n        Value < v) {\n            max\n            Value = v\n        }\n    }\n    return\n    max\n    Value\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all values\n * produced by [selector] function applied to each element in the sequence.\n * @throws\n * NoSuchElementException if the sequence is empty.\n * The operation is _terminal_.
```

```

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R>
Sequence<T>.maxOfWith(comparator: Comparator<in R>, selector: (T) -> R): R {\n    val iterator = iterator()\n    if
(!iterator.hasNext()) throw NoSuchElementException()\n    var max Value = selector(iterator.next())\n    while
(iterator.hasNext()) {\n        val v = selector(iterator.next())\n        if (comparator.compare(max Value, v) < 0) {\n
            max Value = v\n        }\n    }\n    return max Value\n}\n\n/**\n * Returns the largest value according to the provided
[comparator]\n * among all values produced by [selector] function applied to each element in the sequence or `null`
if there are no elements.\n * \n * The operation is _terminal_.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R>
Sequence<T>.maxOfWithOrNull(comparator: Comparator<in R>, selector: (T) -> R): R? {\n    val iterator =
iterator()\n    if (!iterator.hasNext()) return null\n    var max Value = selector(iterator.next())\n    while
(iterator.hasNext()) {\n        val v = selector(iterator.next())\n        if (comparator.compare(max Value, v) < 0) {\n
            max Value = v\n        }\n    }\n    return max Value\n}\n\n/**\n * Returns the largest element or `null` if there are no
elements.\n * \n * If any of elements is `NaN` returns `NaN`.\n * \n * The operation is _terminal_.\n
*\n@SinceKotlin("1.4")\npublic fun Sequence<Double>.maxOrNull(): Double? {\n    val iterator = iterator()\n    if
(!iterator.hasNext()) return null\n    var max = iterator.next()\n    while (iterator.hasNext()) {\n        val e =
iterator.next()\n        max = maxOf(max, e)\n    }\n    return max\n}\n\n/**\n * Returns the largest element or `null` if
there are no elements.\n * \n * If any of elements is `NaN` returns `NaN`.\n * \n * The operation is _terminal_.\n
*\n@SinceKotlin("1.4")\npublic fun Sequence<Float>.maxOrNull(): Float? {\n    val iterator = iterator()\n    if
(!iterator.hasNext()) return null\n    var max = iterator.next()\n    while (iterator.hasNext()) {\n        val e =
iterator.next()\n        max = maxOf(max, e)\n    }\n    return max\n}\n\n/**\n * Returns the largest element or `null` if
there are no elements.\n * \n * The operation is _terminal_.\n
*\n@SinceKotlin("1.4")\npublic fun <T :
Comparable<T>> Sequence<T>.maxOrNull(): T? {\n    val iterator = iterator()\n    if (!iterator.hasNext()) return
null\n    var max = iterator.next()\n    while (iterator.hasNext()) {\n        val e = iterator.next()\n        if (max < e) max
= e\n    }\n    return max\n}\n\n@Deprecated("Use maxWithOrNull instead.")
ReplaceWith("this.maxWithOrNull(comparator)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun <T> Sequence<T>.maxWith(comparator: Comparator<in T>): T? {\n
return maxWithOrNull(comparator)\n}\n\n/**\n * Returns the first element having the largest value according to the
provided [comparator] or `null` if there are no elements.\n * \n * The operation is _terminal_.\n
*\n@SinceKotlin("1.4")\npublic fun <T> Sequence<T>.maxWithOrNull(comparator: Comparator<in T>): T? {\n
val iterator = iterator()\n    if (!iterator.hasNext()) return null\n    var max = iterator.next()\n    while
(iterator.hasNext()) {\n        val e = iterator.next()\n        if (comparator.compare(max, e) < 0) max = e\n    }\n
return max\n}\n\n@Deprecated("Use minOrNull instead.")
ReplaceWith("this.minOrNull()")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")\n@SinceKotlin("1.1")\npublic fun Sequence<Double>.min(): Double? {\n    return
minOrNull()\n}\n\n@Deprecated("Use minOrNull instead.")
ReplaceWith("this.minOrNull()")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")\n@SinceKotlin("1.1")\npublic fun Sequence<Float>.min(): Float? {\n    return
minOrNull()\n}\n\n@Deprecated("Use minOrNull instead.")
ReplaceWith("this.minOrNull()")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")\npublic fun <T : Comparable<T>> Sequence<T>.min(): T? {\n    return
minOrNull()\n}\n\n@Deprecated("Use minByOrNull instead.")
ReplaceWith("this.minByOrNull(selector)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince =
"1.5", hiddenSince = "1.6")\npublic inline fun <T, R : Comparable<R>> Sequence<T>.minBy(selector: (T) ->
R): T? {\n    return minByOrNull(selector)\n}\n\n/**\n * Returns the first element yielding the smallest value of the
given function or `null` if there are no elements.\n * \n * The operation is _terminal_.\n * \n * @sample
samples.collections.Collections.Aggregates.minByOrNull\n
*\n@SinceKotlin("1.4")\npublic inline fun <T, R :

```

```

Comparable<R>> Sequence<T>.minByOrNull(selector: (T) -> R): T? {
    val iterator = iterator()
    if (!iterator.hasNext()) return null
    var minElem = iterator.next()
    if (!iterator.hasNext()) return minElem
    var minValue = selector(minElem)
    do {
        val e = iterator.next()
        val v = selector(e)
        if (minValue > v) {
            minElem = e
            minValue = v
        }
    } while (iterator.hasNext())
    return minElem
}

/**
 * Returns the smallest value among all values produced by [selector] function
 * applied to each element in the sequence.
 * If any of values produced by [selector] function is `NaN`, the returned result
 * is `NaN`.
 * @throws NoSuchElementException if the sequence is empty.
 * The operation is _terminal_.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun <T> Sequence<T>.minOf(selector: (T) -> Double): Double {
    val iterator = iterator()
    if (!iterator.hasNext()) throw NoSuchElementException()
    var minValue = selector(iterator.next())
    while (iterator.hasNext()) {
        val v = selector(iterator.next())
        minValue = minOf(minValue, v)
    }
    return minValue
}

/**
 * Returns the smallest value among all
 * values produced by [selector] function
 * applied to each element in the sequence.
 * If any of values
 * produced by [selector] function is `NaN`, the returned result is `NaN`.
 * @throws NoSuchElementException
 * if the sequence is empty.
 * The operation is _terminal_.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun <T> Sequence<T>.minOf(selector: (T) -> Float): Float {
    val iterator = iterator()
    if (!iterator.hasNext()) throw NoSuchElementException()
    var minValue = selector(iterator.next())
    while (iterator.hasNext()) {
        val v = selector(iterator.next())
        minValue = minOf(minValue, v)
    }
    return minValue
}

/**
 * Returns the smallest value among all
 * values produced by [selector] function
 * applied to each element in the sequence.
 * @throws
 * NoSuchElementException if the sequence is empty.
 * The operation is _terminal_.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun <T, R : Comparable<R>> Sequence<T>.minOf(selector: (T) -> R): R {
    val iterator = iterator()
    if (!iterator.hasNext()) throw NoSuchElementException()
    var minValue = selector(iterator.next())
    while (iterator.hasNext()) {
        val v = selector(iterator.next())
        if (minValue > v) {
            minValue = v
        }
    }
    return minValue
}

/**
 * Returns the smallest value among all values produced by [selector] function
 * applied to each element in the sequence or `null` if there are no elements.
 * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.
 * The operation is _terminal_.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun <T> Sequence<T>.minOrNull(selector: (T) -> Double): Double? {
    val iterator = iterator()
    if (!iterator.hasNext()) return null
    var minValue = selector(iterator.next())
    while (iterator.hasNext()) {
        val v = selector(iterator.next())
        minValue = minOf(minValue, v)
    }
    return minValue
}

/**
 * Returns the smallest value among all values produced
 * by [selector] function
 * applied to each element in the sequence or `null` if there are no elements.
 * If any of
 * values produced by [selector] function is `NaN`, the returned result is `NaN`.
 * The operation is _terminal_.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun <T> Sequence<T>.minOrNull(selector: (T) -> Float): Float? {
    val iterator = iterator()
    if (!iterator.hasNext()) return null
    var minValue = selector(iterator.next())
    while (iterator.hasNext()) {
        val v = selector(iterator.next())
        minValue = minOf(minValue, v)
    }
    return minValue
}

/**
 * Returns the smallest value among all values produced
 * by [selector] function
 * applied to each element in the sequence or `null` if there are no elements.
 * The
 * operation is _terminal_.
 */
@SinceKotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@kotlin.internal.InlineOnly
public inline fun <T, R : Comparable<R>> Sequence<T>.minOrNull(selector: (T) -> R): R? {
    val iterator = iterator()
    if (!iterator.hasNext()) return

```

```

null\n    var minValue = selector(iterator.next())\n    while (iterator.hasNext()) {\n        val v =
selector(iterator.next())\n        if (minValue > v) {\n            minValue = v\n        }\n    }\n    return
minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values
produced by [selector] function applied to each element in the sequence.\n * \n * @throws
NoSuchElementException if the sequence is empty.\n * \n * The operation is _terminal_.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R>
Sequence<T>.minOfWith(comparator: Comparator<in R>, selector: (T) -> R): R {\n    val iterator = iterator()\n    if
(!iterator.hasNext()) throw NoSuchElementException()\n    var minValue = selector(iterator.next())\n    while
(iterator.hasNext()) {\n        val v = selector(iterator.next())\n        if (comparator.compare(minValue, v) > 0) {\n
            minValue = v\n        }\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value according to the
provided [comparator]\n * among all values produced by [selector] function applied to each element in the sequence
or `null` if there are no elements.\n * \n * The operation is _terminal_.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <T, R>
Sequence<T>.minOfWithOrNull(comparator: Comparator<in R>, selector: (T) -> R): R? {\n    val iterator =
iterator()\n    if (!iterator.hasNext()) return null\n    var minValue = selector(iterator.next())\n    while
(iterator.hasNext()) {\n        val v = selector(iterator.next())\n        if (comparator.compare(minValue, v) > 0) {\n
            minValue = v\n        }\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest element or `null` if there are
no elements.\n * \n * If any of elements is `NaN` returns `NaN`.\n * \n * The operation is _terminal_.\n
*\n@SinceKotlin("1.4")\npublic fun Sequence<Double>.minOrNull(): Double? {\n    val iterator = iterator()\n    if
(!iterator.hasNext()) return null\n    var min = iterator.next()\n    while (iterator.hasNext()) {\n        val e =
iterator.next()\n        min = minOf(min, e)\n    }\n    return min\n}\n\n/**\n * Returns the smallest element or `null` if
there are no elements.\n * \n * If any of elements is `NaN` returns `NaN`.\n * \n * The operation is _terminal_.\n
*\n@SinceKotlin("1.4")\npublic fun Sequence<Float>.minOrNull(): Float? {\n    val iterator = iterator()\n    if
(!iterator.hasNext()) return null\n    var min = iterator.next()\n    while (iterator.hasNext()) {\n        val e =
iterator.next()\n        min = minOf(min, e)\n    }\n    return min\n}\n\n/**\n * Returns the smallest element or `null` if
there are no elements.\n * \n * The operation is _terminal_.\n
*\n@SinceKotlin("1.4")\npublic fun <T :
Comparable<T>> Sequence<T>.minOrNull(): T? {\n    val iterator = iterator()\n    if (!iterator.hasNext()) return
null\n    var min = iterator.next()\n    while (iterator.hasNext()) {\n        val e = iterator.next()\n        if (min > e) min
= e\n    }\n    return min\n}\n\n@Deprecated("Use minWithOrNull instead.")
ReplaceWith("this.minWithOrNull(comparator)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\npublic fun <T> Sequence<T>.minWith(comparator: Comparator<in T>): T? {\n
return minWithOrNull(comparator)\n}\n\n/**\n * Returns the first element having the smallest value according to
the provided [comparator] or `null` if there are no elements.\n * \n * The operation is _terminal_.\n
*\n@SinceKotlin("1.4")\npublic fun <T> Sequence<T>.minWithOrNull(comparator: Comparator<in T>): T? {\n
val iterator = iterator()\n    if (!iterator.hasNext()) return null\n    var min = iterator.next()\n    while
(iterator.hasNext()) {\n        val e = iterator.next()\n        if (comparator.compare(min, e) > 0) min = e\n    }\n    return
min\n}\n\n/**\n * Returns `true` if the sequence has no elements.\n * \n * The operation is _terminal_.\n * \n *
@\n * @sample samples.collections.Collections.Aggregates.none\n *\n@SinceKotlin("1.4")\npublic fun <T> Sequence<T>.none(): Boolean {\n
return !iterator().hasNext()\n}\n\n/**\n * Returns `true` if no elements match the given [predicate].\n * \n * The
operation is _terminal_.\n * \n * @sample samples.collections.Collections.Aggregates.noneWithPredicate\n
*\n@SinceKotlin("1.4")\npublic inline fun <T> Sequence<T>.none(predicate: (T) -> Boolean): Boolean {\n    for (element in this) if
(predicate(element)) return false\n    return true\n}\n\n/**\n * Returns a sequence which performs the given [action]
on each element of the original sequence as they pass through it.\n * \n * The operation is _intermediate_ and
_stateless_.\n *\n@SinceKotlin("1.1")\npublic fun <T> Sequence<T>.onEach(action: (T) -> Unit): Sequence<T>
{\n    return map {\n        action(it)\n        it\n    }\n}\n\n/**\n * Returns a sequence which performs the given
[action] on each element of the original sequence as they pass through it.\n * \n * @param [action] function that takes

```

the index of an element and the element itself and performs the action on the element. The operation is `_intermediate_ and _stateless_`.

```

@SinceKotlin("1.4")
public fun <T> Sequence<T>.onEachIndexed(action:
(index: Int, T) -> Unit): Sequence<T> {
    return mapIndexed { index, element ->
        action(index, element)
    }
}

```

Accumulates value starting with the first element and applying [operation] from left to right to current accumulator value and each element. Throws an exception if this sequence is empty. If the sequence can be empty in an expected way, please use [reduceOrNull] instead. It returns `null` when its receiver is empty.

@param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value. The operation is `_terminal_`.

@sample

```

samples.collections.Collections.Aggregates.reduce
public inline fun <S, T : S>
Sequence<T>.reduce(operation: (acc: S, T) -> S): S {
    val iterator = this.iterator()
    if (!iterator.hasNext())
        throw UnsupportedOperationException("Empty sequence can't be reduced.")
    var accumulator: S =
        iterator.next()
    while (iterator.hasNext()) {
        accumulator = operation(accumulator, iterator.next())
    }
    return accumulator
}

```

Accumulates value starting with the first element and applying [operation] from left to right to current accumulator value and each element with its index in the original sequence. Throws an exception if this sequence is empty. If the sequence can be empty in an expected way, please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.

@param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value. The operation is `_terminal_`.

@sample

```

samples.collections.Collections.Aggregates.reduce
public inline fun <S, T : S>
Sequence<T>.reduceIndexed(operation: (index: Int, acc: S, T) -> S): S {
    val iterator = this.iterator()
    if (!iterator.hasNext())
        throw UnsupportedOperationException("Empty sequence can't be reduced.")
    var index = 1
    var accumulator: S = iterator.next()
    while (iterator.hasNext()) {
        accumulator =
            operation(checkIndexOverflow(index++), accumulator, iterator.next())
    }
    return accumulator
}

```

Accumulates value starting with the first element and applying [operation] from left to right to current accumulator value and each element with its index in the original sequence. Returns `null` if the sequence is empty.

@param [operation] function that takes the index of an element, current accumulator value and the element itself, and calculates the next accumulator value. The operation is `_terminal_`.

@sample

```

samples.collections.Collections.Aggregates.reduceOrNull
@SinceKotlin("1.4")
public inline fun <S, T : S>
Sequence<T>.reduceIndexedOrNull(operation: (index: Int, acc: S, T) -> S): S? {
    val iterator = this.iterator()
    if (!iterator.hasNext())
        return null
    var index = 1
    var accumulator: S = iterator.next()
    while (iterator.hasNext()) {
        accumulator = operation(checkIndexOverflow(index++), accumulator, iterator.next())
    }
    return accumulator
}

```

Accumulates value starting with the first element and applying [operation] from left to right to current accumulator value and each element. Returns `null` if the sequence is empty.

@param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value. The operation is `_terminal_`.

@sample

```

samples.collections.Collections.Aggregates.reduceOrNull
@SinceKotlin("1.4")
@WasExperimental(ExperimentalStdlibApi::class)
public inline fun <S, T : S>
Sequence<T>.reduceOrNull(operation: (acc: S, T) -> S): S? {
    val iterator = this.iterator()
    if (!iterator.hasNext())
        return null
    var accumulator: S = iterator.next()
    while (iterator.hasNext()) {
        accumulator = operation(accumulator, iterator.next())
    }
    return accumulator
}

```

Returns a sequence containing successive accumulation values generated by applying [operation] from left to right to each element and current accumulator value that starts with [initial] value. Note that `acc` value passed to [operation] function should not be mutated; otherwise it would affect the previous value in resulting sequence. The [initial] value should also be immutable (or should not be mutated) as it may be passed to [operation] function later because of sequence's lazy nature.

@param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value. The operation is `_intermediate_ and _stateless_`.

@sample

```

samples.collections.Collections.Aggregates.runningFold
@SinceKotlin("1.4")
public fun <T, R> Sequence<T>.runningFold(initial: R, operation: (acc: R, T) -> R):

```

```

Sequence<R> {\n  return sequence {\n    yield(initial)\n    var accumulator = initial\n    for (element in\nthis@runningFold) {\n      accumulator = operation(accumulator, element)\n      yield(accumulator)\n    }\n  }\n}\n\n/**\n * Returns a sequence containing successive accumulation values generated by applying [operation]\n from left to right\n * to each element, its index in the original sequence and current accumulator value that starts\n with [initial] value.\n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting sequence.\n * The [initial] value should also be immutable\n (or should not be mutated)\n * as it may be passed to [operation] function later because of sequence's lazy nature.\n *\n * @param [operation] function that takes the index of an element, current accumulator value\n * and the\n element itself, and calculates the next accumulator value.\n *\n * The operation is _intermediate_ and _stateless_.\n *\n * @sample samples.collections.Collections.Aggregates.runningFold\n */\n\n@SinceKotlin("1.4")\npublic fun\n<T, R> Sequence<T>.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, T) -> R): Sequence<R> {\n  return sequence {\n    yield(initial)\n    var index = 0\n    var accumulator = initial\n    for (element in\nthis@runningFoldIndexed) {\n      accumulator = operation(checkIndexOverflow(index++), accumulator,\n      element)\n      yield(accumulator)\n    }\n  }\n}\n\n/**\n * Returns a sequence containing successive\n accumulation values generated by applying [operation] from left to right\n * to each element and current\n accumulator value that starts with the first element of this sequence.\n *\n * Note that `acc` value passed to\n [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting sequence.\n *\n * @param [operation] function that takes current accumulator value and the element, and calculates the next\n accumulator value.\n *\n * The operation is _intermediate_ and _stateless_.\n *\n * @sample\n samples.collections.Collections.Aggregates.runningReduce\n */\n\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun <S, T : S>\nSequence<T>.runningReduce(operation: (acc: S, T) -> S): Sequence<S> {\n  return sequence {\n    val iterator =\niterator()\n    if (iterator.hasNext()) {\n      var accumulator: S = iterator.next()\n      yield(accumulator)\n      while (iterator.hasNext()) {\n        accumulator = operation(accumulator, iterator.next())\n        yield(accumulator)\n      }\n    }\n  }\n}\n\n/**\n * Returns a sequence containing successive accumulation\n values generated by applying [operation] from left to right\n * to each element, its index in the original sequence and\n current accumulator value that starts with the first element of this sequence.\n *\n * Note that `acc` value passed to\n [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting sequence.\n *\n * @param [operation] function that takes the index of an element, current accumulator value\n * and the\n element itself, and calculates the next accumulator value.\n *\n * The operation is _intermediate_ and _stateless_.\n *\n * @sample samples.collections.Collections.Aggregates.runningReduce\n */\n\n@SinceKotlin("1.4")\npublic fun\n<S, T : S> Sequence<T>.runningReduceIndexed(operation: (index: Int, acc: S, T) -> S): Sequence<S> {\n  return\nsequence {\n    val iterator = iterator()\n    if (iterator.hasNext()) {\n      var accumulator: S =\niterator.next()\n      yield(accumulator)\n      var index = 1\n      while (iterator.hasNext()) {\n        accumulator = operation(checkIndexOverflow(index++), accumulator, iterator.next())\n        yield(accumulator)\n      }\n    }\n  }\n}\n\n/**\n * Returns a sequence containing successive accumulation\n values generated by applying [operation] from left to right\n * to each element and current accumulator value that\n starts with [initial] value.\n *\n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting sequence.\n * The [initial] value should also be immutable\n (or should not be mutated)\n * as it may be passed to [operation] function later because of sequence's lazy nature.\n *\n * @param [operation] function that takes current accumulator value and an element, and calculates the next\n accumulator value.\n *\n * The operation is _intermediate_ and _stateless_.\n *\n * @sample\n samples.collections.Collections.Aggregates.scan\n */\n\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun <T, R>\nSequence<T>.scan(initial: R, operation: (acc: R, T) -> R): Sequence<R> {\n  return runningFold(initial,\noperation)\n}\n\n/**\n * Returns a sequence containing successive accumulation values generated by applying\n [operation] from left to right\n * to each element, its index in the original sequence and current accumulator value\n that starts with [initial] value.\n *\n * Note that `acc` value passed to [operation] function should not be mutated;\n

```


* otherwise it would affect the previous value in resulting sequence.\n * The [initial] value should also be immutable (or should not be mutated)\n * as it may be passed to [operation] function later because of sequence's lazy nature.\n

* \n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n *\n * The operation is _intermediate_ and _stateless_.\n

* \n * @sample samples.collections.Collections.Aggregates.scan\n

```

*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun <T, R>
Sequence<T>.scanIndexed(initial: R, operation: (index: Int, acc: R, T) -> R): Sequence<R> {\n    return
runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the sequence.\n *\n * The operation is _terminal_.\n */\n@Deprecated("Use sumOf
instead.", ReplaceWith("this.sumOf(selector)"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic inline
fun <T> Sequence<T>.sumBy(selector: (T) -> Int): Int {\n    var sum: Int = 0\n    for (element in this) {\n        sum
+= selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector]
function applied to each element in the sequence.\n *\n * The operation is _terminal_.\n */\n@Deprecated("Use
sumOf instead.", ReplaceWith("this.sumOf(selector)"))\n@DeprecatedSinceKotlin(warningSince =
"1.5")\npublic inline fun <T> Sequence<T>.sumByDouble(selector: (T) -> Double): Double {\n    var sum: Double
= 0.0\n    for (element in this) {\n        sum += selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum
of all values produced by [selector] function applied to each element in the sequence.\n *\n * The operation is
_terminal_.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfDouble")\n@kotlin.internal.InlineOnly\npublic inline fun
<T> Sequence<T>.sumOf(selector: (T) -> Double): Double {\n    var sum: Double = 0.toDouble()\n    for (element
in this) {\n        sum += selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced
by [selector] function applied to each element in the sequence.\n *\n * The operation is _terminal_.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfInt")\n@kotlin.internal.InlineOnly\npublic inline fun <T>
Sequence<T>.sumOf(selector: (T) -> Int): Int {\n    var sum: Int = 0.toInt()\n    for (element in this) {\n        sum
+= selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the sequence.\n *\n * The operation is _terminal_.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfLong")\n@kotlin.internal.InlineOnly\npublic inline fun
<T> Sequence<T>.sumOf(selector: (T) -> Long): Long {\n    var sum: Long = 0.toLong()\n    for (element in this)
{\n        sum += selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each element in the sequence.\n *\n * The operation is _terminal_.\n */\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType
s::class)\n@kotlin.internal.InlineOnly\npublic inline fun <T> Sequence<T>.sumOf(selector: (T) -> UInt): UInt {\n
    var sum: UInt = 0.toUInt()\n    for (element in this) {\n        sum += selector(element)\n    }\n    return
sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the
sequence.\n *\n * The operation is _terminal_.\n */\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfULong")\n@WasExperimental(ExperimentalUnsignedType
s::class)\n@kotlin.internal.InlineOnly\npublic inline fun <T> Sequence<T>.sumOf(selector: (T) -> ULong):
ULong {\n    var sum: ULong = 0.toULong()\n    for (element in this) {\n        sum += selector(element)\n    }\n
return sum\n}\n\n/**\n * Returns an original collection containing all the non-`null` elements, throwing an
[IllegalArgumentException] if there are any `null` elements.\n *\n * The operation is _intermediate_ and
_stateless_.\n */\npublic fun <T : Any> Sequence<T?>.requireNonNulls(): Sequence<T> {\n    return map { it ? :
throw IllegalArgumentException("null element found in $this.") }\n}\n\n/**\n * Splits this sequence into a
sequence of lists each not exceeding the given [size].\n *\n * The last list in the resulting sequence may have fewer

```

elements than the given [size].\n * \n * @param size the number of elements to take in each list, must be positive and can be greater than the number of elements in this sequence.\n * \n * The operation is `_intermediate_` and `_stateful_`.\n * \n * @sample samples.collections.Collections.Transformations.chunked

```

*\n@SinceKotlin("1.2")\npublic fun <T> Sequence<T>.chunked(size: Int): Sequence<List<T>> {\n    return\n    windowed(size, size, partialWindows = true)\n}\n\n/**\n * Splits this sequence into several lists each not exceeding\n the given [size]\n * and applies the given [transform] function to an each.\n * \n * @return sequence of results of the\n [transform] applied to an each list.\n * \n * Note that the list passed to the [transform] function is ephemeral and is\n valid only inside that function.\n * You should not store it or allow it to escape in some way, unless you made a\n snapshot of it.\n * The last list may have fewer elements than the given [size].\n * \n * @param size the number of\n elements to take in each list, must be positive and can be greater than the number of elements in this sequence.\n * \n * The operation is _intermediate_ and _stateful_.\n * \n * @sample samples.text.Strings.chunkedTransform
*\n@SinceKotlin("1.2")\npublic fun <T, R> Sequence<T>.chunked(size: Int, transform: (List<T>) -> R):\n Sequence<R> {\n    return windowed(size, size, partialWindows = true, transform = transform)\n}\n\n/**\n * Returns a sequence containing all elements of the original sequence without the first occurrence of the given\n [element].\n * \n * The operation is _intermediate_ and _stateless_.\n */\npublic operator fun <T>\n Sequence<T>.minus(element: T): Sequence<T> {\n    return object: Sequence<T> {\n        override fun iterator():\n Iterator<T> {\n            var removed = false\n            return this@minus.filter { if (!removed && it == element) {\n                removed = true; false } else true }.iterator()\n        }\n    }\n}\n\n/**\n * Returns a sequence containing all elements\n of original sequence except the elements contained in the given [elements] array.\n * \n * Note that the source\n sequence and the array being subtracted are iterated only when an `iterator` is requested from\n * the resulting\n sequence. Changing any of them between successive calls to `iterator` may affect the result.\n * \n * Before Kotlin\n 1.6, the [elements] array may have been converted to a [HashSet] to speed up the operation, thus the elements were\n required to have\n * a correct and stable implementation of `hashCode()` that didn't change between successive\n invocations.\n * On JVM, you can enable this behavior back with the system property\n `kotlin.collections.convert_arg_to_set_in_removeAll` set to `true`.\n * \n * The operation is _intermediate_ and _stateful_.\n */\npublic operator fun <T> Sequence<T>.minus(elements: Array<out T>): Sequence<T> {\n    if\n (elements.isEmpty()) return this\n    return object: Sequence<T> {\n        override fun iterator(): Iterator<T> {\n            val other = elements.convertToSetForSetOperation()\n            return this@minus.filterNot { it in other }.iterator()\n        }\n    }\n}\n\n/**\n * Returns a sequence containing all elements of original sequence except the elements\n contained in the given [elements] collection.\n * \n * Note that the source sequence and the collection being\n subtracted are iterated only when an `iterator` is requested from\n * the resulting sequence. Changing any of them\n between successive calls to `iterator` may affect the result.\n * \n * Before Kotlin 1.6, the [elements] collection may\n have been converted to a [HashSet] to speed up the operation, thus the elements were required to have\n * a correct\n and stable implementation of `hashCode()` that didn't change between successive invocations.\n * On JVM, you can\n enable this behavior back with the system property `kotlin.collections.convert_arg_to_set_in_removeAll` set to\n `true`.\n * \n * The operation is _intermediate_ and _stateful_.\n */\npublic operator fun <T>\n Sequence<T>.minus(elements: Iterable<T>): Sequence<T> {\n    return object: Sequence<T> {\n        override fun\n iterator(): Iterator<T> {\n            val other = elements.convertToSetForSetOperation()\n            if (other.isEmpty())\n                return this@minus.iterator()\n            else\n                return this@minus.filterNot { it in other }.iterator()\n        }\n    }\n}\n\n/**\n * Returns a sequence containing all elements of original sequence except the elements\n contained in the given [elements] sequence.\n * \n * Note that the source sequence and the sequence being\n subtracted are iterated only when an `iterator` is requested from\n * the resulting sequence. Changing any of them\n between successive calls to `iterator` may affect the result.\n * \n * The operation is _intermediate_ for this sequence\n and _terminal_ and _stateful_ for the [elements] sequence.\n * \n * Before Kotlin 1.6, the [elements] sequence may\n have been converted to a [HashSet] to speed up the operation, thus the elements were required to have\n * a correct\n and stable implementation of `hashCode()` that didn't change between successive invocations.\n * On JVM, you can\n enable this behavior back with the system property `kotlin.collections.convert_arg_to_set_in_removeAll` set to\n `true`.\n */\npublic operator fun <T> Sequence<T>.minus(elements: Sequence<T>): Sequence<T> {\n    return

```

```

object: Sequence<T> {\n
    override fun iterator(): Iterator<T> {\n
        val other =
        elements.convertToSetForSetOperation()\n
        if (other.isEmpty())\n
            return this@minus.iterator()\n
        else\n
            return this@minus.filterNot { it in other }.iterator()\n
    }\n
}\n\n/**\n * Returns a sequence
containing all elements of the original sequence without the first occurrence of the given [element].\n *\n * The
operation is _intermediate_ and _stateless_.\n */\n\n@kotlin.internal.InlineOnly\npublic inline fun <T>
Sequence<T>.minusElement(element: T): Sequence<T> {\n
    return minus(element)\n
}\n\n/**\n * Splits the
original sequence into pair of lists,\n * where *first* list contains elements for which [predicate] yielded `true`,\n *
while *second* list contains elements for which [predicate] yielded `false`.\n *\n * The operation is _terminal_.\n */
\n * @sample samples.collections.Sequences.Transformations.partition\n */\n\npublic inline fun <T>
Sequence<T>.partition(predicate: (T) -> Boolean): Pair<List<T>, List<T>> {\n
    val first = ArrayList<T>()\n
    val
    second = ArrayList<T>()\n
    for (element in this) {\n
        if (predicate(element)) {\n
            first.add(element)\n
        } else {\n
            second.add(element)\n
        }\n
    }\n
    return Pair(first, second)\n
}\n\n/**\n * Returns a sequence
containing all elements of the original sequence and then the given [element].\n *\n * The operation is
_intermediate_ and _stateless_.\n */\n\npublic operator fun <T> Sequence<T>.plus(element: T): Sequence<T> {\n
    return sequenceOf(this, sequenceOf(element)).flatten()\n
}\n\n/**\n * Returns a sequence containing all elements of
original sequence and then all elements of the given [elements] array.\n *\n * Note that the source sequence and the
array being added are iterated only when an `iterator` is requested from\n * the resulting sequence. Changing any of
them between successive calls to `iterator` may affect the result.\n *\n * The operation is _intermediate_ and
_stateless_.\n */\n\npublic operator fun <T> Sequence<T>.plus(elements: Array<out T>): Sequence<T> {\n
    return
    this.plus(elements.asList())\n
}\n\n/**\n * Returns a sequence containing all elements of original sequence and then
all elements of the given [elements] collection.\n *\n * Note that the source sequence and the collection being added
are iterated only when an `iterator` is requested from\n * the resulting sequence. Changing any of them between
successive calls to `iterator` may affect the result.\n *\n * The operation is _intermediate_ and _stateless_.\n */
\n * @sample samples.collections.Sequences.Transformations.takeWindows\n */\n\n@SinceKotlin("1.2")\npublic fun <T>
Sequence<T>.windowed(size: Int, step: Int = 1, partialWindows:
Boolean = false): Sequence<List<T>> {\n
    return windowedSequence(size, step, partialWindows, reuseBuffer =
false)\n
}\n\n/**\n * Returns a sequence of results of applying the given [transform] function to\n * an each list
representing a view over the window of the given [size]\n * sliding along this sequence with the given [step].\n *\n *
Note that the list passed to the [transform] function is ephemeral and is valid only inside that function.\n * You
should not store it or allow it to escape in some way, unless you made a snapshot of it.\n * Several last lists may
have fewer elements than the given [size].\n *\n * Both [size] and [step] must be positive and can be greater than
the number of elements in this sequence.\n *\n * @param size the number of elements to take in each window\n *
@param step the number of elements to move the window forward by on an each step, by default 1\n * @param
partialWindows controls whether or not to keep partial windows in the end if any,\n * by default `false` which means
partial windows won't be preserved\n *\n * @sample samples.collections.Sequences.Transformations.takeWindows\n */
\n * @SinceKotlin("1.2")\n */\n\npublic fun <T> Sequence<T>.windowed(size: Int, step: Int = 1, partialWindows:
Boolean = false): Sequence<List<T>> {\n
    return windowedSequence(size, step, partialWindows, reuseBuffer =
false)\n
}\n\n/**\n * Returns a sequence of results of applying the given [transform] function to\n * an each list
representing a view over the window of the given [size]\n * sliding along this sequence with the given [step].\n *\n *
Note that the list passed to the [transform] function is ephemeral and is valid only inside that function.\n * You
should not store it or allow it to escape in some way, unless you made a snapshot of it.\n * Several last lists may
have fewer elements than the given [size].\n *\n * Both [size] and [step] must be positive and can be greater than
the number of elements in this sequence.\n *\n * @param size the number of elements to take in each window\n *
@param step the number of elements to move the window forward by on an each step, by default 1\n * @param
partialWindows controls whether or not to keep partial windows in the end if any,\n * by default `false` which means
partial windows won't be preserved\n *\n * @sample samples.collections.Sequences.Transformations.takeWindows\n */
\n * @SinceKotlin("1.2")\n */\n\npublic fun <T> Sequence<T>.windowed(size: Int, step: Int = 1, partialWindows:
Boolean = false): Sequence<List<T>> {\n
    return windowedSequence(size, step, partialWindows, reuseBuffer =
false)\n
}

```

partialWindows controls whether or not to keep partial windows in the end if any, \n * by default `false` which means partial windows won't be preserved \n * \n * @sample

```

samples.collections.Sequences.Transformations.averageWindows\n *^n@SinceKotlin("1.2")\npublic fun <T, R>
Sequence<T>.windowed(size: Int, step: Int = 1, partialWindows: Boolean = false, transform: (List<T>) -> R):
Sequence<R> {\n    return windowedSequence(size, step, partialWindows, reuseBuffer =
true).map(transform)\n}\n\n/**\n * Returns a sequence of values built from the elements of `this` sequence and the
[other] sequence with the same index.\n * The resulting sequence ends as soon as the shortest input sequence ends.\n
*\n * The operation is _intermediate_ and _stateless_.\n * \n * @sample

```

```

samples.collections.Sequences.Transformations.zip\n *^npublic infix fun <T, R> Sequence<T>.zip(other:
Sequence<R>): Sequence<Pair<T, R>> {\n    return MergingSequence(this, other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n *
Returns a sequence of values built from the elements of `this` sequence and the [other] sequence with the same
index\n * using the provided [transform] function applied to each pair of elements.\n * The resulting sequence ends
as soon as the shortest input sequence ends.\n *\n * The operation is _intermediate_ and _stateless_.\n * \n *
@sample

```

```

samples.collections.Sequences.Transformations.zipWithTransform\n *^npublic fun <T, R, V>
Sequence<T>.zip(other: Sequence<R>, transform: (a: T, b: R) -> V): Sequence<V> {\n    return
MergingSequence(this, other, transform)\n}\n\n/**\n * Returns a sequence of pairs of each two adjacent elements in
this sequence.\n * \n * The returned sequence is empty if this sequence contains less than two elements.\n *\n * The
operation is _intermediate_ and _stateless_.\n * \n * @sample

```

```

samples.collections.Collections.Transformations.zipWithNext\n *^n@SinceKotlin("1.2")\npublic fun <T>
Sequence<T>.zipWithNext(): Sequence<Pair<T, T>> {\n    return zipWithNext { a, b -> a to b }\n}\n\n/**\n *
Returns a sequence containing the results of applying the given [transform] function\n * to an each pair of two
adjacent elements in this sequence.\n * \n * The returned sequence is empty if this sequence contains less than two
elements.\n *\n * The operation is _intermediate_ and _stateless_.\n * \n * @sample

```

```

samples.collections.Collections.Transformations.zipWithNextToFindDeltas\n *^n@SinceKotlin("1.2")\npublic
fun <T, R> Sequence<T>.zipWithNext(transform: (a: T, b: T) -> R): Sequence<R> {\n    return sequence result@
{\n        val iterator = iterator()\n        if (!iterator.hasNext()) return @result\n        var current = iterator.next()\n
while (iterator.hasNext()) {\n            val next = iterator.next()\n            yield(transform(current, next))\n
current = next\n        }\n    }\n}\n\n/**\n * Appends the string from all the elements separated using [separator] and
using the given [prefix] and [postfix] if supplied.\n * \n * If the collection could be huge, you can specify a non-
negative value of [limit], in which case only the first [limit]\n * elements will be appended, followed by the
[truncated] string (which defaults to "...").\n *\n * The operation is _terminal_.\n * \n * @sample

```

```

samples.collections.Collections.Transformations.joinTo\n *^npublic fun <T, A : Appendable>
Sequence<T>.joinTo(buffer: A, separator: CharSequence = "\", \"", prefix: CharSequence = "\"", postfix:
CharSequence = "\"", limit: Int = -1, truncated: CharSequence = "...", transform: ((T) -> CharSequence)? = null): A
{\n    buffer.append(prefix)\n    var count = 0\n    for (element in this) {\n        if (++count > 1)
buffer.append(separator)\n        if (limit < 0 || count <= limit) {\n            buffer.appendElement(element, transform)\n
        } else break\n    }\n    if (limit >= 0 && count > limit) buffer.append(truncated)\n    buffer.append(postfix)\n
return buffer\n}\n\n/**\n * Creates a string from all the elements separated using [separator] and using the given
[prefix] and [postfix] if supplied.\n * \n * If the collection could be huge, you can specify a non-negative value of
[limit], in which case only the first [limit]\n * elements will be appended, followed by the [truncated] string (which
defaults to "...").\n *\n * The operation is _terminal_.\n * \n * @sample

```

```

samples.collections.Collections.Transformations.joinToString\n *^npublic fun <T>
Sequence<T>.joinToString(separator: CharSequence = "\", \"", prefix: CharSequence = "\"", postfix: CharSequence =
\"", limit: Int = -1, truncated: CharSequence = "...", transform: ((T) -> CharSequence)? = null): String {\n    return
joinTo(StringBuilder(), separator, prefix, postfix, limit, truncated, transform).toString()\n}\n\n/**\n * Creates an
[Iterable] instance that wraps the original sequence returning its elements when being iterated.\n *^npublic fun <T>
Sequence<T>.asIterable(): Iterable<T> {\n    return Iterable { this.iterator() }\n}\n\n/**\n * Returns this sequence as
a [Sequence].\n *^n@kotlin.internal.InlineOnly\npublic inline fun <T> Sequence<T>.asSequence(): Sequence<T>

```

```

{\n  return this}\n\n/**\n * Returns an average value of elements in the sequence.\n *\n * The operation is
_terminal_.\n *\n@kotlin.jvm.JvmName("averageOfByte")\npublic fun Sequence<Byte>.average(): Double {\n
var sum: Double = 0.0\n  var count: Int = 0\n  for (element in this) {\n    sum += element\n
checkCountOverflow(++count)\n  }\n  return if (count == 0) Double.NaN else sum / count}\n\n/**\n * Returns
an average value of elements in the sequence.\n *\n * The operation is _terminal_.\n
*\n@kotlin.jvm.JvmName("averageOfShort")\npublic fun Sequence<Short>.average(): Double {\n  var sum:
Double = 0.0\n  var count: Int = 0\n  for (element in this) {\n    sum += element\n
checkCountOverflow(++count)\n  }\n  return if (count == 0) Double.NaN else sum / count}\n\n/**\n * Returns
an average value of elements in the sequence.\n *\n * The operation is _terminal_.\n
*\n@kotlin.jvm.JvmName("averageOfInt")\npublic fun Sequence<Int>.average(): Double {\n  var sum: Double
= 0.0\n  var count: Int = 0\n  for (element in this) {\n    sum += element\n    checkCountOverflow(++count)\n
  }\n  return if (count == 0) Double.NaN else sum / count}\n\n/**\n * Returns an average value of elements in the
sequence.\n *\n * The operation is _terminal_.\n *\n@kotlin.jvm.JvmName("averageOfLong")\npublic fun
Sequence<Long>.average(): Double {\n  var sum: Double = 0.0\n  var count: Int = 0\n  for (element in this) {\n
sum += element\n    checkCountOverflow(++count)\n  }\n  return if (count == 0) Double.NaN else sum /
count}\n\n/**\n * Returns an average value of elements in the sequence.\n *\n * The operation is _terminal_.\n
*\n@kotlin.jvm.JvmName("averageOfFloat")\npublic fun Sequence<Float>.average(): Double {\n  var sum:
Double = 0.0\n  var count: Int = 0\n  for (element in this) {\n    sum += element\n
checkCountOverflow(++count)\n  }\n  return if (count == 0) Double.NaN else sum / count}\n\n/**\n * Returns
an average value of elements in the sequence.\n *\n * The operation is _terminal_.\n
*\n@kotlin.jvm.JvmName("averageOfDouble")\npublic fun Sequence<Double>.average(): Double {\n  var sum:
Double = 0.0\n  var count: Int = 0\n  for (element in this) {\n    sum += element\n
checkCountOverflow(++count)\n  }\n  return if (count == 0) Double.NaN else sum / count}\n\n/**\n * Returns
the sum of all elements in the sequence.\n *\n * The operation is _terminal_.\n
*\n@kotlin.jvm.JvmName("sumOfByte")\npublic fun Sequence<Byte>.sum(): Int {\n  var sum: Int = 0\n  for
(element in this) {\n    sum += element\n  }\n  return sum}\n\n/**\n * Returns the sum of all elements in the
sequence.\n *\n * The operation is _terminal_.\n *\n@kotlin.jvm.JvmName("sumOfShort")\npublic fun
Sequence<Short>.sum(): Int {\n  var sum: Int = 0\n  for (element in this) {\n    sum += element\n  }\n  return
sum}\n\n/**\n * Returns the sum of all elements in the sequence.\n *\n * The operation is _terminal_.\n
*\n@kotlin.jvm.JvmName("sumOfInt")\npublic fun Sequence<Int>.sum(): Int {\n  var sum: Int = 0\n  for
(element in this) {\n    sum += element\n  }\n  return sum}\n\n/**\n * Returns the sum of all elements in the
sequence.\n *\n * The operation is _terminal_.\n *\n@kotlin.jvm.JvmName("sumOfLong")\npublic fun
Sequence<Long>.sum(): Long {\n  var sum: Long = 0L\n  for (element in this) {\n    sum += element\n  }\n
return sum}\n\n/**\n * Returns the sum of all elements in the sequence.\n *\n * The operation is _terminal_.\n
*\n@kotlin.jvm.JvmName("sumOfFloat")\npublic fun Sequence<Float>.sum(): Float {\n  var sum: Float = 0.0f\n
for (element in this) {\n    sum += element\n  }\n  return sum}\n\n/**\n * Returns the sum of all elements in
the sequence.\n *\n * The operation is _terminal_.\n *\n@kotlin.jvm.JvmName("sumOfDouble")\npublic fun
Sequence<Double>.sum(): Double {\n  var sum: Double = 0.0\n  for (element in this) {\n    sum += element\n
  }\n  return sum}\n\n"/**\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n
*\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("SetsKt")\n\npackage
kotlin.collections\n\n/\n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\nimport kotlin.random.*\nimport
kotlin.ranges.contains\nimport kotlin.ranges.reversed\n\n/**\n * Returns a set containing all elements of the original
set except the given [element].\n *\n * The returned set preserves the element iteration order of the original set.\n
*\n@public operator fun <T> Set<T>.minus(element: T): Set<T> {\n  val result =
LinkedHashSet<T>(mapCapacity(size))\n  var removed = false\n  return this.filterTo(result) { if (!removed && it

```

```

== element) { removed = true; false } else true }
}

/** Returns a set containing all elements of the original
set except the elements contained in the given [elements] array.
 * The returned set preserves the element
iteration order of the original set.
 * Before Kotlin 1.6, the [elements] array may have been converted to a
[HashSet] to speed up the operation, thus the elements were required to have
 * a correct and stable implementation
of `hashCode()` that didn't change between successive invocations.
 * On JVM, you can enable this behavior back
with the system property `kotlin.collections.convert_arg_to_set_in_removeAll` set to `true`.
 */
@public operator
fun <T> Set<T>.minus(elements: Array<out T>): Set<T> {
    val result = LinkedHashSet<T>(this)
    result.removeAll(elements)
    return result
}

/** Returns a set containing all elements of the original set
except the elements contained in the given [elements] collection.
 * The returned set preserves the element
iteration order of the original set.
 * Before Kotlin 1.6, the [elements] collection may have been converted to a
[HashSet] to speed up the operation, thus the elements were required to have
 * a correct and stable implementation
of `hashCode()` that didn't change between successive invocations.
 * On JVM, you can enable this behavior back
with the system property `kotlin.collections.convert_arg_to_set_in_removeAll` set to `true`.
 */
@public operator
fun <T> Set<T>.minus(elements: Iterable<T>): Set<T> {
    val other =
elements.convertToSetForSetOperationWith(this)
    if (other.isEmpty())
        return this.toSet()
    if (other is
Set)
        return this.filterNotTo(LinkedHashSet<T>()) { it in other }
    val result = LinkedHashSet<T>(this)
    result.removeAll(other)
    return result
}

/** Returns a set containing all elements of the original set
except the elements contained in the given [elements] sequence.
 * The returned set preserves the element
iteration order of the original set.
 * Before Kotlin 1.6, the [elements] sequence may have been converted to a
[HashSet] to speed up the operation, thus the elements were required to have
 * a correct and stable implementation
of `hashCode()` that didn't change between successive invocations.
 * On JVM, you can enable this behavior back
with the system property `kotlin.collections.convert_arg_to_set_in_removeAll` set to `true`.
 */
@public operator
fun <T> Set<T>.minus(elements: Sequence<T>): Set<T> {
    val result = LinkedHashSet<T>(this)
    result.removeAll(elements)
    return result
}

/** Returns a set containing all elements of the original set
except the given [element].
 * The returned set preserves the element iteration order of the original set.
 */
@kotlin.internal.InlineOnly
@public inline fun <T> Set<T>.minusElement(element: T): Set<T> {
    return
minus(element)
}

/** Returns a set containing all elements of the original set and then the given [element] if
it isn't already in this set.
 * The returned set preserves the element iteration order of the original set.
 */
@public operator fun <T> Set<T>.plus(element: T): Set<T> {
    val result =
LinkedHashSet<T>(mapCapacity(size + 1))
    result.addAll(this)
    result.add(element)
    return
result
}

/** Returns a set containing all elements of the original set and the given [elements] array,
which aren't already in this set.
 * The returned set preserves the element iteration order of the original set.
 */
@public operator fun <T> Set<T>.plus(elements: Array<out T>): Set<T> {
    val result =
LinkedHashSet<T>(mapCapacity(this.size + elements.size))
    result.addAll(this)
    result.addAll(elements)
    return result
}

/** Returns a set containing all elements of the original set and the given [elements]
collection,
 * which aren't already in this set.
 * The returned set preserves the element iteration order of the
original set.
 */
@public operator fun <T> Set<T>.plus(elements: Iterable<T>): Set<T> {
    val result =
LinkedHashSet<T>(mapCapacity(elements.collectionSizeOrNull()?.let { this.size + it } ?: this.size * 2))
    result.addAll(this)
    result.addAll(elements)
    return result
}

/** Returns a set containing all elements of
the original set and the given [elements] sequence,
 * which aren't already in this set.
 * The returned set
preserves the element iteration order of the original set.
 */
@public operator fun <T> Set<T>.plus(elements:
Sequence<T>): Set<T> {
    val result = LinkedHashSet<T>(mapCapacity(this.size * 2))
    result.addAll(this)
    result.addAll(elements)
    return result
}

/** Returns a set containing all elements of the original set and
then the given [element] if it isn't already in this set.
 * The returned set preserves the element iteration order
of the original set.
 */
@kotlin.internal.InlineOnly
@public inline fun <T> Set<T>.plusElement(element: T):
Set<T> {
    return plus(element)
}

/* Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming
Language contributors.
 * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.
 */

```

```

*\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("\StringsKt")\n\npackage
kotlin.text\n\n/\n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\nimport kotlin.random.*\n\n/**\n * Returns a
character at the given [index] or throws an [IndexOutOfBoundsException] if the [index] is out of bounds of this char
sequence.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n */\npublic expect fun
CharSequence.elementAt(index: Int): Char\n\n/**\n * Returns a character at the given [index] or the result of calling
the [defaultValue] function if the [index] is out of bounds of this char sequence.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrElse\n */\n@kotlin.internal.InlineOnly\npublic inline fun
CharSequence.elementAtOrElse(index: Int, defaultValue: (Int) -> Char): Char {\n    return if (index >= 0 && index
<= lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns a character at the given [index] or `null` if
the [index] is out of bounds of this char sequence.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrNull\n */\n@kotlin.internal.InlineOnly\npublic inline fun
CharSequence.elementAtOrNull(index: Int): Char? {\n    return this.getOrNull(index)\n}\n\n/**\n * Returns the first
character matching the given [predicate], or `null` if no such character was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n */\n@kotlin.internal.InlineOnly\npublic inline fun
CharSequence.find(predicate: (Char) -> Boolean): Char? {\n    return firstOrNull(predicate)\n}\n\n/**\n * Returns
the last character matching the given [predicate], or `null` if no such character was found.\n * \n * @sample
samples.collections.Collections.Elements.find\n */\n@kotlin.internal.InlineOnly\npublic inline fun
CharSequence.find(predicate: (Char) -> Boolean): Char? {\n    return lastOrNull(predicate)\n}\n\n/**\n *
Returns first character.\n * @throws [NoSuchElementException] if the char sequence is empty.\n */\npublic fun
CharSequence.first(): Char {\n    if (isEmpty())\n        throw NoSuchElementException("\Char sequence is
empty.")\n    return this[0]\n}\n\n/**\n * Returns the first character matching the given [predicate].\n * @throws
[NoSuchElementException] if no such character is found.\n */\npublic inline fun CharSequence.first(predicate:
(Char) -> Boolean): Char {\n    for (element in this) if (predicate(element)) return element\n    throw
NoSuchElementException("\Char sequence contains no character matching the predicate.")\n}\n\n/**\n * Returns
the first non-null value produced by [transform] function being applied to characters of this char sequence in
iteration order,\n * or throws [NoSuchElementException] if no non-null value was produced.\n * \n * @sample
samples.collections.Collections.Transformations.firstNotNullOf\n */\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun <R : Any>
CharSequence.firstNotNullOf(transform: (Char) -> R?): R {\n    return firstNotNullOfOrNull(transform)?: throw
NoSuchElementException("\No element of the char sequence was transformed to a non-null value.")\n}\n\n/**\n *
Returns the first non-null value produced by [transform] function being applied to characters of this char sequence in
iteration order,\n * or `null` if no non-null value was produced.\n * \n * @sample
samples.collections.Collections.Transformations.firstNotNullOf\n */\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun <R : Any>
CharSequence.firstNotNullOfOrNull(transform: (Char) -> R?): R? {\n    for (element in this) {\n        val result =
transform(element)\n        if (result != null) {\n            return result\n        }\n    }\n    return null\n}\n\n/**\n *
Returns the first character, or `null` if the char sequence is empty.\n */\npublic fun CharSequence.firstOrNull():
Char? {\n    return if (isEmpty()) null else this[0]\n}\n\n/**\n * Returns the first character matching the given
[predicate], or `null` if character was not found.\n */\npublic inline fun CharSequence.firstOrNull(predicate: (Char) -
> Boolean): Char? {\n    for (element in this) if (predicate(element)) return element\n    return null\n}\n\n/**\n *
Returns a character at the given [index] or the result of calling the [defaultValue] function if the [index] is out of
bounds of this char sequence.\n */\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.getOrNull(index:
Int, defaultValue: (Int) -> Char): Char {\n    return if (index >= 0 && index <= lastIndex) get(index) else
defaultValue(index)\n}\n\n/**\n * Returns a character at the given [index] or `null` if the [index] is out of bounds of
this char sequence.\n * \n * @sample samples.collections.Collections.Elements.getOrNull\n */\npublic fun
CharSequence.getOrNull(index: Int): Char? {\n    return if (index >= 0 && index <= lastIndex) get(index) else
null\n}\n\n/**\n * Returns index of the first character matching the given [predicate], or -1 if the char sequence does

```

```

not contain such character.\n */\npublic inline fun CharSequence.indexOfFirst(predicate: (Char) -> Boolean): Int {\n
    for (index in indices) {\n        if (predicate(this[index])) {\n            return index\n        }\n    }\n    return -
1\n}\n\n/**\n * Returns index of the last character matching the given [predicate], or -1 if the char sequence does
not contain such character.\n */\npublic inline fun CharSequence.indexOfLast(predicate: (Char) -> Boolean): Int {\n
    for (index in indices.reversed()) {\n        if (predicate(this[index])) {\n            return index\n        }\n    }\n    return -
1\n}\n\n/**\n * Returns the last character.\n */\n * @throws NoSuchElementException if the char sequence is
empty.\n */\n * @sample samples.text.Strings.last\n */\npublic fun CharSequence.last(): Char {\n    if (isEmpty())\n        throw NoSuchElementException("Char sequence is empty.")\n    return this[lastIndex]\n}\n\n/**\n * Returns the
last character matching the given [predicate].\n */\n * @throws NoSuchElementException if no such character is
found.\n */\n * @sample samples.text.Strings.last\n */\npublic inline fun CharSequence.last(predicate: (Char) ->
Boolean): Char {\n    for (index in this.indices.reversed()) {\n        val element = this[index]\n        if
(predicate(element)) return element\n    }\n    throw NoSuchElementException("Char sequence contains no
character matching the predicate.")\n}\n\n/**\n * Returns the last character, or `null` if the char sequence is
empty.\n */\n * @sample samples.text.Strings.last\n */\npublic fun CharSequence.lastOrNull(): Char? {\n    return if
(isEmpty()) null else this[length - 1]\n}\n\n/**\n * Returns the last character matching the given [predicate], or `null`
if no such character was found.\n */\n * @sample samples.text.Strings.last\n */\npublic inline fun
CharSequence.lastOrNull(predicate: (Char) -> Boolean): Char? {\n    for (index in this.indices.reversed()) {\n
        val element = this[index]\n        if (predicate(element)) return element\n    }\n    return null\n}\n\n/**\n * Returns a
random character from this char sequence.\n */\n * @throws NoSuchElementException if this char sequence is
empty.\n */\n * @SinceKotlin("1.3")\n * @kotlin.internal.InlineOnly\n */\npublic inline fun CharSequence.random(): Char
{\n    return random(Random)\n}\n\n/**\n * Returns a random character from this char sequence using the specified
source of randomness.\n */\n * @throws NoSuchElementException if this char sequence is empty.\n */\n * @SinceKotlin("1.3")\n */\npublic fun CharSequence.random(random: Random): Char {\n    if (isEmpty())\n        throw NoSuchElementException("Char sequence is empty.")\n    return get(random.nextInt(length))\n}\n\n/**\n * Returns a random character from this char sequence, or `null` if this char sequence is empty.\n
*/\n * @SinceKotlin("1.4")\n * @WasExperimental(ExperimentalStdlibApi::class)\n * @kotlin.internal.InlineOnly\n */\npublic
inline fun CharSequence.randomOrNull(): Char? {\n    return randomOrNull(Random)\n}\n\n/**\n * Returns a
random character from this char sequence using the specified source of randomness, or `null` if this char sequence is
empty.\n */\n * @SinceKotlin("1.4")\n * @WasExperimental(ExperimentalStdlibApi::class)\n */\npublic fun
CharSequence.randomOrNull(random: Random): Char? {\n    if (isEmpty())\n        return null\n    return
get(random.nextInt(length))\n}\n\n/**\n * Returns the single character, or throws an exception if the char sequence
is empty or has more than one character.\n */\n */\npublic fun CharSequence.single(): Char {\n    return when (length)
{\n        0 -> throw NoSuchElementException("Char sequence is empty.")\n        1 -> this[0]\n        else -> throw
IllegalArgumentException("Char sequence has more than one element.")\n    }\n}\n\n/**\n * Returns the single
character matching the given [predicate], or throws exception if there is no or more than one matching character.\n
*/\n */\npublic inline fun CharSequence.single(predicate: (Char) -> Boolean): Char {\n    var single: Char? = null\n    var
found = false\n    for (element in this) {\n        if (predicate(element)) {\n            if (found) throw
IllegalArgumentException("Char sequence contains more than one matching element.")\n            single =
element\n            found = true\n        }\n    }\n    if (!found) throw NoSuchElementException("Char sequence
contains no character matching the predicate.")\n    @Suppress("UNCHECKED_CAST")\n    return single as
Char\n}\n\n/**\n * Returns single character, or `null` if the char sequence is empty or has more than one character.\n
*/\n */\npublic fun CharSequence.singleOrNull(): Char? {\n    return if (length == 1) this[0] else null\n}\n\n/**\n *
Returns the single character matching the given [predicate], or `null` if character was not found or more than one
character was found.\n */\n */\npublic inline fun CharSequence.singleOrNull(predicate: (Char) -> Boolean): Char? {\n
    var single: Char? = null\n    var found = false\n    for (element in this) {\n        if (predicate(element)) {\n
            if (found) return null\n            single = element\n            found = true\n        }\n    }\n    if
(!found) return null\n    return single\n}\n\n/**\n * Returns a subsequence of this char sequence with the first [n]
characters removed.\n */\n * @throws IllegalArgumentException if [n] is negative.\n */\n * @sample samples.text.Strings.drop\n */\npublic fun

```



```

CharSequence.drop(n: Int): CharSequence {
  require(n >= 0) { "Requested character count $n is less than zero." }
}
return subSequence(n.coerceAtMost(length), length)
}
Returns a string with the first [n] characters removed.
@throws IllegalArgumentException if [n] is negative.
@sample
samples.text.Strings.drop
*/
public fun String.drop(n: Int): String {
  require(n >= 0) { "Requested character count $n is less than zero." }
  return substring(n.coerceAtMost(length))
}
Returns a subsequence of this char sequence with the last [n] characters removed.
@throws IllegalArgumentException if [n] is negative.
@sample
samples.text.Strings.drop
*/
public fun CharSequence.dropLast(n: Int):
CharSequence {
  require(n >= 0) { "Requested character count $n is less than zero." }
  return take((length - n).coerceAtLeast(0))
}
Returns a string with the last [n] characters removed.
@throws
IllegalArgumentException if [n] is negative.
@sample
samples.text.Strings.drop
*/
public fun
String.dropLast(n: Int): String {
  require(n >= 0) { "Requested character count $n is less than zero." }
  return take((length - n).coerceAtLeast(0))
}
Returns a subsequence of this char sequence containing all
characters except last characters that satisfy the given [predicate].
@sample
samples.text.Strings.drop
*/
public inline fun CharSequence.dropLastWhile(predicate: (Char) -> Boolean): CharSequence {
  for (index in lastIndex downTo 0)
    if (!predicate(this[index]))
      return subSequence(0, index + 1)
  return ""
}
Returns a string containing all characters except last characters that satisfy the given [predicate].
@sample
samples.text.Strings.drop
*/
public inline fun String.dropLastWhile(predicate: (Char) ->
Boolean): String {
  for (index in lastIndex downTo 0)
    if (!predicate(this[index]))
      return substring(0, index + 1)
  return ""
}
Returns a subsequence of this char sequence containing all
characters except first characters that satisfy the given [predicate].
@sample
samples.text.Strings.drop
*/
public inline fun CharSequence.dropWhile(predicate: (Char) -> Boolean): CharSequence {
  for (index in this.indices)
    if (!predicate(this[index]))
      return subSequence(index, length)
  return ""
}
Returns a string containing all characters except first characters that satisfy the given [predicate].
@sample
samples.text.Strings.drop
*/
public inline fun String.dropWhile(predicate: (Char) -> Boolean): String
{
  for (index in this.indices)
    if (!predicate(this[index]))
      return substring(index)
  return ""
}
Returns a char sequence containing only those characters from the original char sequence that
match the given [predicate].
@sample
samples.text.Strings.filter
*/
public inline fun
CharSequence.filter(predicate: (Char) -> Boolean): CharSequence {
  return filterTo(StringBuilder(),
predicate)
}
Returns a string containing only those characters from the original string that match the
given [predicate].
@sample
samples.text.Strings.filter
*/
public inline fun String.filter(predicate: (Char) -
> Boolean): String {
  return filterTo(StringBuilder(), predicate).toString()
}
Returns a char sequence
containing only those characters from the original char sequence that match the given [predicate].
@param
[predicate] function that takes the index of a character and the character itself
and returns the result of predicate
evaluation on the character.
@sample
samples.collections.Collections.Filtering.filterIndexed
*/
public
inline fun CharSequence.filterIndexed(predicate: (index: Int, Char) -> Boolean): CharSequence {
  return
filterIndexedTo(StringBuilder(), predicate)
}
Returns a string containing only those characters from the
original string that match the given [predicate].
@param [predicate] function that takes the index of a character
and the character itself
and returns the result of predicate evaluation on the character.
@sample
samples.collections.Collections.Filtering.filterIndexed
*/
public inline fun String.filterIndexed(predicate: (index:
Int, Char) -> Boolean): String {
  return filterIndexedTo(StringBuilder(), predicate).toString()
}
Appends all characters matching the given [predicate] to the given [destination].
@param [predicate] function
that takes the index of a character and the character itself
and returns the result of predicate evaluation on the
character.
@sample
samples.collections.Collections.Filtering.filterIndexedTo
*/
public inline fun <C :
Appendable> CharSequence.filterIndexedTo(destination: C, predicate: (index: Int, Char) -> Boolean): C {
  forEachIndexed { index, element ->
    if (predicate(index, element)) destination.append(element)
  }
  return destination
}
Returns a char sequence containing only those characters from the original char
sequence that do not match the given [predicate].
@sample
samples.text.Strings.filterNot
*/
public inline
fun CharSequence.filterNot(predicate: (Char) -> Boolean): CharSequence {
  return filterNotTo(StringBuilder(),

```

```

predicate)\n\n/**\n * Returns a string containing only those characters from the original string that do not match
the given [predicate].\n * \n * @sample samples.text.Strings.filterNot\n */\npublic inline fun
String.filterNot(predicate: (Char) -> Boolean): String {\n    return filterNotTo(StringBuilder(),
predicate).toString()\n}\n\n/**\n * Appends all characters not matching the given [predicate] to the given
[destination].\n * \n * @sample samples.collections.Collections.Filtering.filterTo\n */\npublic inline fun <C :
Appendable> CharSequence.filterNotTo(destination: C, predicate: (Char) -> Boolean): C {\n    for (element in this)
if (!predicate(element)) destination.append(element)\n    return destination\n}\n\n/**\n * Appends all characters
matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n */\npublic inline fun <C : Appendable>
CharSequence.filterTo(destination: C, predicate: (Char) -> Boolean): C {\n    for (index in 0 until length) {\n        val
element = get(index)\n        if (predicate(element)) destination.append(element)\n    }\n    return
destination\n}\n\n/**\n * Returns a char sequence containing characters of the original char sequence at the
specified range of [indices].\n */\npublic fun CharSequence.slice(indices: IntRange): CharSequence {\n    if
(indices.isEmpty()) return ""\n    return subSequence(indices)\n}\n\n/**\n * Returns a string containing characters
of the original string at the specified range of [indices].\n */\npublic fun String.slice(indices: IntRange): String {\n
if (indices.isEmpty()) return ""\n    return substring(indices)\n}\n\n/**\n * Returns a char sequence containing
characters of the original char sequence at specified [indices].\n */\npublic fun CharSequence.slice(indices:
Iterable<Int>): CharSequence {\n    val size = indices.collectionSizeOrDefault(10)\n    if (size == 0) return ""\n
val result = StringBuilder(size)\n    for (i in indices) {\n        result.append(get(i))\n    }\n    return result\n}\n\n/**\n * Returns a string containing characters of the original string at specified [indices].\n
*/\n\n@kotlin.internal.InlineOnly\npublic inline fun String.slice(indices: Iterable<Int>): String {\n    return (this as
CharSequence).slice(indices).toString()\n}\n\n/**\n * Returns a subsequence of this char sequence containing the
first [n] characters from this char sequence, or the entire char sequence if this char sequence is shorter.\n * \n *
@throws IllegalArgumentException if [n] is negative.\n * \n * @sample samples.text.Strings.take\n */\npublic fun
CharSequence.take(n: Int): CharSequence {\n    require(n >= 0) { \"Requested character count $n is less than zero.\"
}\n    return subSequence(0, n.coerceAtMost(length))\n}\n\n/**\n * Returns a string containing the first [n]
characters from this string, or the entire string if this string is shorter.\n * \n * @throws IllegalArgumentException if
[n] is negative.\n * \n * @sample samples.text.Strings.take\n */\npublic fun String.take(n: Int): String {\n    require(n
>= 0) { \"Requested character count $n is less than zero.\" }\n    return substring(0,
n.coerceAtMost(length))\n}\n\n/**\n * Returns a subsequence of this char sequence containing the last [n]
characters from this char sequence, or the entire char sequence if this char sequence is shorter.\n * \n * @throws
IllegalArgumentException if [n] is negative.\n * \n * @sample samples.text.Strings.take\n */\npublic fun
CharSequence.takeLast(n: Int): CharSequence {\n    require(n >= 0) { \"Requested character count $n is less than
zero.\" }\n    val length = length\n    return subSequence(length - n.coerceAtMost(length), length)\n}\n\n/**\n *
Returns a string containing the last [n] characters from this string, or the entire string if this string is shorter.\n *
\n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample samples.text.Strings.take\n */\npublic fun
String.takeLast(n: Int): String {\n    require(n >= 0) { \"Requested character count $n is less than zero.\" }\n    val
length = length\n    return substring(length - n.coerceAtMost(length))\n}\n\n/**\n * Returns a subsequence of this
char sequence containing last characters that satisfy the given [predicate].\n * \n * @sample
samples.text.Strings.take\n */\npublic inline fun CharSequence.takeLastWhile(predicate: (Char) -> Boolean):
CharSequence {\n    for (index in lastIndex downTo 0) {\n        if (!predicate(this[index])) {\n            return
subSequence(index + 1, length)\n        }\n    }\n    return subSequence(0, length)\n}\n\n/**\n * Returns a string
containing last characters that satisfy the given [predicate].\n * \n * @sample samples.text.Strings.take\n */\npublic
inline fun String.takeLastWhile(predicate: (Char) -> Boolean): String {\n    for (index in lastIndex downTo 0) {\n
if (!predicate(this[index])) {\n        return substring(index + 1)\n    }\n    }\n    return this\n}\n\n/**\n * Returns
a subsequence of this char sequence containing the first characters that satisfy the given [predicate].\n * \n *
@sample samples.text.Strings.take\n */\npublic inline fun CharSequence.takeWhile(predicate: (Char) -> Boolean):
CharSequence {\n    for (index in 0 until length)\n        if (!predicate(get(index))) {\n            return subSequence(0,

```

```

index)\n    }\n    return subSequence(0, length)\n}\n\n/**\n * Returns a string containing the first characters that
satisfy the given [predicate].\n * \n * @sample samples.text.Strings.take\n */\npublic inline fun
String.takeWhile(predicate: (Char) -> Boolean): String {\n    for (index in 0 until length)\n        if
(!predicate(get(index))) {\n            return substring(0, index)\n        }\n    return this\n}\n\n/**\n * Returns a char
sequence with characters in reversed order.\n */\npublic fun CharSequence.reversed(): CharSequence {\n    return
StringBuilder(this).reverse()\n}\n\n/**\n * Returns a string with characters in reversed order.\n */\n@kotlin.internal.InlineOnly\npublic inline fun String.reversed(): String {\n    return (this as
CharSequence).reversed().toString()\n}\n\n/**\n * Returns a [Map] containing key-value pairs provided by
[transform] function\n * applied to characters of the given char sequence.\n * \n * If any of two pairs would have the
same key the last one gets added to the map.\n * \n * The returned map preserves the entry iteration order of the
original char sequence.\n * \n * @sample samples.text.Strings.associate\n */\npublic inline fun <K, V>
CharSequence.associate(transform: (Char) -> Pair<K, V>): Map<K, V> {\n    val capacity =
mapCapacity(length).coerceAtLeast(16)\n    return associateTo(LinkedHashMap<K, V>(capacity),
transform)\n}\n\n/**\n * Returns a [Map] containing the characters from the given char sequence indexed by the
key\n * returned from [keySelector] function applied to each character.\n * \n * If any two characters would have the
same\n * key returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the entry
iteration order of the original char sequence.\n * \n * @sample samples.text.Strings.associateBy\n */\npublic inline
fun <K> CharSequence.associateBy(keySelector: (Char) -> K): Map<K, Char> {\n    val capacity =
mapCapacity(length).coerceAtLeast(16)\n    return associateByTo(LinkedHashMap<K, Char>(capacity),
keySelector)\n}\n\n/**\n * Returns a [Map] containing the values provided by [valueTransform] and indexed by
[keySelector] functions applied to characters of the given char sequence.\n * \n * If any two characters would have
the same key returned by [keySelector] the last one gets added to the map.\n * \n * The returned map preserves the
entry iteration order of the original char sequence.\n * \n * @sample
samples.text.Strings.associateByWithValueTransform\n */\npublic inline fun <K, V>
CharSequence.associateBy(keySelector: (Char) -> K, valueTransform: (Char) -> V): Map<K, V> {\n    val capacity
= mapCapacity(length).coerceAtLeast(16)\n    return associateByTo(LinkedHashMap<K, V>(capacity),
keySelector, valueTransform)\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value
pairs,\n * where key is provided by the [keySelector] function applied to each character of the given char sequence\n
* and value is the character itself.\n * \n * If any two characters would have the same key returned by [keySelector]
the last one gets added to the map.\n * \n * @sample samples.text.Strings.associateByTo\n */\npublic inline fun <K,
M : MutableMap<in K, in Char>> CharSequence.associateByTo(destination: M, keySelector: (Char) -> K): M {\n    for
(element in this) {\n        destination.put(keySelector(element), element)\n    }\n    return destination\n}\n\n/**\n
* Populates and returns the [destination] mutable map with key-value pairs,\n * where key is provided by the
[keySelector] function and\n * and value is provided by the [valueTransform] function applied to characters of the
given char sequence.\n * \n * If any two characters would have the same key returned by [keySelector] the last one
gets added to the map.\n * \n * @sample samples.text.Strings.associateByToWithValueTransform\n */\npublic
inline fun <K, V, M : MutableMap<in K, in V>> CharSequence.associateByTo(destination: M, keySelector: (Char)
-> K, valueTransform: (Char) -> V): M {\n    for (element in this) {\n        destination.put(keySelector(element),
valueTransform(element))\n    }\n    return destination\n}\n\n/**\n * Populates and returns the [destination] mutable
map with key-value pairs\n * provided by [transform] function applied to each character of the given char
sequence.\n * \n * If any of two pairs would have the same key the last one gets added to the map.\n * \n * @sample
samples.text.Strings.associateTo\n */\npublic inline fun <K, V, M : MutableMap<in K, in V>>
CharSequence.associateTo(destination: M, transform: (Char) -> Pair<K, V>): M {\n    for (element in this) {\n
destination += transform(element)\n    }\n    return destination\n}\n\n/**\n * Returns a [Map] where keys are
characters from the given char sequence and values are\n * produced by the [valueSelector] function applied to each
character.\n * \n * If any two characters are equal, the last one gets added to the map.\n * \n * The returned map
preserves the entry iteration order of the original char sequence.\n * \n * @sample
samples.text.Strings.associateWith\n */\n@SinceKotlin("1.3")\npublic inline fun <V>

```

```

CharSequence.associateWith(valueSelector: (Char) -> V): Map<Char, V> {\n  val result = LinkedHashMap<Char,
V>(mapCapacity(length.coerceAtMost(128)).coerceAtLeast(16))\n  return associateWithTo(result,
valueSelector)\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs for each
character of the given char sequence,\n * where key is the character itself and value is provided by the
[valueSelector] function applied to that key.\n * \n * If any two characters are equal, the last one overwrites the
former value in the map.\n * \n * @sample samples.text.Strings.associateWithTo\n
*/\n\n@SinceKotlin("1.3")\npublic inline fun <V, M : MutableMap<in Char, in V>>
CharSequence.associateWithTo(destination: M, valueSelector: (Char) -> V): M {\n  for (element in this) {\n
destination.put(element, valueSelector(element))\n  }\n  return destination\n}\n\n/**\n * Appends all characters to
the given [destination] collection.\n */\n\npublic fun <C : MutableCollection<in Char>>
CharSequence.toCollection(destination: C): C {\n  for (item in this) {\n    destination.add(item)\n  }\n  return
destination\n}\n\n/**\n * Returns a new [HashSet] of all characters.\n */\n\npublic fun CharSequence.toHashSet():
HashSet<Char> {\n  return toCollection(HashSet<Char>(mapCapacity(length.coerceAtMost(128))))\n}\n\n/**\n *
Returns a [List] containing all characters.\n */\n\npublic fun CharSequence.toList(): List<Char> {\n  return when
(length) {\n    0 -> emptyList()\n    1 -> listOf(this[0])\n    else -> this.toMutableList()\n  }\n}\n\n/**\n *
Returns a new [MutableList] filled with all characters of this char sequence.\n */\n\npublic fun
CharSequence.toMutableList(): MutableList<Char> {\n  return toCollection(ArrayList<Char>(length))\n}\n\n/**\n *
Returns a [Set] of all characters.\n * \n * The returned set preserves the element iteration order of the original char
sequence.\n */\n\npublic fun CharSequence.toSet(): Set<Char> {\n  return when (length) {\n    0 -> emptySet()\n
1 -> setOf(this[0])\n    else -> toCollection(LinkedHashSet<Char>(mapCapacity(length.coerceAtMost(128))))\n
}\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being invoked on
each character of original char sequence.\n * \n * @sample
samples.collections.Collections.Transformations.flatMap\n */\n\npublic inline fun <R>
CharSequence.flatMap(transform: (Char) -> Iterable<R>): List<R> {\n  return flatMapTo(ArrayList<R>(),
transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being
invoked on each character\n * and its index in the original char sequence.\n * \n * @sample
samples.collections.Collections.Transformations.flatMapIndexed\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterable")\n@kotlin.internal.InlineOnly\npublic
inline fun <R> CharSequence.flatMapIndexed(transform: (index: Int, Char) -> Iterable<R>): List<R> {\n  return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Appends all elements yielded from results of
[transform] function being invoked on each character\n * and its index in the original char sequence, to the given
[destination].\n */\n\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("flatMapIndexedIterableTo")\n@kotlin.internal.InlineOnly\npublic
inline fun <R, C : MutableCollection<in R>> CharSequence.flatMapIndexedTo(destination: C, transform: (index:
Int, Char) -> Iterable<R>): C {\n  var index = 0\n  for (element in this) {\n    val list = transform(index++,
element)\n    destination.addAll(list)\n  }\n  return destination\n}\n\n/**\n * Appends all elements yielded from
results of [transform] function being invoked on each character of original char sequence, to the given
[destination].\n */\n\npublic inline fun <R, C : MutableCollection<in R>> CharSequence.flatMapTo(destination: C,
transform: (Char) -> Iterable<R>): C {\n  for (element in this) {\n    val list = transform(element)\n
destination.addAll(list)\n  }\n  return destination\n}\n\n/**\n * Groups characters of the original char sequence by
the key returned by the given [keySelector] function\n * applied to each character and returns a map where each
group key is associated with a list of corresponding characters.\n * \n * The returned map preserves the entry
iteration order of the keys produced from the original char sequence.\n * \n * @sample
samples.collections.Collections.Transformations.groupBy\n */\n\npublic inline fun <K>
CharSequence.groupBy(keySelector: (Char) -> K): Map<K, List<Char>> {\n  return
groupByTo(LinkedHashMap<K, MutableList<Char>>(), keySelector)\n}\n\n/**\n * Groups values returned by the

```

[valueTransform] function applied to each character of the original char sequence by the key returned by the given [keySelector] function applied to the character and returns a map where each group key is associated with a list of corresponding values. The returned map preserves the entry iteration order of the keys produced from the original char sequence.

```

@sample
samples.collections.Collections.Transformations.groupByKeyAndValues
public inline fun <K, V>
CharSequence.groupBy(keySelector: (Char) -> K, valueTransform: (Char) -> V): Map<K, List<V>> {
    return groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)
}
Groups characters of the original char sequence by the key returned by the given [keySelector] function applied to each character and puts to the [destination] map each group key associated with a list of corresponding characters.
@return The [destination] map.
@sample samples.collections.Collections.Transformations.groupBy
public inline fun <K, M : MutableMap<in K, MutableList<Char>>>
CharSequence.groupByTo(destination: M, keySelector: (Char) -> K): M {
    for (element in this) {
        val key = keySelector(element)
        val list = destination.getOrPut(key) { ArrayList<Char>() }
        list.add(element)
    }
    return destination
}
Groups values returned by the [valueTransform] function applied to each character of the original char sequence by the key returned by the given [keySelector] function applied to the character and puts to the [destination] map each group key associated with a list of corresponding values.
@return The [destination] map.
@sample samples.collections.Collections.Transformations.groupByKeyAndValues
public inline fun <K, V, M : MutableMap<in K, MutableList<V>>>
CharSequence.groupByTo(destination: M, keySelector: (Char) -> K, valueTransform: (Char) -> V): M {
    for (element in this) {
        val key = keySelector(element)
        val list = destination.getOrPut(key) { ArrayList<V>() }
        list.add(valueTransform(element))
    }
    return destination
}
Creates a [Grouping] source from a char sequence to be used later with one of group-and-fold operations using the specified [keySelector] function to extract a key from each character.
@sample samples.collections.Grouping.groupingByEachCount
@SinceKotlin("1.1")
public inline fun <K>
CharSequence.groupingBy(crossinline keySelector: (Char) -> K): Grouping<Char, K> {
    return object : Grouping<Char, K> {
        override fun sourceIterator(): Iterator<Char> = this@groupingBy.iterator()
        override fun keyOf(element: Char): K = keySelector(element)
    }
}
Returns a list containing the results of applying the given [transform] function to each character in the original char sequence.
@sample samples.text.Strings.map
public inline fun <R>
CharSequence.map(transform: (Char) -> R): List<R> {
    return mapTo(ArrayList<R>(length), transform)
}
Returns a list containing the results of applying the given [transform] function to each character and its index in the original char sequence.
@param [transform] function that takes the index of a character and the character itself and returns the result of the transform applied to the character.
public inline fun <R>
CharSequence.mapIndexed(transform: (index: Int, Char) -> R): List<R> {
    return mapIndexedTo(ArrayList<R>(length), transform)
}
Returns a list containing only the non-null results of applying the given [transform] function to each character and its index in the original char sequence.
@param [transform] function that takes the index of a character and the character itself and returns the result of the transform applied to the character.
public inline fun <R : Any>
CharSequence.mapIndexedNotNull(transform: (index: Int, Char) -> R?): List<R> {
    return mapIndexedNotNullTo(ArrayList<R>(), transform)
}
Applies the given [transform] function to each character and its index in the original char sequence and appends only the non-null results to the given [destination].
@param [transform] function that takes the index of a character and the character itself and returns the result of the transform applied to the character.
public inline fun <R : Any, C : MutableCollection<in R>>
CharSequence.mapIndexedNotNullTo(destination: C, transform: (index: Int, Char) -> R?): C {
    forEachIndexed { index, element -> transform(index, element)?.let { destination.add(it) } }
    return destination
}
Applies the given [transform] function to each character and its index in the original char sequence and appends the results to the given [destination].
@param [transform] function that takes the index of a character and the character itself and returns the result of the transform applied to the character.
public inline fun <R, C : MutableCollection<in R>>
CharSequence.mapIndexedTo(destination: C, transform: (index: Int, Char) -> R): C {
    var index = 0
    for (item in this)
        destination.add(transform(index++,

```

```

item))\n return destination\n}\n\n/**\n * Returns a list containing only the non-null results of applying the given
[transform] function\n * to each character in the original char sequence.\n * \n * @sample
samples.collections.Collections.Transformations.mapNotNull\n */\npublic inline fun <R : Any>
CharSequence.mapNotNull(transform: (Char) -> R?): List<R> {\n return mapNotNullTo(ArrayList<R>(),
transform)\n}\n\n/**\n * Applies the given [transform] function to each character in the original char sequence\n *
and appends only the non-null results to the given [destination].\n */\npublic inline fun <R : Any, C :
MutableCollection<in R>> CharSequence.mapNotNullTo(destination: C, transform: (Char) -> R?): C {\n forEach
{ element -> transform(element)?.let { destination.add(it) } }\n return destination\n}\n\n/**\n * Applies the given
[transform] function to each character of the original char sequence\n * and appends the results to the given
[destination].\n */\npublic inline fun <R, C : MutableCollection<in R>> CharSequence.mapTo(destination: C,
transform: (Char) -> R): C {\n for (item in this)\n destination.add(transform(item))\n return
destination\n}\n\n/**\n * Returns a lazy [Iterable] that wraps each character of the original char sequence\n * into an
[IndexValue] containing the index of that character and the character itself.\n */\npublic fun
CharSequence.withIndex(): Iterable<IndexedValue<Char>> {\n return IndexingIterable { iterator() }\n}\n\n/**\n *
Returns `true` if all characters match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.all\n */\npublic inline fun CharSequence.all(predicate: (Char) ->
Boolean): Boolean {\n for (element in this) if (!predicate(element)) return false\n return true\n}\n\n/**\n *
Returns `true` if char sequence has at least one character.\n * \n * @sample
samples.collections.Collections.Aggregates.any\n */\npublic fun CharSequence.any(): Boolean {\n return
!isEmpty()\n}\n\n/**\n * Returns `true` if at least one character matches the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.anyWithPredicate\n */\npublic inline fun CharSequence.any(predicate:
(Char) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return true\n return
false\n}\n\n/**\n * Returns the length of this char sequence.\n */\n@kotlin.internal.InlineOnly\npublic inline fun
CharSequence.count(): Int {\n return length\n}\n\n/**\n * Returns the number of characters matching the given
[predicate].\n */\npublic inline fun CharSequence.count(predicate: (Char) -> Boolean): Int {\n var count = 0\n
for (element in this) if (predicate(element)) ++count\n return count\n}\n\n/**\n * Accumulates value starting with
[initial] value and applying [operation] from left to right\n * to current accumulator value and each character.\n * \n
* Returns the specified [initial] value if the char sequence is empty.\n * \n * @param [operation] function that takes
current accumulator value and a character, and calculates the next accumulator value.\n */\npublic inline fun <R>
CharSequence.fold(initial: R, operation: (acc: R, Char) -> R): R {\n var accumulator = initial\n for (element in
this) accumulator = operation(accumulator, element)\n return accumulator\n}\n\n/**\n * Accumulates value
starting with [initial] value and applying [operation] from left to right\n * to current accumulator value and each
character with its index in the original char sequence.\n * \n * Returns the specified [initial] value if the char
sequence is empty.\n * \n * @param [operation] function that takes the index of a character, current accumulator
value\n * and the character itself, and calculates the next accumulator value.\n */\npublic inline fun <R>
CharSequence.foldIndexed(initial: R, operation: (index: Int, acc: R, Char) -> R): R {\n var index = 0\n var
accumulator = initial\n for (element in this) accumulator = operation(index++, accumulator, element)\n return
accumulator\n}\n\n/**\n * Accumulates value starting with [initial] value and applying [operation] from right to
left\n * to each character and current accumulator value.\n * \n * Returns the specified [initial] value if the char
sequence is empty.\n * \n * @param [operation] function that takes a character and current accumulator value, and
calculates the next accumulator value.\n */\npublic inline fun <R> CharSequence.foldRight(initial: R, operation:
(Char, acc: R) -> R): R {\n var index = lastIndex\n var accumulator = initial\n while (index >= 0) {\n
accumulator = operation(get(index--), accumulator)\n }\n return accumulator\n}\n\n/**\n * Accumulates value
starting with [initial] value and applying [operation] from right to left\n * to each character with its index in the
original char sequence and current accumulator value.\n * \n * Returns the specified [initial] value if the char
sequence is empty.\n * \n * @param [operation] function that takes the index of a character, the character itself\n *
and current accumulator value, and calculates the next accumulator value.\n */\npublic inline fun <R>
CharSequence.foldRightIndexed(initial: R, operation: (index: Int, Char, acc: R) -> R): R {\n var index =

```

```

lastIndex\n    var accumulator = initial\n    while (index >= 0) {\n        accumulator = operation(index, get(index),
accumulator)\n        --index\n    }\n    return accumulator\n}\n\n/**\n * Performs the given [action] on each
character.\n */\npublic inline fun CharSequence.forEach(action: (Char) -> Unit): Unit {\n    for (element in this)
action(element)\n}\n\n/**\n * Performs the given [action] on each character, providing sequential index with the
character.\n * @param [action] function that takes the index of a character and the character itself\n * and performs
the action on the character.\n */\npublic inline fun CharSequence.forEachIndexed(action: (index: Int, Char) -> Unit):
Unit {\n    var index = 0\n    for (item in this) action(index++, item)\n}\n\n@Deprecated("Use maxOrNull
instead.", ReplaceWith("this.maxOrNull()"))\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince =
"1.5", hiddenSince = "1.6")\npublic fun CharSequence.max(): Char? {\n    return
maxOrNull()\n}\n\n@Deprecated("Use maxByOrNull instead.",
ReplaceWith("this.maxByOrNull(selector)"))\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince =
"1.5", hiddenSince = "1.6")\npublic inline fun <R : Comparable<R>> CharSequence.maxBy(selector: (Char) ->
R): Char? {\n    return maxByOrNull(selector)\n}\n\n/**\n * Returns the first character yielding the largest value of
the given function or `null` if there are no characters.\n */\n * @sample
samples.collections.Collections.Aggregates.maxByOrNull\n */\n@SinceKotlin("1.4")\npublic inline fun <R :
Comparable<R>> CharSequence.maxByOrNull(selector: (Char) -> R): Char? {\n    if (isEmpty()) return null\n    var
maxElem = this[0]\n    val lastIndex = this.lastIndex\n    if (lastIndex == 0) return maxElem\n    var maxValue =
selector(maxElem)\n    for (i in 1..lastIndex) {\n        val e = this[i]\n        val v = selector(e)\n        if (maxValue < v)
{\n            maxElem = e\n            maxValue = v\n        }\n    }\n    return maxElem\n}\n\n/**\n * Returns the largest
value among all values produced by [selector] function\n * applied to each character in the char sequence.\n * \n * If
any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws
NoSuchElementException if the char sequence is empty.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.maxOf(selector: (Char) ->
Double): Double {\n    if (isEmpty()) throw NoSuchElementException()\n    var maxValue = selector(this[0])\n    for
(i in 1..lastIndex) {\n        val v = selector(this[i])\n        maxValue = maxOf(maxValue, v)\n    }\n    return
maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to
each character in the char sequence.\n * \n * If any of values produced by [selector] function is `NaN`, the returned
result is `NaN`.\n * \n * @throws NoSuchElementException if the char sequence is empty.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.maxOf(selector: (Char) ->
Float): Float {\n    if (isEmpty()) throw NoSuchElementException()\n    var maxValue = selector(this[0])\n    for
(i in 1..lastIndex) {\n        val v = selector(this[i])\n        maxValue = maxOf(maxValue, v)\n    }\n    return
maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to
each character in the char sequence.\n * \n * @throws NoSuchElementException if the char sequence is empty.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>
CharSequence.maxOf(selector: (Char) -> R): R {\n    if (isEmpty()) throw NoSuchElementException()\n    var
maxValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if (maxValue < v) {\n
            maxValue = v\n        }\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value among all values
produced by [selector] function\n * applied to each character in the char sequence or `null` if there are no
characters.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.maxOfOrNull(selector:
(Char) -> Double): Double? {\n    if (isEmpty()) return null\n    var maxValue = selector(this[0])\n    for (i in
1..lastIndex) {\n        val v = selector(this[i])\n        maxValue = maxOf(maxValue, v)\n    }\n    return
maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to
each character in the char sequence or `null` if there are no characters.\n * \n * If any of values produced by

```

[selector] function is `NaN`, the returned result is `NaN`.

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.maxOrNull(selector:\n(Char) -> Float): Float? {\n    if (isEmpty()) return null\n    var maxValue = selector(this[0])\n    for (i in\n1..lastIndex) {\n        val v = selector(this[i])\n        maxValue = maxOf(maxValue, v)\n    }\n    return\nmaxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each character in the char sequence or `null` if there are no characters.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>\nCharSequence.maxOrNull(selector: (Char) -> R): R? {\n    if (isEmpty()) return null\n    var maxValue =\nselector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if (maxValue < v) {\n            maxValue = v\n        }\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value according to the provided\n [comparator]\n * among all values produced by [selector] function applied to each character in the char sequence.\n * \n * @throws NoSuchElementException if the char sequence is empty.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> CharSequence.maxWith(comparator:\nComparator<in R>, selector: (Char) -> R): R {\n    if (isEmpty()) throw NoSuchElementException()\n    var\nmaxValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if\n(comparator.compare(maxValue, v) < 0) {\n            maxValue = v\n        }\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]\n function applied to each character in the char sequence or `null` if there are no characters.\n
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R>\nCharSequence.maxWithOrNull(comparator: Comparator<in R>, selector: (Char) -> R): R? {\n    if (isEmpty())\nreturn null\n    var maxValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if\n(comparator.compare(maxValue, v) < 0) {\n            maxValue = v\n        }\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest character or `null` if there are no characters.\n
```

```
*\n@SinceKotlin("1.4")\npublic fun\nCharSequence.maxOrNull(): Char? {\n    if (isEmpty()) return null\n    var max = this[0]\n    for (i in 1..lastIndex)\n{\n        val e = this[i]\n        if (max < e) max = e\n    }\n    return max\n}\n\n@Deprecated("Use maxWithOrNull\ninstead.", ReplaceWith("this.maxWithOrNull(comparator)"))\n@DeprecatedSinceKotlin(warningSince = "1.4",\nerrorSince = "1.5", hiddenSince = "1.6")\npublic fun CharSequence.maxWith(comparator: Comparator<in\nChar>): Char? {\n    return maxWithOrNull(comparator)\n}\n\n/**\n * Returns the first character having the largest\n value according to the provided [comparator] or `null` if there are no characters.\n
```

```
*\n@SinceKotlin("1.4")\npublic fun CharSequence.maxWithOrNull(comparator: Comparator<in Char>): Char?\n{\n    if (isEmpty()) return null\n    var max = this[0]\n    for (i in 1..lastIndex) {\n        val e = this[i]\n        if\n(comparator.compare(max, e) < 0) max = e\n    }\n    return max\n}\n\n@Deprecated("Use minOrNull instead.",\nReplaceWith("this.minOrNull()"))\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",\nhiddenSince = "1.6")\npublic fun CharSequence.min(): Char? {\n    return minOrNull()\n}\n\n@Deprecated("Use\nminByOrNull instead.", ReplaceWith("this.minByOrNull(selector)"))\n@DeprecatedSinceKotlin(warningSince =\n"1.4", errorSince = "1.5", hiddenSince = "1.6")\npublic inline fun <R : Comparable<R>>\nCharSequence.minBy(selector: (Char) -> R): Char? {\n    return minByOrNull(selector)\n}\n\n/**\n * Returns the\n first character yielding the smallest value of the given function or `null` if there are no characters.\n * \n * @sample\n samples.collections.Collections.Aggregates.minByOrNull\n
```

```
*\n@SinceKotlin("1.4")\npublic inline fun <R :\nComparable<R>> CharSequence.minByOrNull(selector: (Char) -> R): Char? {\n    if (isEmpty()) return null\n    var\nminElem = this[0]\n    val lastIndex = this.lastIndex\n    if (lastIndex == 0) return minElem\n    var minValue =\nselector(minElem)\n    for (i in 1..lastIndex) {\n        val e = this[i]\n        val v = selector(e)\n        if (minValue > v)\n{\n            minElem = e\n            minValue = v\n        }\n    }\n    return minElem\n}\n\n/**\n * Returns the smallest\n value among all values produced by [selector] function\n * applied to each character in the char sequence.\n * \n * If
```


any of values produced by [selector] function is `NaN`, the returned result is `NaN`.
@throws NoSuchElementException if the char sequence is empty.

NoSuchElementException if the char sequence is empty.

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.minOf(selector: (Char) ->\nDouble): Double {\n    if (isEmpty()) throw NoSuchElementException()\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return\n    minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each character in the char sequence.\n * \n * If any of values produced by [selector] function is `NaN`, the returned\n * result is `NaN`.  
@throws NoSuchElementException if the char sequence is empty.
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.minOf(selector: (Char) ->\nFloat): Float {\n    if (isEmpty()) throw NoSuchElementException()\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return\n    minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each character in the char sequence.\n * \n * @throws NoSuchElementException if the char sequence is empty.
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>\nCharSequence.minOf(selector: (Char) -> R): R {\n    if (isEmpty()) throw NoSuchElementException()\n    var\n    minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if (minValue > v) {\n            minValue = v\n        }\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value among all values\n * produced by [selector] function\n * applied to each character in the char sequence or `null` if there are no\n * characters.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.minOrNull(selector:\n(Char) -> Double): Double? {\n    if (isEmpty()) return null\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return\n    minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each character in the char sequence or `null` if there are no characters.\n * \n * If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.minOrNull(selector:\n(Char) -> Float): Float? {\n    if (isEmpty()) return null\n    var minValue = selector(this[0])\n    for (i in 1..lastIndex)\n    {\n        val v = selector(this[i])\n        minValue = minOf(minValue, v)\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each character in the char\n * sequence or `null` if there are no characters.
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>\nCharSequence.minOrNull(selector: (Char) -> R): R? {\n    if (isEmpty()) return null\n    var minValue =\n    selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if (minValue > v) {\n            minValue = v\n        }\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value according to the provided\n * [comparator]\n * among all values produced by [selector] function applied to each character in the char sequence.\n * \n * @throws NoSuchElementException if the char sequence is empty.
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R> CharSequence.minOfWith(comparator:\nComparator<in R>, selector: (Char) -> R): R {\n    if (isEmpty()) throw NoSuchElementException()\n    var\n    minValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if\n        (comparator.compare(minValue, v) > 0) {\n            minValue = v\n        }\n    }\n    return minValue\n}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values produced by [selector]
```

```

function applied to each character in the char sequence or `null` if there are no characters.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.internal.InlineOnly\npublic inline fun <R>
CharSequence.minOfWithOrNull(comparator: Comparator<in R>, selector: (Char) -> R): R? {\n if (isEmpty())
return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n *
Returns the smallest character or `null` if there are no characters.\n */\n@SinceKotlin("1.4")\npublic fun
CharSequence.minOrNull(): Char? {\n if (isEmpty()) return null\n var min = this[0]\n for (i in 1..lastIndex) {\n
val e = this[i]\n if (min > e) min = e\n }\n return min\n}\n\n@Deprecated("Use minWithOrNull
instead.", ReplaceWith("this.minWithOrNull(comparator)"))\n@DeprecatedSinceKotlin(warningSince = "1.4",
errorSince = "1.5", hiddenSince = "1.6")\npublic fun CharSequence.minWith(comparator: Comparator<in
Char>): Char? {\n return minWithOrNull(comparator)\n}\n\n/**\n * Returns the first character having the smallest
value according to the provided [comparator] or `null` if there are no characters.\n */\n
*\n@SinceKotlin("1.4")\npublic fun CharSequence.minWithOrNull(comparator: Comparator<in Char>): Char?
{\n if (isEmpty()) return null\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if
(comparator.compare(min, e) > 0) min = e\n }\n return min\n}\n\n/**\n * Returns `true` if the char sequence has
no characters.\n */\n * @sample samples.collections.Collections.Aggregates.none\n */\npublic fun
CharSequence.none(): Boolean {\n return isEmpty()\n}\n\n/**\n * Returns `true` if no characters match the given
[predicate].\n */\n * @sample samples.collections.Collections.Aggregates.noneWithPredicate\n */\npublic inline fun
CharSequence.none(predicate: (Char) -> Boolean): Boolean {\n for (element in this) if (predicate(element)) return
false\n return true\n}\n\n/**\n * Performs the given [action] on each character and returns the char sequence itself
afterwards.\n */\n@SinceKotlin("1.1")\npublic inline fun <S : CharSequence> S.onEach(action: (Char) -> Unit): S
{\n return apply { for (element in this) action(element) }\n}\n\n/**\n * Performs the given [action] on each
character, providing sequential index with the character,\n * and returns the char sequence itself afterwards.\n *
@param [action] function that takes the index of a character and the character itself\n * and performs the action on
the character.\n */\n@SinceKotlin("1.4")\npublic inline fun <S : CharSequence> S.onEachIndexed(action: (index:
Int, Char) -> Unit): S {\n return apply { forEachIndexed(action) }\n}\n\n/**\n * Accumulates value starting with
the first character and applying [operation] from left to right\n * to current accumulator value and each character.\n *
Throws an exception if this char sequence is empty. If the char sequence can be empty in an expected way,\n *
please use [reduceOrNull] instead. It returns `null` when its receiver is empty.\n */\n * @param [operation] function
that takes current accumulator value and a character,\n * and calculates the next accumulator value.\n */\n *
@sample samples.collections.Collections.Aggregates.reduce\n */\npublic inline fun
CharSequence.reduce(operation: (acc: Char, Char) -> Char): Char {\n if (isEmpty())\n throw
UnsupportedOperationException("Empty char sequence can't be reduced.")\n var accumulator = this[0]\n for
(index in 1..lastIndex) {\n accumulator = operation(accumulator, this[index])\n }\n return
accumulator\n}\n\n/**\n * Accumulates value starting with the first character and applying [operation] from left to
right\n * to current accumulator value and each character with its index in the original char sequence.\n *
Throws an exception if this char sequence is empty. If the char sequence can be empty in an expected way,\n *
please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.\n */\n * @param [operation]
function that takes the index of a character, current accumulator value and the character itself,\n * and calculates the
next accumulator value.\n * @sample samples.collections.Collections.Aggregates.reduce\n */\npublic inline fun
CharSequence.reduceIndexed(operation: (index: Int, acc: Char, Char) -> Char): Char {\n if (isEmpty())\n
throw UnsupportedOperationException("Empty char sequence can't be reduced.")\n var accumulator = this[0]\n
for (index in 1..lastIndex) {\n accumulator = operation(index, accumulator, this[index])\n }\n return
accumulator\n}\n\n/**\n * Accumulates value starting with the first character and applying [operation] from left to
right\n * to current accumulator value and each character with its index in the original char sequence.\n *
Returns `null` if the char sequence is empty.\n * @param [operation] function that takes the index of a
character, current accumulator value and the character itself,\n * and calculates the next accumulator value.\n */

```

```

@sample samples.collections.Collections.Aggregates.reduceOrNull\n *\n@SinceKotlin("1.4")\npublic inline fun
CharSequence.reduceIndexedOrNull(operation: (index: Int, acc: Char, Char) -> Char): Char? {\n  if (isEmpty())\n    return null\n  var accumulator = this[0]\n  for (index in 1..lastIndex) {\n    accumulator = operation(index,
accumulator, this[index])\n  }\n  return accumulator\n}\n\n/**\n * Accumulates value starting with the first
character and applying [operation] from left to right\n * to current accumulator value and each character.\n * \n *
Returns `null` if the char sequence is empty.\n * \n * @param [operation] function that takes current accumulator
value and a character,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceOrNull\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun
CharSequence.reduceOrNull(operation: (acc: Char, Char) -> Char): Char? {\n  if (isEmpty())\n    return null\n  var
accumulator = this[0]\n  for (index in 1..lastIndex) {\n    accumulator = operation(accumulator, this[index])\n  }\n
return accumulator\n}\n\n/**\n * Accumulates value starting with the last character and applying [operation]
from right to left\n * to each character and current accumulator value.\n * \n * Throws an exception if this char
sequence is empty. If the char sequence can be empty in an expected way,\n * please use [reduceRightOrNull]
instead. It returns `null` when its receiver is empty.\n * \n * @param [operation] function that takes a character and
current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRight\n *\npublic inline fun
CharSequence.reduceRight(operation: (Char, acc: Char) -> Char): Char {\n  var index = lastIndex\n  if (index < 0)
throw UnsupportedOperationException("Empty char sequence can't be reduced.")\n  var accumulator = get(index--)\n
while (index >= 0) {\n    accumulator = operation(get(index--), accumulator)\n  }\n  return
accumulator\n}\n\n/**\n * Accumulates value starting with the last character and applying [operation] from right to
left\n * to each character with its index in the original char sequence and current accumulator value.\n * \n * Throws
an exception if this char sequence is empty. If the char sequence can be empty in an expected way,\n * please use
[reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param [operation]
function that takes the index of a character, the character itself and current accumulator value,\n * and calculates the
next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceRight\n *\npublic
inline fun CharSequence.reduceRightIndexed(operation: (index: Int, Char, acc: Char) -> Char): Char {\n  var index
= lastIndex\n  if (index < 0) throw UnsupportedOperationException("Empty char sequence can't be reduced.")\n  var
accumulator = get(index--)\n  while (index >= 0) {\n    accumulator = operation(index, get(index),
accumulator)\n    --index\n  }\n  return accumulator\n}\n\n/**\n * Accumulates value starting with the last
character and applying [operation] from right to left\n * to each character with its index in the original char sequence
and current accumulator value.\n * \n * Returns `null` if the char sequence is empty.\n * \n * @param [operation]
function that takes the index of a character, the character itself and current accumulator value,\n * and calculates the
next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceRightOrNull\n
*\n@SinceKotlin("1.4")\npublic inline fun CharSequence.reduceRightIndexedOrNull(operation: (index: Int, Char,
acc: Char) -> Char): Char? {\n  var index = lastIndex\n  if (index < 0) return null\n  var accumulator = get(index--)\n
while (index >= 0) {\n    accumulator = operation(index, get(index), accumulator)\n    --index\n  }\n  return
accumulator\n}\n\n/**\n * Accumulates value starting with the last character and applying [operation] from
right to left\n * to each character and current accumulator value.\n * \n * Returns `null` if the char sequence is
empty.\n * \n * @param [operation] function that takes a character and current accumulator value,\n * and calculates
the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceRightOrNull\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun
CharSequence.reduceRightOrNull(operation: (Char, acc: Char) -> Char): Char? {\n  var index = lastIndex\n  if
(index < 0) return null\n  var accumulator = get(index--)\n  while (index >= 0) {\n    accumulator =
operation(get(index--), accumulator)\n  }\n  return accumulator\n}\n\n/**\n * Returns a list containing successive
accumulation values generated by applying [operation] from left to right\n * to each character and current
accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should
not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation]

```

function that takes current accumulator value and a character, and calculates the next accumulator value.

```

@sample samples.collections.Collections.Aggregates.runningFold
<R> CharSequence.runningFold(initial: R, operation: (acc: R, Char) -> R): List<R> {
    if (isEmpty()) return listOf(initial)
    val result = ArrayList<R>(length + 1).apply { add(initial) }
    var accumulator = initial
    for (element in this) {
        accumulator = operation(accumulator, element)
        result.add(accumulator)
    }
    return result
}

```

Returns a list containing successive accumulation values generated by applying [operation] from left to right to each character, its index in the original char sequence and current accumulator value that starts with [initial] value.

Note that `acc` value passed to [operation] function should not be mutated; otherwise it would affect the previous value in resulting list.

@param [operation] function that takes the index of a character, current accumulator value and the character itself, and calculates the next accumulator value.

```

@sample samples.collections.Collections.Aggregates.runningFold
*
@SinceKotlin("1.4")
public inline fun <R> CharSequence.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, Char) -> R): List<R> {
    if (isEmpty()) return listOf(initial)
    val result = ArrayList<R>(length + 1).apply { add(initial) }
    var accumulator = initial
    for (index in indices) {
        accumulator = operation(index, accumulator, this[index])
        result.add(accumulator)
    }
    return result
}

```

Returns a list containing successive accumulation values generated by applying [operation] from left to right to each character and current accumulator value that starts with the first character of this char sequence.

Note that `acc` value passed to [operation] function should not be mutated; otherwise it would affect the previous value in resulting list.

@param [operation] function that takes current accumulator value and a character, and calculates the next accumulator value.

```

@sample samples.collections.Collections.Aggregates.runningReduce
*
@SinceKotlin("1.4")
public inline fun CharSequence.runningReduce(operation: (acc: Char, Char) -> Char): List<Char> {
    if (isEmpty()) return emptyList()
    var accumulator = this[0]
    val result = ArrayList<Char>(length).apply { add(accumulator) }
    for (index in 1 until length) {
        accumulator = operation(accumulator, this[index])
        result.add(accumulator)
    }
    return result
}

```

Returns a list containing successive accumulation values generated by applying [operation] from left to right to each character, its index in the original char sequence and current accumulator value that starts with the first character of this char sequence.

Note that `acc` value passed to [operation] function should not be mutated; otherwise it would affect the previous value in resulting list.

@param [operation] function that takes the index of a character, current accumulator value and the character itself, and calculates the next accumulator value.

```

@sample samples.collections.Collections.Aggregates.runningReduce
*
@SinceKotlin("1.4")
public inline fun CharSequence.runningReduceIndexed(operation: (index: Int, acc: Char, Char) -> Char): List<Char> {
    if (isEmpty()) return emptyList()
    var accumulator = this[0]
    val result = ArrayList<Char>(length).apply { add(accumulator) }
    for (index in 1 until length) {
        accumulator = operation(index, accumulator, this[index])
        result.add(accumulator)
    }
    return result
}

```

Returns a list containing successive accumulation values generated by applying [operation] from left to right to each character and current accumulator value that starts with [initial] value.

Note that `acc` value passed to [operation] function should not be mutated; otherwise it would affect the previous value in resulting list.

@param [operation] function that takes current accumulator value and a character, and calculates the next accumulator value.

```

@sample samples.collections.Collections.Aggregates.scan
*
@SinceKotlin("1.4")
@WasExperimental(ExperimentalStdlibApi::class)
public inline fun <R> CharSequence.scan(initial: R, operation: (acc: R, Char) -> R): List<R> {
    return runningFold(initial, operation)
}

```

Returns a list containing successive accumulation values generated by applying [operation] from left to right to each character, its index in the original char sequence and current accumulator value that starts with [initial] value.

Note that `acc` value passed to [operation] function should not be mutated; otherwise it would affect the previous value in resulting list.

@param [operation] function that takes the index of a character, current accumulator value and the character itself, and calculates the next accumulator value.

```

@sample samples.collections.Collections.Aggregates.scan

```

```

*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic inline fun <R>
CharSequence.scanIndexed(initial: R, operation: (index: Int, acc: R, Char) -> R): List<R> {\n    return
runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each character in the char sequence.\n */\n@Deprecated("Use sumOf instead.",
ReplaceWith("this.sumOf(selector)"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic inline fun
CharSequence.sumBy(selector: (Char) -> Int): Int {\n    var sum: Int = 0\n    for (element in this) {\n        sum +=
selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each character in the char sequence.\n */\n@Deprecated("Use sumOf instead.",
ReplaceWith("this.sumOf(selector)"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic inline fun
CharSequence.sumByDouble(selector: (Char) -> Double): Double {\n    var sum: Double = 0.0\n    for (element in
this) {\n        sum += selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each character in the char sequence.\n */\n\n*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfDouble")\n@kotlin.internal.InlineOnly\npublic inline fun
CharSequence.sumOf(selector: (Char) -> Double): Double {\n    var sum: Double = 0.toDouble()\n    for (element in
this) {\n        sum += selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each character in the char sequence.\n */\n\n*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfInt")\n@kotlin.internal.InlineOnly\npublic inline fun
CharSequence.sumOf(selector: (Char) -> Int): Int {\n    var sum: Int = 0.toInt()\n    for (element in this) {\n        sum
+= selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector]
function applied to each character in the char sequence.\n */\n\n*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfLong")\n@kotlin.internal.InlineOnly\npublic inline fun
CharSequence.sumOf(selector: (Char) -> Long): Long {\n    var sum: Long = 0.toLong()\n    for (element in this) {\n
sum += selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each character in the char sequence.\n */\n\n*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfUInt")\n@WasExperimental(ExperimentalUnsignedType
s::class)\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.sumOf(selector: (Char) -> UInt): UInt {\n
var sum: UInt = 0.toUInt()\n    for (element in this) {\n        sum += selector(element)\n    }\n    return
sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each character in the char
sequence.\n */\n\n*\n@SinceKotlin("1.5")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@kotlin.jvm.JvmName("sumOfULong")\n@WasExperimental(ExperimentalUnsignedType
s::class)\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.sumOf(selector: (Char) -> ULong):
ULong {\n    var sum: ULong = 0.toULong()\n    for (element in this) {\n        sum += selector(element)\n    }\n
return sum\n}\n\n/**\n * Splits this char sequence into a list of strings each not exceeding the given [size].\n */\n * \n *
The last string in the resulting list may have fewer characters than the given [size].\n */\n * @param size the number
of elements to take in each string, must be positive and can be greater than the number of elements in this char
sequence.\n */\n * @sample samples.text.Strings.chunked\n */\n\n*\n@SinceKotlin("1.2")\npublic fun
CharSequence.chunked(size: Int): List<String> {\n    return windowed(size, size, partialWindows =
true)\n}\n\n/**\n * Splits this char sequence into several char sequences each not exceeding the given [size]\n */\n *
and applies the given [transform] function to an each.\n */\n * @return list of results of the [transform] applied to an
each char sequence.\n */\n * \n * Note that the char sequence passed to the [transform] function is ephemeral and is valid
only inside that function.\n */\n * You should not store it or allow it to escape in some way, unless you made a snapshot
of it.\n */\n * The last char sequence may have fewer characters than the given [size].\n */\n * @param size the number
of elements to take in each char sequence, must be positive and can be greater than the number of elements in this

```

```

char sequence.\n * \n * @sample samples.text.Strings.chunkedTransform\n */\n@SinceKotlin("1.2")\npublic fun
<R> CharSequence.chunked(size: Int, transform: (CharSequence) -> R): List<R> {\n    return windowed(size, size,
partialWindows = true, transform = transform)\n}\n\n/**\n * Splits this char sequence into a sequence of strings
each not exceeding the given [size].\n * \n * The last string in the resulting sequence may have fewer characters than
the given [size].\n * \n * @param size the number of elements to take in each string, must be positive and can be
greater than the number of elements in this char sequence.\n * \n * @sample
samples.collections.Collections.Transformations.chunked\n */\n@SinceKotlin("1.2")\npublic fun
CharSequence.chunkedSequence(size: Int): Sequence<String> {\n    return chunkedSequence(size) { it.toString()
}\n}\n\n/**\n * Splits this char sequence into several char sequences each not exceeding the given [size]\n * and
applies the given [transform] function to an each.\n * \n * @return sequence of results of the [transform] applied to
an each char sequence.\n * \n * Note that the char sequence passed to the [transform] function is ephemeral and is
valid only inside that function.\n * \n * You should not store it or allow it to escape in some way, unless you made a
snapshot of it.\n * \n * The last char sequence may have fewer characters than the given [size].\n * \n * @param size the
number of elements to take in each char sequence, must be positive and can be greater than the number of elements
in this char sequence.\n * \n * @sample samples.text.Strings.chunkedTransformToSequence\n
*/\n@SinceKotlin("1.2")\npublic fun <R> CharSequence.chunkedSequence(size: Int, transform: (CharSequence) -
> R): Sequence<R> {\n    return windowedSequence(size, size, partialWindows = true, transform =
transform)\n}\n\n/**\n * Splits the original char sequence into pair of char sequences,\n * where *first* char
sequence contains characters for which [predicate] yielded `true`,\n * while *second* char sequence contains
characters for which [predicate] yielded `false`.\n * \n * @sample samples.text.Strings.partition\n */\npublic inline
fun CharSequence.partition(predicate: (Char) -> Boolean): Pair<CharSequence, CharSequence> {\n    val first =
StringBuilder()\n    val second = StringBuilder()\n    for (element in this) {\n        if (predicate(element)) {\n
            first.append(element)\n        } else {\n            second.append(element)\n        }\n    }\n    return Pair(first,
second)\n}\n\n/**\n * Splits the original string into pair of strings,\n * where *first* string contains characters for
which [predicate] yielded `true`,\n * while *second* string contains characters for which [predicate] yielded
`false`.\n * \n * @sample samples.text.Strings.partition\n */\npublic inline fun String.partition(predicate: (Char) ->
Boolean): Pair<String, String> {\n    val first = StringBuilder()\n    val second = StringBuilder()\n    for (element in
this) {\n        if (predicate(element)) {\n            first.append(element)\n        } else {\n
            second.append(element)\n        }\n    }\n    return Pair(first.toString(), second.toString())\n}\n\n/**\n * Returns a list
of snapshots of the window of the given [size]\n * sliding along this char sequence with the given [step], where
each\n * snapshot is a string.\n * \n * Several last strings may have fewer characters than the given [size].\n * \n *
Both [size] and [step] must be positive and can be greater than the number of elements in this char sequence.\n *
\n * @param size the number of elements to take in each window\n * @param step the number of elements to move the
window forward by on an each step, by default 1\n * @param partialWindows controls whether or not to keep
partial windows in the end if any,\n * by default `false` which means partial windows won't be preserved\n * \n *
\n * @sample samples.collections.Sequences.Transformations.takeWindows\n */\n@SinceKotlin("1.2")\npublic fun
CharSequence.windowed(size: Int, step: Int = 1, partialWindows: Boolean = false): List<String> {\n    return
windowed(size, step, partialWindows) { it.toString() }\n}\n\n/**\n * Returns a list of results of applying the given
[transform] function to\n * an each char sequence representing a view over the window of the given [size]\n *
sliding along this char sequence with the given [step].\n * \n * Note that the char sequence passed to the [transform]
function is ephemeral and is valid only inside that function.\n * \n * You should not store it or allow it to escape in some
way, unless you made a snapshot of it.\n * \n * Several last char sequences may have fewer characters than the given
[size].\n * \n * Both [size] and [step] must be positive and can be greater than the number of elements in this char
sequence.\n * \n * @param size the number of elements to take in each window\n * @param step the number of
elements to move the window forward by on an each step, by default 1\n * @param partialWindows controls
whether or not to keep partial windows in the end if any,\n * by default `false` which means partial windows won't
be preserved\n * \n * @sample samples.collections.Sequences.Transformations.averageWindows\n
*/\n@SinceKotlin("1.2")\npublic fun <R> CharSequence.windowed(size: Int, step: Int = 1, partialWindows:

```

```

Boolean = false, transform: (CharSequence) -> R): List<R> {
    checkWindowSizeStep(size, step)
    val thisSize = this.length
    val resultCapacity = thisSize / step + if (thisSize % step == 0) 0 else 1
    val result = ArrayList<R>(resultCapacity)
    var index = 0
    while (index in 0 until thisSize) {
        val end = index + size
        val coercedEnd = if (end < 0 || end > thisSize) { if (partialWindows) thisSize else break } else end
        result.add(transform(subSequence(index, coercedEnd)))
        index += step
    }
    return result
}

Returns a sequence of snapshots of the window of the given [size] sliding along this char sequence with the given [step], where each snapshot is a string. Several last strings may have fewer characters than the given [size]. Both [size] and [step] must be positive and can be greater than the number of elements in this char sequence.
@param size the number of elements to take in each window
@param step the number of elements to move the window forward by on an each step, by default 1
@param partialWindows controls whether or not to keep partial windows in the end if any, by default `false` which means partial windows won't be preserved
@sample samples.collections.Sequences.Transformations.takeWindows

*Since Kotlin("1.2")
public fun CharSequence.windowedSequence(size: Int, step: Int = 1, partialWindows: Boolean = false): Sequence<String> {
    return windowedSequence(size, step, partialWindows) { it.toString() }
}

Returns a sequence of results of applying the given [transform] function to an each char sequence representing a view over the window of the given [size] sliding along this char sequence with the given [step]. Note that the char sequence passed to the [transform] function is ephemeral and is valid only inside that function. You should not store it or allow it to escape in some way, unless you made a snapshot of it. Several last char sequences may have fewer characters than the given [size]. Both [size] and [step] must be positive and can be greater than the number of elements in this char sequence.
@param size the number of elements to take in each window
@param step the number of elements to move the window forward by on an each step, by default 1
@param partialWindows controls whether or not to keep partial windows in the end if any, by default `false` which means partial windows won't be preserved
@sample samples.collections.Sequences.Transformations.averageWindows

*Since Kotlin("1.2")
public fun <R> CharSequence.windowedSequence(size: Int, step: Int = 1, partialWindows: Boolean = false, transform: (CharSequence) -> R): Sequence<R> {
    checkWindowSizeStep(size, step)
    val windows = if (partialWindows) indices else 0 until length - size + 1
    step step
    return windows.asSequence().map { index ->
        val end = index + size
        val coercedEnd = if (end < 0 || end > length) length else end
        transform(subSequence(index, coercedEnd))
    }
}

Returns a list of pairs built from the characters of `this` and the [other] char sequences with the same index. The returned list has length of the shortest char sequence.
@sample samples.text.Strings.zip

*public infix fun CharSequence.zip(other: CharSequence): List<Pair<Char, Char>> {
    return zip(other) { c1, c2 -> c1 to c2 }
}

Returns a list of values built from the characters of `this` and the [other] char sequences with the same index using the provided [transform] function applied to each pair of characters. The returned list has length of the shortest char sequence.
@sample samples.text.Strings.zipWithTransform

*public inline fun <V> CharSequence.zip(other: CharSequence, transform: (a: Char, b: Char) -> V): List<V> {
    val length = minOf(this.length, other.length)
    val list = ArrayList<V>(length)
    for (i in 0 until length) {
        list.add(transform(this[i], other[i]))
    }
    return list
}

Returns a list of pairs of each two adjacent characters in this char sequence. The returned list is empty if this char sequence contains less than two characters.
@sample samples.collections.Collections.Transformations.zipWithNext

*Since Kotlin("1.2")
public fun CharSequence.zipWithNext(): List<Pair<Char, Char>> {
    return zipWithNext { a, b -> a to b }
}

Returns a list containing the results of applying the given [transform] function to an each pair of two adjacent characters in this char sequence. The returned list is empty if this char sequence contains less than two characters.
@sample samples.collections.Collections.Transformations.zipWithNextToFindDeltas

*Since Kotlin("1.2")
public inline fun <R> CharSequence.zipWithNext(transform: (a: Char, b: Char) -> R): List<R> {
    val size = length - 1
    if (size < 1) return emptyList()
    val result = ArrayList<R>(size)
    for (index in 0 until size) {
        result.add(transform(this[index], this[index + 1]))
    }
    return result
}

Creates an [Iterable] instance that wraps the original char sequence returning its characters when being iterated.

```

```

*public fun CharSequence.asIterable(): Iterable<Char> {
    if (this is String && isEmpty()) return emptyList()
    return Iterable { this.iterator() }
}
* Creates a [Sequence] instance that wraps the original char sequence
returning its characters when being iterated.
*public fun CharSequence.asSequence(): Sequence<Char> {
    if (this is String && isEmpty()) return emptySequence()
    return Sequence { this.iterator() }
}
"/
*
Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.
* Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.
*
@file:kotlin.jvm.JvmMultifileClass
@file:kotlin.jvm.JvmName("StringsKt")
package
kotlin.text
import kotlin.contracts.contract
import kotlin.jvm.JvmName
* Returns a copy of this string
converted to upper case using the rules of the default locale.
*@Deprecated("Use uppercase() instead.",
ReplaceWith("uppercase()"))
@DeprecatedSinceKotlin(warningSince = "1.5")
public expect fun
String.toUpperCase(): String
* Returns a copy of this string converted to upper case using Unicode
mapping rules of the invariant locale.
* This function supports one-to-many and many-to-one character
mapping,
* thus the length of the returned string can be different from the length of the original string.
*
* @sample samples.text.Strings.uppercase
*
@SinceKotlin("1.5")
@WasExperimental(ExperimentalStdlibApi::class)
public expect fun
String.uppercase(): String
* Returns a copy of this string converted to lower case using the rules of the
default locale.
*@Deprecated("Use lowercase() instead.",
ReplaceWith("lowercase()"))
@DeprecatedSinceKotlin(warningSince = "1.5")
public expect fun
String.toLowerCase(): String
* Returns a copy of this string converted to lower case using Unicode
mapping rules of the invariant locale.
* This function supports one-to-many and many-to-one character
mapping,
* thus the length of the returned string can be different from the length of the original string.
*
* @sample samples.text.Strings.lowercase
*
@SinceKotlin("1.5")
@WasExperimental(ExperimentalStdlibApi::class)
public expect fun
String.lowercase(): String
* Returns a copy of this string having its first letter titlecased using the rules of
the default locale,
* or the original string if it's empty or already starts with a title case letter.
* The title case
of a character is usually the same as its upper case with several exceptions.
* The particular list of characters with
the special title case form depends on the underlying platform.
*
* @sample samples.text.Strings.capitalize
*
@Deprecated("Use replaceFirstChar instead.", ReplaceWith("replaceFirstChar { if (it.isLowerCase())
it.titlecase() else it.toString() }"))
@DeprecatedSinceKotlin(warningSince = "1.5")
public expect fun
String.capitalize(): String
* Returns a copy of this string having its first letter lowercased using the rules of
the default locale,
* or the original string if it's empty or already starts with a lower case letter.
*
* @sample
samples.text.Strings.decapitalize
*
@Deprecated("Use replaceFirstChar instead.",
ReplaceWith("replaceFirstChar { it.lowercase() }"))
@DeprecatedSinceKotlin(warningSince = "1.5")
public
expect fun String.decapitalize(): String
* Returns a sub sequence of this char sequence having leading and
trailing characters matching the [predicate] removed.
*public inline fun CharSequence.trim(predicate: (Char) ->
Boolean): CharSequence {
    var startIndex = 0
    var endIndex = length - 1
    var startFound = false
    while (startIndex <= endIndex) {
        val index = if (!startFound) startIndex else endIndex
        val match =
predicate(this[index])
        if (!startFound) {
            if (!match)
                startFound = true
            else
                startIndex += 1
        } else {
            if (!match)
                break
            else
                endIndex -= 1
        }
    }
    return subSequence(startIndex, endIndex + 1)
}
* Returns a string having leading and
trailing characters matching the [predicate] removed.
*public inline fun String.trim(predicate: (Char) ->
Boolean): String =
(this as CharSequence).trim(predicate).toString()
* Returns a sub sequence of this
char sequence having leading characters matching the [predicate] removed.
*public inline fun
CharSequence.trimStart(predicate: (Char) -> Boolean): CharSequence {
    for (index in this.indices)
        if (!predicate(this[index]))
            return subSequence(index, length)
    return ""
}
* Returns a string
having leading characters matching the [predicate] removed.
*public inline fun String.trimStart(predicate:
(Char) -> Boolean): String =
(this as CharSequence).trimStart(predicate).toString()
* Returns a sub
sequence of this char sequence having trailing characters matching the [predicate] removed.
*public inline fun

```



```

CharSequence.trimEnd(predicate: (Char) -> Boolean): CharSequence {
    for (index in this.indices.reversed())
        if (!predicate(this[index]))
            return subSequence(0, index + 1)
    return ""
}
* Returns a string having trailing characters matching the [predicate] removed.

public inline fun String.trimEnd(predicate: (Char) -> Boolean): String =
    (this as CharSequence).trimEnd(predicate).toString()
* Returns a sub sequence of this char sequence having leading and trailing characters from the [chars] array removed.

public fun CharSequence.trim(vararg chars: Char): CharSequence = trim { it in chars }
* Returns a string having leading and trailing characters from the [chars] array removed.

public fun String.trim(vararg chars: Char): String = trim { it in chars }
* Returns a sub sequence of this char sequence having leading characters from the [chars] array removed.

public fun CharSequence.trimStart(vararg chars: Char): CharSequence = trimStart { it in chars }
* Returns a string having leading characters from the [chars] array removed.

public fun String.trimStart(vararg chars: Char): String = trimStart { it in chars }
* Returns a sub sequence of this char sequence having trailing characters from the [chars] array removed.

public fun CharSequence.trimEnd(vararg chars: Char): CharSequence = trimEnd { it in chars }
* Returns a string having trailing characters from the [chars] array removed.

public fun String.trimEnd(vararg chars: Char): String = trimEnd { it in chars }
* Returns a sub sequence of this char sequence having leading and trailing whitespace removed.

public fun CharSequence.trim(): CharSequence = trim(Char::isWhitespace)
* Returns a string having leading and trailing whitespace removed.

@kotlin.internal.InlineOnly
public inline fun String.trim(): String = (this as CharSequence).trim().toString()
* Returns a sub sequence of this char sequence having leading whitespace removed.

public fun CharSequence.trimStart(): CharSequence = trimStart(Char::isWhitespace)
* Returns a string having leading whitespace removed.

@kotlin.internal.InlineOnly
public inline fun String.trimStart(): String = (this as CharSequence).trimStart().toString()
* Returns a sub sequence of this char sequence having trailing whitespace removed.

public fun CharSequence.trimEnd(): CharSequence = trimEnd(Char::isWhitespace)
* Returns a string having trailing whitespace removed.

@kotlin.internal.InlineOnly
public inline fun String.trimEnd(): String = (this as CharSequence).trimEnd().toString()
* Returns a char sequence with content of this char sequence padded at the beginning
* to the specified [length] with the specified character or space.
* @param length the desired string length.
* @param padChar the character to pad string with, if it has length less than the [length] specified.
Space is used by default.
* @return Returns a char sequence of length at least [length] consisting of `this` char
sequence prepended with [padChar] as many times
* as are necessary to reach that length.
* @sample samples.text.Strings.padStart
public fun CharSequence.padStart(length: Int, padChar: Char = ' '):
CharSequence {
    if (length < 0)
        throw IllegalArgumentException("Desired length $length is less than zero.")
    if (length <= this.length)
        return this.subSequence(0, this.length)
    val sb =
        StringBuilder(length)
    for (i in 1..(length - this.length))
        sb.append(padChar)
    sb.append(this)
    return sb
}
* Pads the string to the specified [length] at the beginning with the specified character or space.
* @param length the desired string length.
* @param padChar the character to pad string with, if it has length less than the [length] specified.
Space is used by default.
* @return Returns a string of length at least [length]
consisting of `this` string prepended with [padChar] as many times
* as are necessary to reach that length.
* @sample samples.text.Strings.padStart
public fun String.padStart(length: Int, padChar: Char = ' '): String =
    (this as CharSequence).padStart(length, padChar).toString()
* Returns a char sequence with content of this
char sequence padded at the end
* to the specified [length] with the specified character or space.
* @param length the desired string length.
* @param padChar the character to pad string with, if it has length less than the
[length] specified.
Space is used by default.
* @return Returns a char sequence of length at least [length]
consisting of `this` char sequence appended with [padChar] as many times
* as are necessary to reach that
length.
* @sample samples.text.Strings.padEnd
public fun CharSequence.padEnd(length: Int, padChar: Char = ' '):
CharSequence {
    if (length < 0)
        throw IllegalArgumentException("Desired length $length is less than zero.")
    if (length <= this.length)
        return this.subSequence(0, this.length)
    val sb =
        StringBuilder(length)
    sb.append(this)
    for (i in 1..(length - this.length))
        sb.append(padChar)
    return sb
}
* Pads the string to the specified [length] at the end with the specified character or space.

```

@param length the desired string length.\n * @param padChar the character to pad string with, if it has length less than the [length] specified. Space is used by default.\n * @return Returns a string of length at least [length] consisting of `this` string appended with [padChar] as many times\n * as are necessary to reach that length.\n * @sample samples.text.Strings.padEnd\n *
`public fun String.padEnd(length: Int, padChar: Char = ' '): String = (this as CharSequence).padEnd(length, padChar).toString()`\n\n**\n * Returns `true` if this nullable char sequence is either `null` or empty.\n * \n * @sample samples.text.Strings.stringIsNullOrEmpty\n *
`public inline fun CharSequence?.isNullOrEmpty(): Boolean { contract { returns(false) implies (this@isNullOrEmpty != null) } return this == null || this.length == 0 }`\n\n**\n * Returns `true` if this char sequence is empty (contains no characters).\n * \n * @sample samples.text.Strings.stringIsEmpty\n *
`public inline fun CharSequence.isEmpty(): Boolean = length == 0`\n\n**\n * Returns `true` if this char sequence is not empty.\n * \n * @sample samples.text.Strings.stringIsNotEmpty\n *
`public inline fun CharSequence.isNotEmpty(): Boolean = length > 0`\n\n// implemented differently in JVM and JS\n\n**\n * Returns `true` if this char sequence is not empty and contains some characters except of whitespace characters.\n * \n * @sample samples.text.Strings.stringIsNotBlank\n *
`public inline fun CharSequence.isNotBlank(): Boolean = !isBlank()`\n\n**\n * Returns `true` if this nullable char sequence is either `null` or empty or consists solely of whitespace characters.\n * \n * @sample samples.text.Strings.stringIsNullOrBlank\n *
`public inline fun CharSequence?.isNullOrBlank(): Boolean { contract { returns(false) implies (this@isNullOrBlank != null) } return this == null || this.isBlank() }`\n\n**\n * Iterator for characters of the given char sequence.\n *
`public operator fun CharSequence.iterator(): CharIterator = object : CharIterator() { private var index = 0\n public override fun nextChar(): Char = get(index++)\n public override fun hasNext(): Boolean = index < length }`\n\n**\n * Returns the string if it is not `null`, or the empty string otherwise.\n *
`public inline fun String?.orElse(): String = this ?: ""`\n\n**\n * Returns this char sequence if it's not empty\n * or the result of calling [defaultValue] function if the char sequence is empty.\n * \n * @sample samples.text.Strings.stringIfEmpty\n *
`public inline fun <C, R> C.ifEmpty(defaultValue: () -> R): R where C : CharSequence, C : R = if (isEmpty()) defaultValue() else this`\n\n**\n * Returns this char sequence if it is not empty and doesn't consist solely of whitespace characters,\n * or the result of calling [defaultValue] function otherwise.\n * \n * @sample samples.text.Strings.stringIfNotBlank\n *
`public inline fun <C, R> C.ifBlank(defaultValue: () -> R): R where C : CharSequence, C : R = if (isBlank()) defaultValue() else this`\n\n**\n * Returns the range of valid character indices for this char sequence.\n *
`public val CharSequence.indices: IntRange get() = 0..length - 1`\n\n**\n * Returns the index of the last character in the char sequence or -1 if it is empty.\n *
`public val CharSequence.lastIndex: Int get() = this.length - 1`\n\n**\n * Returns `true` if this CharSequence has Unicode surrogate pair at the specified [index].\n *
`public fun CharSequence.hasSurrogatePairAt(index: Int): Boolean { return index in 0..length - 2 && this[index].isHighSurrogate() && this[index + 1].isLowSurrogate() }`\n\n**\n * Returns a substring specified by the given [range] of indices.\n *
`public fun String.substring(range: IntRange): String = substring(range.start, range.endInclusive + 1)`\n\n**\n * Returns a subsequence of this char sequence specified by the given [range] of indices.\n *
`public fun CharSequence.subSequence(range: IntRange): CharSequence = subSequence(range.start, range.endInclusive + 1)`\n\n**\n * Returns a subsequence of this char sequence.\n * \n * This extension is chosen only for invocation with old-named parameters.\n * Replace parameter names with the same as those of [CharSequence.subSequence].\n *
`public inline fun String.subSequence(start: Int, end: Int): CharSequence = subSequence(start, end)`\n\n**\n * Returns a substring of chars from a range of this char sequence starting at the

[startIndex] and ending right before the [endIndex].\n * @param startIndex the start index (inclusive).\n * @param endIndex the end index (exclusive). If not specified, the length of the char sequence is used.\n */\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.substring(startIndex: Int, endIndex: Int = length): String = subSequence(startIndex, endIndex).toString()\n\n/**\n * Returns a substring of chars at indices from the specified [range] of this char sequence.\n */\npublic fun CharSequence.substring(range: IntRange): String = subSequence(range.start, range.endInclusive + 1).toString()\n\n/**\n * Returns a substring before the first occurrence of [delimiter].\n * If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.\n */\npublic fun String.substringBefore(delimiter: Char, missingDelimiterValue: String = this): String {\n val index = indexOf(delimiter)\n return if (index == -1) missingDelimiterValue else substring(0, index)\n}\n\n/**\n * Returns a substring before the first occurrence of [delimiter].\n * If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.\n */\npublic fun String.substringBefore(delimiter: String, missingDelimiterValue: String = this): String {\n val index = indexOf(delimiter)\n return if (index == -1) missingDelimiterValue else substring(0, index)\n}\n\n/**\n * Returns a substring after the first occurrence of [delimiter].\n * If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.\n */\npublic fun String.substringAfter(delimiter: Char, missingDelimiterValue: String = this): String {\n val index = indexOf(delimiter)\n return if (index == -1) missingDelimiterValue else substring(index + 1, length)\n}\n\n/**\n * Returns a substring after the first occurrence of [delimiter].\n * If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.\n */\npublic fun String.substringAfter(delimiter: String, missingDelimiterValue: String = this): String {\n val index = indexOf(delimiter)\n return if (index == -1) missingDelimiterValue else substring(index + delimiter.length, length)\n}\n\n/**\n * Returns a substring before the last occurrence of [delimiter].\n * If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.\n */\npublic fun String.substringBeforeLast(delimiter: Char, missingDelimiterValue: String = this): String {\n val index = lastIndexOf(delimiter)\n return if (index == -1) missingDelimiterValue else substring(0, index)\n}\n\n/**\n * Returns a substring before the last occurrence of [delimiter].\n * If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.\n */\npublic fun String.substringBeforeLast(delimiter: String, missingDelimiterValue: String = this): String {\n val index = lastIndexOf(delimiter)\n return if (index == -1) missingDelimiterValue else substring(0, index)\n}\n\n/**\n * Returns a substring after the last occurrence of [delimiter].\n * If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.\n */\npublic fun String.substringAfterLast(delimiter: Char, missingDelimiterValue: String = this): String {\n val index = lastIndexOf(delimiter)\n return if (index == -1) missingDelimiterValue else substring(index + 1, length)\n}\n\n/**\n * Returns a substring after the last occurrence of [delimiter].\n * If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.\n */\npublic fun String.substringAfterLast(delimiter: String, missingDelimiterValue: String = this): String {\n val index = lastIndexOf(delimiter)\n return if (index == -1) missingDelimiterValue else substring(index + delimiter.length, length)\n}\n\n/**\n * Returns a char sequence with content of this char sequence where its part at the given range\n * is replaced with the [replacement] char sequence.\n * @param startIndex the index of the first character to be replaced.\n * @param endIndex the index of the first character after the replacement to keep in the string.\n */\npublic fun CharSequence.replaceRange(startIndex: Int, endIndex: Int, replacement: CharSequence): CharSequence {\n if (endIndex < startIndex)\n throw IndexOutOfBoundsException("\u201cEnd index (\$endIndex) is less than start index (\$startIndex).\u201c")\n val sb = StringBuilder()\n sb.appendRange(this, 0, startIndex)\n sb.append(replacement)\n sb.appendRange(this, endIndex, length)\n return sb\n}\n\n/**\n * Replaces the part of the string at the given range with the [replacement] char sequence.\n * @param startIndex the index of the first character to be replaced.\n * @param endIndex the index of the first character after the replacement to keep in the string.\n */\n@kotlin.internal.InlineOnly\npublic inline fun String.replaceRange(startIndex: Int, endIndex: Int, replacement: CharSequence): String =\n (this as CharSequence).replaceRange(startIndex, endIndex, replacement).toString()\n\n/**\n * Returns a char sequence with content of this char sequence where its part at the given [range]\n * is replaced with the [replacement] char sequence.\n * @param range the range of the string to be replaced.\n * @param replacement the replacement char sequence.\n * @param startIndex the start index of the [range].\n * @param endIndex the end index of the [range].\n */\npublic fun String.replace(range: IntRange, replacement: CharSequence): String =\n replaceRange(range.start, range.endInclusive + 1, replacement)\n\n/**\n * Returns a char sequence with content of this char sequence where its part at the given [range]\n * is replaced with the [replacement] char sequence.\n * @param range the range of the string to be replaced.\n * @param replacement the replacement char sequence.\n * @param startIndex the start index of the [range].\n * @param endIndex the end index of the [range].\n */\npublic fun String.replace(range: IntRange, replacement: String): String =\n replaceRange(range.start, range.endInclusive + 1, replacement)

```

in the part to be replaced.\n */\npublic fun CharSequence.replaceRange(range: IntRange, replacement:
CharSequence): CharSequence =\n    replaceRange(range.start, range.endInclusive + 1, replacement)\n\n/**\n * Replace the part of string at the given [range] with the [replacement] string.\n * The end index of the [range] is
included in the part to be replaced.\n */\n@kotlin.internal.InlineOnly\npublic inline fun String.replaceRange(range:
IntRange, replacement: CharSequence): String =\n    (this as CharSequence).replaceRange(range,
replacement).toString()\n\n/**\n * Returns a char sequence with content of this char sequence where its part at the
given range is removed.\n * \n * @param startIndex the index of the first character to be removed.\n * @param
endIndex the index of the first character after the removed part to keep in the string.\n * [endIndex] is not
included in the removed part.\n */\npublic fun CharSequence.removeRange(startIndex: Int, endIndex: Int):
CharSequence {\n    if (endIndex < startIndex)\n        throw IndexOutOfBoundsException("End index ($endIndex)
is less than start index ($startIndex).")\n    if (endIndex == startIndex)\n        return this.subSequence(0,
length)\n    val sb = StringBuilder(length - (endIndex - startIndex))\n    sb.appendRange(this, 0, startIndex)\n
sb.appendRange(this, endIndex, length)\n    return sb\n}\n\n/**\n * Removes the part of a string at a given range.\n *
\n * @param startIndex the index of the first character to be removed.\n * @param endIndex the index of the first
character after the removed part to keep in the string.\n * [endIndex] is not included in the removed part.\n
*/\n@kotlin.internal.InlineOnly\npublic inline fun String.removeRange(startIndex: Int, endIndex: Int): String =\n
(this as CharSequence).removeRange(startIndex, endIndex).toString()\n\n/**\n * Returns a char sequence with
content of this char sequence where its part at the given [range] is removed.\n * The end index of the [range] is
included in the removed part.\n */\npublic fun CharSequence.removeRange(range: IntRange): CharSequence =
removeRange(range.start, range.endInclusive + 1)\n\n/**\n * Removes the part of a string at the given [range].\n *
The end index of the [range] is included in the removed part.\n */\n@kotlin.internal.InlineOnly\npublic inline fun
String.removeRange(range: IntRange): String =\n    (this as CharSequence).removeRange(range).toString()\n\n/**\n *
If this char sequence starts with the given [prefix], returns a new char sequence\n * with the prefix removed.
Otherwise, returns a new char sequence with the same characters.\n */\npublic fun
CharSequence.removePrefix(prefix: CharSequence): CharSequence {\n    if (startsWith(prefix)) {\n        return
subSequence(prefix.length, length)\n    }\n    return subSequence(0, length)\n}\n\n/**\n * If this string starts with the
given [prefix], returns a copy of this string\n * with the prefix removed. Otherwise, returns this string.\n */\npublic
fun String.removePrefix(prefix: CharSequence): String {\n    if (startsWith(prefix)) {\n        return
substring(prefix.length)\n    }\n    return this\n}\n\n/**\n * If this char sequence ends with the given [suffix], returns
a new char sequence\n * with the suffix removed. Otherwise, returns a new char sequence with the same
characters.\n */\npublic fun CharSequence.removeSuffix(suffix: CharSequence): CharSequence {\n    if
(endsWith(suffix)) {\n        return subSequence(0, length - suffix.length)\n    }\n    return subSequence(0,
length)\n}\n\n/**\n * If this string ends with the given [suffix], returns a copy of this string\n * with the suffix
removed. Otherwise, returns this string.\n */\npublic fun String.removeSuffix(suffix: CharSequence): String {\n    if
(endsWith(suffix)) {\n        return substring(0, length - suffix.length)\n    }\n    return this\n}\n\n/**\n * When this
char sequence starts with the given [prefix] and ends with the given [suffix],\n * returns a new char sequence having
both the given [prefix] and [suffix] removed.\n * Otherwise returns a new char sequence with the same characters.\n
*/\npublic fun CharSequence.removeSurrounding(prefix: CharSequence, suffix: CharSequence): CharSequence {\n    if
((length >= prefix.length + suffix.length) && startsWith(prefix) && endsWith(suffix)) {\n        return
subSequence(prefix.length, length - suffix.length)\n    }\n    return subSequence(0, length)\n}\n\n/**\n * Removes
from a string both the given [prefix] and [suffix] if and only if\n * it starts with the [prefix] and ends with the
[suffix].\n * Otherwise returns this string unchanged.\n */\npublic fun String.removeSurrounding(prefix:
CharSequence, suffix: CharSequence): String {\n    if ((length >= prefix.length + suffix.length) &&
startsWith(prefix) && endsWith(suffix)) {\n        return substring(prefix.length, length - suffix.length)\n    }\n
return this\n}\n\n/**\n * When this char sequence starts with and ends with the given [delimiter],\n * returns a new
char sequence having this [delimiter] removed both from the start and end.\n * Otherwise returns a new char
sequence with the same characters.\n */\npublic fun CharSequence.removeSurrounding(delimiter: CharSequence):
CharSequence = removeSurrounding(delimiter, delimiter)\n\n/**\n * Removes the given [delimiter] string from both

```

the start and the end of this string\n * if and only if it starts with and ends with the [delimiter].\n * Otherwise returns this string unchanged.\n */\npublic fun String.removeSurrounding(delimiter: CharSequence): String = removeSurrounding(delimiter, delimiter)\n\n/**\n * Replace part of string before the first occurrence of given delimiter with the [replacement] string.\n * If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.\n */\npublic fun String.replaceBefore(delimiter: Char, replacement: String, missingDelimiterValue: String = this): String {\n val index = indexOf(delimiter)\n return if (index == -1) missingDelimiterValue else replaceRange(0, index, replacement)\n}\n\n/**\n * Replace part of string before the first occurrence of given delimiter with the [replacement] string.\n * If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.\n */\npublic fun String.replaceBefore(delimiter: String, replacement: String, missingDelimiterValue: String = this): String {\n val index = indexOf(delimiter)\n return if (index == -1) missingDelimiterValue else replaceRange(0, index, replacement)\n}\n\n/**\n * Replace part of string after the first occurrence of given delimiter with the [replacement] string.\n * If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.\n */\npublic fun String.replaceAfter(delimiter: Char, replacement: String, missingDelimiterValue: String = this): String {\n val index = indexOf(delimiter)\n return if (index == -1) missingDelimiterValue else replaceRange(index + 1, length, replacement)\n}\n\n/**\n * Replace part of string after the first occurrence of given delimiter with the [replacement] string.\n * If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.\n */\npublic fun String.replaceAfter(delimiter: String, replacement: String, missingDelimiterValue: String = this): String {\n val index = indexOf(delimiter)\n return if (index == -1) missingDelimiterValue else replaceRange(index + delimiter.length, length, replacement)\n}\n\n/**\n * Replace part of string after the last occurrence of given delimiter with the [replacement] string.\n * If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.\n */\npublic fun String.replaceAfterLast(delimiter: String, replacement: String, missingDelimiterValue: String = this): String {\n val index = lastIndexOf(delimiter)\n return if (index == -1) missingDelimiterValue else replaceRange(index + delimiter.length, length, replacement)\n}\n\n/**\n * Replace part of string after the last occurrence of given delimiter with the [replacement] string.\n * If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.\n */\npublic fun String.replaceAfterLast(delimiter: Char, replacement: String, missingDelimiterValue: String = this): String {\n val index = lastIndexOf(delimiter)\n return if (index == -1) missingDelimiterValue else replaceRange(index + 1, length, replacement)\n}\n\n/**\n * Replace part of string before the last occurrence of given delimiter with the [replacement] string.\n * If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.\n */\npublic fun String.replaceBeforeLast(delimiter: Char, replacement: String, missingDelimiterValue: String = this): String {\n val index = lastIndexOf(delimiter)\n return if (index == -1) missingDelimiterValue else replaceRange(0, index, replacement)\n}\n\n/**\n * Replace part of string before the last occurrence of given delimiter with the [replacement] string.\n * If the string does not contain the delimiter, returns [missingDelimiterValue] which defaults to the original string.\n */\npublic fun String.replaceBeforeLast(delimiter: String, replacement: String, missingDelimiterValue: String = this): String {\n val index = lastIndexOf(delimiter)\n return if (index == -1) missingDelimiterValue else replaceRange(0, index, replacement)\n}\n\n\n/**\n * Returns a new string obtained by replacing each substring of this char sequence that matches the given regular expression\n * with the given [replacement].\n * The [replacement] can consist of any combination of literal text and \$-substitutions. To treat the replacement string\n * literally escape it with the [kotlin.text.Regex.Companion.escapeReplacement] method.\n */\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.replace(regex: Regex, replacement: String): String = regex.replace(this, replacement)\n\n/**\n * Returns a new string obtained by replacing each substring of this char sequence that matches the given regular expression\n * with the result of the given function [transform] that takes [MatchResult] and returns a string to be used as a\n * replacement for that match.\n */\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.replace(regex: Regex, noinline transform: MatchResult -> String): String = regex.replace(this, transform)

```

(MatchResult) -> CharSequence): String =\n regex.replace(this, transform)\n\n/**\n * Replaces the first
occurrence of the given regular expression [regex] in this char sequence with specified [replacement] expression.\n
*\n * @param replacement A replacement expression that can include substitutions. See [Regex.replaceFirst] for
details.\n */\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.replaceFirst(regex: Regex, replacement:
String): String = regex.replaceFirst(this, replacement)\n\n/**\n * Returns a copy of this string having its first
character replaced with the result of the specified [transform],\n * or the original string if it's empty.\n */\n * @param
transform function that takes the first character and returns the result of the transform applied to the character.\n */\n
* @sample samples.text.Strings.replaceFirstChar\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\n@OptIn(kotlin.experimental.Exper
imentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@JvmName("replaceFirstCharWithC
har")\n@kotlin.internal.InlineOnly\npublic inline fun String.replaceFirstChar(transform: (Char) -> Char): String {\n
return if (isEmpty()) transform(this[0]) + substring(1) else this\n}\n\n/**\n * Returns a copy of this string
having its first character replaced with the result of the specified [transform],\n * or the original string if it's empty.\n
*\n * @param transform function that takes the first character and returns the result of the transform applied to the
character.\n */\n * @sample samples.text.Strings.replaceFirstChar\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class)\n@OptIn(kotlin.experimental.Exper
imentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@JvmName("replaceFirstCharWithC
harSequence")\n@kotlin.internal.InlineOnly\npublic inline fun String.replaceFirstChar(transform: (Char) ->
CharSequence): String {\n return if (isEmpty()) transform(this[0]).toString() + substring(1) else
this\n}\n\n/**\n * Returns `true` if this char sequence matches the given regular expression.\n
*\n@kotlin.internal.InlineOnly\npublic inline infix fun CharSequence.matches(regex: Regex): Boolean =
regex.matches(this)\n\n/**\n * Implementation of [regionMatches] for CharSequences.\n * Invoked when it's
already known that arguments are not Strings, so that no additional type checks are performed.\n */\ninternal fun
CharSequence.regionMatchesImpl(thisOffset: Int, other: CharSequence, otherOffset: Int, length: Int, ignoreCase:
Boolean): Boolean {\n if ((otherOffset < 0) || (thisOffset < 0) || (thisOffset > this.length - length) || (otherOffset >
other.length - length)) {\n return false\n }\n for (index in 0 until length) {\n if (!this[thisOffset +
index].equals(other[otherOffset + index], ignoreCase))\n return false\n }\n return true\n}\n\n/**\n *
Returns `true` if this char sequence starts with the specified character.\n */\npublic fun
CharSequence.startsWith(char: Char, ignoreCase: Boolean = false): Boolean =\n this.length > 0 &&
this[0].equals(char, ignoreCase)\n\n/**\n * Returns `true` if this char sequence ends with the specified character.\n
*\n@kotlin.internal.InlineOnly\npublic fun CharSequence.endsWith(char: Char, ignoreCase: Boolean = false): Boolean =\n
this.length > 0 &&
this[lastIndex].equals(char, ignoreCase)\n\n/**\n * Returns `true` if this char sequence starts with the specified
prefix.\n */\n@kotlin.internal.InlineOnly\npublic fun CharSequence.startsWith(prefix: CharSequence, ignoreCase: Boolean = false): Boolean {\n
if (!ignoreCase && this is String && prefix is String)\n return this.startsWith(prefix)\n else\n return
regionMatchesImpl(0, prefix, 0, prefix.length, ignoreCase)\n}\n\n/**\n * Returns `true` if a substring of this char
sequence starting at the specified offset [startIndex] starts with the specified prefix.\n */\n@kotlin.internal.InlineOnly\n
public fun CharSequence.startsWith(prefix: CharSequence, startIndex: Int, ignoreCase: Boolean = false): Boolean {\n
if (!ignoreCase && this is String && prefix is String)\n return this.startsWith(prefix, startIndex)\n else\n
return regionMatchesImpl(startIndex, prefix, 0, prefix.length, ignoreCase)\n}\n\n/**\n * Returns `true` if this char
sequence ends with the specified suffix.\n */\n@kotlin.internal.InlineOnly\npublic fun CharSequence.endsWith(suffix: CharSequence,
ignoreCase: Boolean = false): Boolean {\n if (!ignoreCase && this is String && suffix is String)\n return
this.endsWith(suffix)\n else\n return regionMatchesImpl(length - suffix.length, suffix, 0, suffix.length,
ignoreCase)\n}\n\n/**\n * Returns the longest string `prefix` such that this char
sequence and [other] char sequence both start with this prefix,\n * taking care not to split surrogate pairs.\n * If this
and [other] have no common prefix, returns the empty string.\n */\n * @param ignoreCase `true` to ignore character
case when matching a character. By default `false`.\n * @sample samples.text.Strings.commonPrefixWith\n
*\n@kotlin.internal.InlineOnly\npublic fun CharSequence.commonPrefixWith(other: CharSequence, ignoreCase: Boolean = false): String {\n
val shortestLength = minOf(this.length, other.length)\n var i = 0\n while (i < shortestLength &&

```

```

this[i].equals(other[i], ignoreCase = ignoreCase)) {\n    i++\n }\n if (this.hasSurrogatePairAt(i - 1) ||
other.hasSurrogatePairAt(i - 1)) {\n    i--\n }\n return subSequence(0, i).toString()\n}\n\n/**\n * Returns the
longest string `suffix` such that this char sequence and [other] char sequence both end with this suffix,\n * taking
care not to split surrogate pairs.\n * If this and [other] have no common suffix, returns the empty string.\n\n *
@param ignoreCase `true` to ignore character case when matching a character. By default `false`.\n * @sample
samples.text.Strings.commonSuffixWith\n */\npublic fun CharSequence.commonSuffixWith(other: CharSequence,
ignoreCase: Boolean = false): String {\n    val thisLength = this.length\n    val otherLength = other.length\n    val
shortestLength = minOf(thisLength, otherLength)\n\n    var i = 0\n    while (i < shortestLength && this[thisLength -
i - 1].equals(other[otherLength - i - 1], ignoreCase = ignoreCase)) {\n        i++\n    }\n    if
(this.hasSurrogatePairAt(thisLength - i - 1) || other.hasSurrogatePairAt(otherLength - i - 1)) {\n        i--\n    }\n
return subSequence(thisLength - i, thisLength).toString()\n}\n\n// indexOfAny()\n\n/**\n * Finds the index of the
first occurrence of any of the specified [chars] in this char sequence,\n * starting from the specified [startIndex] and
optionally ignoring the case.\n * @param ignoreCase `true` to ignore character case when matching a character.
By default `false`.\n * @return An index of the first occurrence of matched character from [chars] or -1 if none of
[chars] are found.\n * @npublic fun CharSequence.indexOfAny(chars: CharArray, startIndex: Int = 0, ignoreCase:
Boolean = false): Int {\n    if (!ignoreCase && chars.size == 1 && this is String) {\n        val char = chars.single()\n
return nativeIndexOf(char, startIndex)\n    }\n\n    for (index in startIndex.coerceAtLeast(0)..lastIndex) {\n        val
charAtIndex = get(index)\n        if (chars.any { it.equals(charAtIndex, ignoreCase) })\n            return index\n    }\n
return -1\n}\n\n/**\n * Finds the index of the last occurrence of any of the specified [chars] in this char sequence,\n
* starting from the specified [startIndex] and optionally ignoring the case.\n * @param startIndex The index of
character to start searching at. The search proceeds backward toward the beginning of the string.\n * @param
ignoreCase `true` to ignore character case when matching a character. By default `false`.\n * @return An index of
the last occurrence of matched character from [chars] or -1 if none of [chars] are found.\n * @npublic fun
CharSequence.lastIndexOfAny(chars: CharArray, startIndex: Int = lastIndex, ignoreCase: Boolean = false): Int {\n
if (!ignoreCase && chars.size == 1 && this is String) {\n    val char = chars.single()\n    return
nativeLastIndexOf(char, startIndex)\n }\n\n for (index in startIndex.coerceAtMost(lastIndex) downTo 0) {\n
val charAtIndex = get(index)\n    if (chars.any { it.equals(charAtIndex, ignoreCase) })\n        return index\n
}\n\n return -1\n}\n\nprivate fun CharSequence.indexOf(other: CharSequence, startIndex: Int, endIndex: Int,
ignoreCase: Boolean, last: Boolean = false): Int {\n    val indices = if (!last)\n        startIndex.coerceAtLeast(0)..endIndex.coerceAtMost(length)\n    else\n        startIndex.coerceAtMost(lastIndex)
downTo endIndex.coerceAtLeast(0)\n\n    if (this is String && other is String) { // smart cast\n        for (index in
indices) {\n            if (other.regionMatches(0, this, index, other.length, ignoreCase))\n                return index\n
}\n    } else {\n        for (index in indices) {\n            if (other.regionMatchesImpl(0, this, index, other.length,
ignoreCase))\n                return index\n        }\n    }\n    return -1\n}\n\nprivate fun CharSequence.findAnyOf(strings:
Collection<String>, startIndex: Int, ignoreCase: Boolean, last: Boolean): Pair<Int, String>? {\n    if (!ignoreCase
&& strings.size == 1) {\n        val string = strings.single()\n        val index = if (!last) indexOf(string, startIndex) else
lastIndexOf(string, startIndex)\n        return if (index < 0) null else index to string\n    }\n\n    val indices = if (!last)
startIndex.coerceAtLeast(0)..length else startIndex.coerceAtMost(lastIndex) downTo 0\n\n    if (this is String) {\n
for (index in indices) {\n        val matchingString = strings.firstOrNull { it.regionMatches(0, this, index, it.length,
ignoreCase) }\n        if (matchingString != null)\n            return index to matchingString\n    }\n    } else {\n
for (index in indices) {\n        val matchingString = strings.firstOrNull { it.regionMatchesImpl(0, this, index,
it.length, ignoreCase) }\n        if (matchingString != null)\n            return index to matchingString\n    }\n
}\n\n    return null\n}\n\n/**\n * Finds the first occurrence of any of the specified [strings] in this char sequence,\n
* starting from the specified [startIndex] and optionally ignoring the case.\n * @param ignoreCase `true` to ignore
character case when matching a string. By default `false`.\n * @return A pair of an index of the first occurrence of
matched string from [strings] and the string matched\n * or `null` if none of [strings] are found.\n * @n * To avoid
ambiguous results when strings in [strings] have characters in common, this method proceeds from\n * the
beginning to the end of this string, and finds at each position the first element in [strings]\n * that matches this string

```

at that position.

```

public fun CharSequence.findAnyOf(strings: Collection<String>, startIndex: Int = 0,
ignoreCase: Boolean = false): Pair<Int, String>? =\n  findAnyOf(strings, startIndex, ignoreCase, last =
false)\n\n/**\n * Finds the last occurrence of any of the specified [strings] in this char sequence,\n * starting from
the specified [startIndex] and optionally ignoring the case.\n *\n * @param startIndex The index of character to start
searching at. The search proceeds backward toward the beginning of the string.\n * @param ignoreCase `true` to
ignore character case when matching a string. By default `false`.\n * @return A pair of an index of the last
occurrence of matched string from [strings] and the string matched or `null` if none of [strings] are found.\n *\n * To
avoid ambiguous results when strings in [strings] have characters in common, this method proceeds from\n * the end
toward the beginning of this string, and finds at each position the first element in [strings]\n * that matches this
string at that position.\n */\n\npublic fun CharSequence.findLastAnyOf(strings: Collection<String>, startIndex: Int =
lastIndex, ignoreCase: Boolean = false): Pair<Int, String>? =\n  findAnyOf(strings, startIndex, ignoreCase, last =
true)\n\n/**\n * Finds the index of the first occurrence of any of the specified [strings] in this char sequence,\n *
starting from the specified [startIndex] and optionally ignoring the case.\n *\n * @param ignoreCase `true` to ignore
character case when matching a string. By default `false`.\n * @return An index of the first occurrence of matched
string from [strings] or -1 if none of [strings] are found.\n *\n * To avoid ambiguous results when strings in [strings]
have characters in common, this method proceeds from\n * the beginning to the end of this string, and finds at each
position the first element in [strings]\n * that matches this string at that position.\n */\n\npublic fun
CharSequence.indexOfAny(strings: Collection<String>, startIndex: Int = 0, ignoreCase: Boolean = false): Int =\n
findAnyOf(strings, startIndex, ignoreCase, last = false)?.first ?: -1\n\n/**\n * Finds the index of the last occurrence
of any of the specified [strings] in this char sequence,\n * starting from the specified [startIndex] and optionally
ignoring the case.\n *\n * @param startIndex The index of character to start searching at. The search proceeds
backward toward the beginning of the string.\n * @param ignoreCase `true` to ignore character case when matching
a string. By default `false`.\n * @return An index of the last occurrence of matched string from [strings] or -1 if
none of [strings] are found.\n *\n * To avoid ambiguous results when strings in [strings] have characters in common,
this method proceeds from\n * the end toward the beginning of this string, and finds at each position the first
element in [strings]\n * that matches this string at that position.\n */\n\npublic fun
CharSequence.lastIndexOfAny(strings: Collection<String>, startIndex: Int = lastIndex, ignoreCase: Boolean =
false): Int =\n  findAnyOf(strings, startIndex, ignoreCase, last = true)?.first ?: -1\n\n// indexOf\n\n/**\n * Returns
the index within this string of the first occurrence of the specified character, starting from the specified
[startIndex].\n *\n * @param ignoreCase `true` to ignore character case when matching a character. By default
`false`.\n * @return An index of the first occurrence of [char] or -1 if none is found.\n */\n\npublic fun
CharSequence.indexOf(char: Char, startIndex: Int = 0, ignoreCase: Boolean = false): Int {\n  return if (ignoreCase
|| this !is String)\n    indexOfAny(charArrayOf(char), startIndex, ignoreCase)\n  else\n    nativeIndexOf(char,
startIndex)\n}\n\n/**\n * Returns the index within this char sequence of the first occurrence of the specified
[string],\n * starting from the specified [startIndex].\n *\n * @param ignoreCase `true` to ignore character case when
matching a string. By default `false`.\n * @return An index of the first occurrence of [string] or -1 if none is
found.\n * @sample sample.text.Strings.indexOf\n */\n\npublic fun CharSequence.indexOf(string: String, startIndex:
Int = 0, ignoreCase: Boolean = false): Int {\n  return if (ignoreCase || this !is String)\n    indexOf(string,
startIndex, length, ignoreCase)\n  else\n    nativeIndexOf(string, startIndex)\n}\n\n/**\n * Returns the index
within this char sequence of the last occurrence of the specified character,\n * starting from the specified
[startIndex].\n *\n * @param startIndex The index of character to start searching at. The search proceeds backward
toward the beginning of the string.\n * @param ignoreCase `true` to ignore character case when matching a
character. By default `false`.\n * @return An index of the last occurrence of [char] or -1 if none is found.\n */\n\npublic fun CharSequence.lastIndexOf(char: Char, startIndex: Int = lastIndex, ignoreCase: Boolean =
false): Int {\n  return if (ignoreCase || this !is String)\n    lastIndexOfAny(charArrayOf(char), startIndex, ignoreCase)\n
else\n    nativeLastIndexOf(char, startIndex)\n}\n\n/**\n * Returns the index within this char sequence of the last
occurrence of the specified [string],\n * starting from the specified [startIndex].\n *\n * @param startIndex The
index of character to start searching at. The search proceeds backward toward the beginning of the string.\n */

```



```

@param ignoreCase `true` to ignore character case when matching a string. By default `false`.
@return An index of the last occurrence of [string] or -1 if none is found.
public fun CharSequence.lastIndexOf(string: String, startIndex: Int = lastIndex, ignoreCase: Boolean = false): Int {
    return if (ignoreCase || this != String)
        indexOf(string, startIndex, 0, ignoreCase, last = true)
    else
        nativeLastIndexOf(string, startIndex)
}

Returns `true` if this char sequence contains the specified [other] sequence of characters as a substring.
@param ignoreCase `true` to ignore character case when comparing strings. By default `false`.
@Suppress("INAPPLICABLE_OPERATOR_MODIFIER")
public operator fun CharSequence.contains(other: CharSequence, ignoreCase: Boolean = false): Boolean {
    if (other is String)
        indexOf(other, ignoreCase = ignoreCase) >= 0
    else
        indexOf(other, 0, length, ignoreCase) >= 0
}

Returns `true` if this char sequence contains the specified character [char].
@param ignoreCase `true` to ignore character case when comparing characters. By default `false`.
@Suppress("INAPPLICABLE_OPERATOR_MODIFIER")
public operator fun CharSequence.contains(char: Char, ignoreCase: Boolean = false): Boolean {
    indexOf(char, ignoreCase = ignoreCase) >= 0
}

Returns `true` if this char sequence contains at least one match of the specified regular expression [regex].
@kotlin.internal.InlineOnly
public inline operator fun CharSequence.contains(regex: Regex): Boolean {
    regex.containsMatchIn(this)
}

// rangesDelimitedBy
private class DelimitedRangesSequence(
    private val input: CharSequence,
    private val startIndex: Int,
    private val limit: Int,
    private val getNextMatch: CharSequence.(current: Int) -> Pair<Int, Int>? : Sequence<IntRange> {
        override fun iterator(): Iterator<IntRange> = object : Iterator<IntRange> {
            var nextState: Int = -1 // -1 for unknown, 0 for done, 1 for continue
            var currentStartIndex: Int = startIndex.coerceIn(0, input.length)
            var nextSearchIndex: Int = currentStartIndex
            var nextItem: IntRange? = null
            var counter: Int = 0
            private fun calcNext() {
                if (nextSearchIndex < 0) {
                    nextState = 0
                    nextItem = null
                } else {
                    if (limit > 0 && ++counter >= limit || nextSearchIndex > input.length) {
                        nextItem = currentStartIndex..input.lastIndex
                        nextSearchIndex = -1
                    } else {
                        val match = input.getNextMatch(nextSearchIndex)
                        if (match == null) {
                            nextItem = currentStartIndex..input.lastIndex
                            nextSearchIndex = -1
                        } else {
                            val (index, length) = match
                            nextItem = currentStartIndex until index
                            currentStartIndex = index + length
                            nextSearchIndex = currentStartIndex + if (length == 0) 1 else 0
                        }
                    }
                    nextState = 1
                }
            }
            override fun next(): IntRange {
                if (nextState == -1) {
                    calcNext()
                    if (nextState == 0) {
                        throw NoSuchElementException()
                    }
                    val result = nextItem as IntRange
                    // Clean next to avoid keeping reference on yielded instance
                    nextItem = null
                    nextState = -1
                    return result
                }
                override fun hasNext(): Boolean {
                    if (nextState == -1) {
                        calcNext()
                        return nextState == 1
                    }
                }
            }
        }
    }

Returns a sequence of index ranges of substrings in this char sequence around occurrences of the specified [delimiters].
@param delimiters One or more characters to be used as delimiters.
@param startIndex The index to start searching delimiters from.
@param limit The maximum number of substrings to return. Zero by default means no limit is set.
private fun CharSequence.rangesDelimitedBy(delimiters: CharArray, startIndex: Int = 0, ignoreCase: Boolean = false, limit: Int = 0): Sequence<IntRange> {
    requireNonNegativeLimit(limit)
    return DelimitedRangesSequence(this, startIndex, limit, { current: Int ->
        indexOfAny(delimiters, current, ignoreCase = ignoreCase).let { if (it < 0) null else it to 1 }
    })
}

Returns a sequence of index ranges of substrings in this char sequence around occurrences of the specified [delimiters].
@param delimiters One or more strings to be used as delimiters.
@param startIndex The index to start searching delimiters from.
@param limit The maximum number of substrings to return. Zero by default means no limit is set.
To avoid ambiguous results

```

```

when strings in [delimiters] have characters in common, this method proceeds from
the beginning to the end of this string, and finds at each position the first element in [delimiters]
that matches this string at that position.
*/private fun CharSequence.rangesDelimitedBy(delimiters: Array<out String>, startIndex: Int = 0, ignoreCase:
Boolean = false, limit: Int = 0): Sequence<IntRange> {
    requireNonNegativeLimit(limit)
    val delimitersList = delimiters.asList()
    return DelimitedRangesSequence(this, startIndex, limit, { currentIndex ->
        findAnyOf(delimitersList, currentIndex, ignoreCase = ignoreCase, last = false)?.let { it.first to it.second.length }
    })
}

internal fun requireNonNegativeLimit(limit: Int) =
    require(limit >= 0) { "Limit must be non-negative, but was $limit" }

// split
/**
 * Splits this char sequence to a sequence of strings around
 occurrences of the specified [delimiters].
 * @param delimiters One or more strings to be used as delimiters.
 * @param ignoreCase `true` to ignore character case when matching a delimiter. By default `false`.
 * @param limit The maximum number of substrings to return. Zero by default means no limit is set.
 * To avoid
 ambiguous results when strings in [delimiters] have characters in common, this method proceeds from
 the beginning to the end of this string, and finds at each position the first element in [delimiters]
 that matches this string at that position.
 */public fun CharSequence.splitToSequence(vararg delimiters: String, ignoreCase:
Boolean = false, limit: Int = 0): Sequence<String> =
    rangesDelimitedBy(delimiters, ignoreCase = ignoreCase, limit = limit).map { substring(it) }

/**
 * Splits this char sequence to a list of strings around occurrences of the
 specified [delimiters].
 * @param delimiters One or more strings to be used as delimiters.
 * @param ignoreCase `true` to ignore character case when matching a delimiter. By default `false`.
 * @param limit The
 maximum number of substrings to return. Zero by default means no limit is set.
 * To avoid ambiguous results
 when strings in [delimiters] have characters in common, this method proceeds from
 the beginning to the end of
 this string, and matches at each position the first element in [delimiters]
 that is equal to a delimiter in this
 instance at that position.
 */public fun CharSequence.split(vararg delimiters: String, ignoreCase: Boolean = false,
limit: Int = 0): List<String> {
    if (delimiters.size == 1) {
        val delimiter = delimiters[0]
        if (!delimiter.isEmpty())
            return split(delimiter, ignoreCase, limit)
    }
    return
    rangesDelimitedBy(delimiters, ignoreCase = ignoreCase, limit = limit).asIterable().map { substring(it) }
}

/**
 * Splits this char sequence to a sequence of strings around occurrences of the specified [delimiters].
 * @param delimiters One or more characters to be used as delimiters.
 * @param ignoreCase `true` to ignore character case
 when matching a delimiter. By default `false`.
 * @param limit The maximum number of substrings to return.
 */public fun CharSequence.splitToSequence(vararg delimiters: Char, ignoreCase: Boolean = false, limit: Int = 0):
Sequence<String> =
    rangesDelimitedBy(delimiters, ignoreCase = ignoreCase, limit = limit).map { substring(it) }
}

/**
 * Splits this char sequence to a list of strings around occurrences of the specified [delimiters].
 * @param delimiters One or more characters to be used as delimiters.
 * @param ignoreCase `true` to ignore
 character case when matching a delimiter. By default `false`.
 * @param limit The maximum number of substrings
 to return.
 */public fun CharSequence.split(vararg delimiters: Char, ignoreCase: Boolean = false, limit: Int = 0):
List<String> {
    if (delimiters.size == 1) {
        return split(delimiters[0].toString(), ignoreCase, limit)
    }
    return
    rangesDelimitedBy(delimiters, ignoreCase = ignoreCase, limit = limit).asIterable().map { substring(it) }
}

/**
 * Splits this char sequence to a list of strings around occurrences of the specified [delimiter].
 * This
 is specialized version of split which receives single non-empty delimiter and offers better performance
 * @param delimiter String used as delimiter
 * @param ignoreCase `true` to ignore character case when matching a
 delimiter. By default `false`.
 * @param limit The maximum number of substrings to return.
 */private fun
CharSequence.split(delimiter: String, ignoreCase: Boolean, limit: Int): List<String> {
    requireNonNegativeLimit(limit)
    var currentOffset = 0
    var nextIndex = indexOf(delimiter, currentOffset,
ignoreCase)
    if (nextIndex == -1 || limit == 1)
        return listOf(this.toString())
    val isLimited =
limit > 0
    val result = ArrayList<String>(if (isLimited) limit.coerceAtMost(10) else 10)
    do {
        result.add(substring(currentOffset, nextIndex))
        currentOffset = nextIndex + delimiter.length
        // Do not
search for next occurrence if we're reaching limit
        if (isLimited && result.size == limit - 1) break
        nextIndex = indexOf(delimiter, currentOffset, ignoreCase)
    } while (nextIndex != -1)
    result.add(substring(currentOffset, length))
    return result
}

/**
 * Splits this char sequence to a list of

```

```

strings around matches of the given regular expression.\n * \n * @param limit Non-negative value specifying the
maximum number of substrings to return.\n * Zero by default means no limit is set.\n
*/\n@kotlin.internal.InlineOnly\npublic inline fun CharSequence.split(regex: Regex, limit: Int = 0): List<String> =
regex.split(this, limit)\n\n/**\n * Splits this char sequence to a sequence of strings around matches of the given
regular expression.\n * \n * @param limit Non-negative value specifying the maximum number of substrings to
return.\n * Zero by default means no limit is set.\n * @sample samples.text.Strings.splitToSequence\n
*/\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
c inline fun CharSequence.splitToSequence(regex: Regex, limit: Int = 0): Sequence<String> =
regex.splitToSequence(this, limit)\n\n/**\n * Splits this char sequence to a sequence of lines delimited by any of the
following character sequences: CRLF, LF or CR.\n * \n * The lines returned do not include terminating line
separators.\n */\npublic fun CharSequence.lineSequence(): Sequence<String> = splitToSequence("\\r\\n", "\\n",
"\\r")\n\n/**\n * Splits this char sequence to a list of lines delimited by any of the following character sequences:
CRLF, LF or CR.\n * \n * The lines returned do not include terminating line separators.\n */\npublic fun
CharSequence.lines(): List<String> = lineSequence().toList()\n\n/**\n * Returns `true` if the contents of this char
sequence are equal to the contents of the specified [other],\n * i.e. both char sequences contain the same number of
the same characters in the same order.\n * \n * @sample samples.text.Strings.contentEquals\n
*/\n@SinceKotlin("1.5")\npublic expect infix fun CharSequence?.contentEquals(other: CharSequence?):
Boolean\n\n/**\n * Returns `true` if the contents of this char sequence are equal to the contents of the specified
[other], optionally ignoring case difference.\n * \n * @param ignoreCase `true` to ignore character case when
comparing contents.\n * \n * @sample samples.text.Strings.contentEquals\n */\n@SinceKotlin("1.5")\npublic
expect fun CharSequence?.contentEquals(other: CharSequence?, ignoreCase: Boolean): Boolean\n\ninternal fun
CharSequence?.contentEqualsIgnoreCaseImpl(other: CharSequence?): Boolean {\n    if (this is String && other is
String) {\n        return this.equals(other, ignoreCase = true)\n    }\n    if (this === other) return true\n    if (this ==
null || other == null || this.length != other.length) return false\n    for (i in 0 until length) {\n        if
(!this[i].equals(other[i], ignoreCase = true)) {\n            return false\n        }\n    }\n    return true\n}\n\ninternal fun
CharSequence?.contentEqualsImpl(other: CharSequence?): Boolean {\n    if (this is String && other is String) {\n
        return this == other\n    }\n    if (this === other) return true\n    if (this == null || other == null ||
this.length !=
other.length) return false\n    for (i in 0 until length) {\n        if (this[i] != other[i]) {\n            return
false\n        }\n    }\n    return true\n}\n\n/**\n * Returns `true` if the content of this string is equal to the word
`"true"`, `false` if it is
equal to `false`,\n * and throws an exception otherwise.\n * \n * There is also a lenient version of the function
available on nullable String, [String?.toBoolean].\n * Note that this function is case-sensitive.\n * \n * @sample
samples.text.Strings.toBooleanStrict\n */\n@SinceKotlin("1.5")\npublic fun String.toBooleanStrict(): Boolean =
when (this) {\n    "true" -> true\n    "false" -> false\n    else -> throw IllegalArgumentException("The string
doesn't represent a boolean value: $this")\n}\n\n/**\n * Returns `true` if the content of this string is equal to the
word `true`, `false` if it is equal to
`false`,\n * and `null` otherwise.\n * \n * There is also a lenient version of the function available on nullable
String, [String?.toBoolean].\n * Note that this function is case-sensitive.\n * \n *
@sample samples.text.Strings.toBooleanStrictOrNull\n */\n@SinceKotlin("1.5")\npublic fun
String.toBooleanStrictOrNull(): Boolean? = when (this) {\n    "true" -> true\n    "false" -> false\n    else ->
null\n}, "/**\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of
this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n//
Auto-generated file. DO NOT EDIT!\n\npackage kotlin\n\nimport
kotlin.jvm.*\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@JvmInline\npublic value class
UByteArray\n@PublishedApi\ninternal constructor(@PublishedApi internal val storage: ByteArray) :
Collection<UByte> {\n    /**\n     * Creates a new array of the specified [size], with all elements initialized to zero. */\n
    public constructor(size: Int) : this(ByteArray(size))\n    /**\n     * Returns the array element at the given [index].
This method can be called using the index operator.\n     * \n     * If the [index] is out of bounds of this array,
throws an [IndexOutOfBoundsException] except in Kotlin/JS\n     * where the behavior is unspecified.\n     */\n    public
operator fun get(index: Int): UByte = storage[index].toUByte()\n    /**\n     * Sets the element at the given [index]

```

```

to the given [value]. This method can be called using the index operator.\n
 * If the [index] is out of bounds of this array, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n
 * where the behavior is unspecified.\n
 * public operator fun set(index: Int, value: UByte) {\n
 storage[index] = value.toByte()\n
 }\n
 /** Returns the number of elements in the array. */\n
 public override val size: Int get() = storage.size\n
 /** Creates an iterator over the elements of the array. */\n
 public override operator fun iterator():\n
 kotlin.collections.Iterator<UByte> = Iterator(storage)\n
 @Suppress("DEPRECATION_ERROR")\n
 private class Iterator(private val array: ByteArray) : UByteIterator() {\n
 private var index = 0\n
 override fun\n
 hasNext() = index < array.size\n
 override fun nextUByte() = if (index < array.size) array[index++].toUByte()\n
 else throw NoSuchElementException(index.toString())\n
 }\n
 override fun contains(element: UByte): Boolean\n
 {\n
 // TODO: Eliminate this check after KT-30016 gets fixed.\n
 // Currently JS BE does not generate\n
 special bridge method for this method.\n
 @Suppress("USELESS_CAST")\n
 if ((element as Any?) !is\n
 UByte) return false\n
 return storage.contains(element.toByte())\n
 }\n
 override fun containsAll(elements:\n
 Collection<UByte>): Boolean {\n
 return (elements as Collection<*>).all { it is UByte &&\n
 storage.contains(it.toByte()) }\n
 }\n
 override fun isEmpty(): Boolean = this.storage.size == 0\n
 }\n
 /**\n
 * Creates a new array of the specified [size], where each element is calculated by calling the specified\n
 * [init]\n
 * function.\n
 * The function [init] is called for each array element sequentially starting from the first one.\n
 * It\n
 * should return the value for an array element given its index.\n
 */\n
 @SinceKotlin("1.3")\n
 @ExperimentalUnsignedTypes\n
 @kotlin.internal.InlineOnly\n
 public inline fun\n
 UByteArray(size: Int, init: (Int) -> UByte): UByteArray {\n
 return UByteArray(ByteArray(size) { index ->\n
 init(index).toByte()\n
 })\n
 }\n
 @SinceKotlin("1.3")\n
 @ExperimentalUnsignedTypes\n
 @kotlin.internal.InlineOnly\n
 public inline fun\n
 ubyteArrayOf(vararg elements: UByte): UByteArray = elements\n
 */\n
 * Copyright 2010-2021 JetBrains s.r.o. and\n
 Kotlin Programming Language contributors.\n
 * Use of this source code is governed by the Apache 2.0 license that\n
 can be found in the license/LICENSE.txt file.\n
 */\n
 // Auto-generated file. DO NOT EDIT!\n
 package\n
 kotlin\n
 import kotlin.jvm.*\n
 @SinceKotlin("1.3")\n
 @ExperimentalUnsignedTypes\n
 @JvmInline\n
 public\n
 value class UIntArray\n
 @PublishedApi\n
 internal constructor(@PublishedApi internal val storage: IntArray) :\n
 Collection<UInt> {\n
 /** Creates a new array of the specified [size], with all elements initialized to zero. */\n
 public constructor(size: Int) : this(IntArray(size))\n
 /**\n
 * Returns the array element at the given [index].\n
 * This method can be called using the index operator.\n
 * If the [index] is out of bounds of this array, throws\n
 an [IndexOutOfBoundsException] except in Kotlin/JS\n
 * where the behavior is unspecified.\n
 */\n
 public\n
 operator fun get(index: Int): UInt = storage[index].toUInt()\n
 /**\n
 * Sets the element at the given [index] to\n
 the given [value]. This method can be called using the index operator.\n
 * If the [index] is out of bounds of\n
 this array, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n
 * where the behavior is unspecified.\n
 */\n
 public\n
 operator fun set(index: Int, value: UInt) {\n
 storage[index] = value.toInt()\n
 }\n
 /** Returns\n
 the number of elements in the array. */\n
 public override val size: Int get() = storage.size\n
 /** Creates an\n
 iterator over the elements of the array. */\n
 public override operator fun iterator(): kotlin.collections.Iterator<UInt>\n
 = Iterator(storage)\n
 @Suppress("DEPRECATION_ERROR")\n
 private class Iterator(private val array:\n
 IntArray) : UIntIterator() {\n
 private var index = 0\n
 override fun hasNext() = index < array.size\n
 override fun nextUInt() = if (index < array.size) array[index++].toUInt() else throw\n
 NoSuchElementException(index.toString())\n
 }\n
 override fun contains(element: UInt): Boolean {\n
 //\n
 TODO: Eliminate this check after KT-30016 gets fixed.\n
 // Currently JS BE does not generate special bridge\n
 method for this method.\n
 @Suppress("USELESS_CAST")\n
 if ((element as Any?) !is UInt) return\n
 false\n
 return storage.contains(element.toInt())\n
 }\n
 override fun containsAll(elements:\n
 Collection<UInt>): Boolean {\n
 return (elements as Collection<*>).all { it is UInt &&\n
 storage.contains(it.toInt()) }\n
 }\n
 override fun isEmpty(): Boolean = this.storage.size == 0\n
 }\n
 /**\n
 * Creates a new array of the specified [size], where each element is calculated by calling the specified\n
 * [init]\n
 * function.\n
 * The function [init] is called for each array element sequentially starting from the first one.\n
 * It\n
 * should return the value for an array element given its index.\n
 */

```

```

*^@SinceKotlin("1.3")^@ExperimentalUnsignedTypes^@kotlin.internal.InlineOnly^public inline fun
UIntArray(size: Int, init: (Int) -> UInt): UIntArray {^n    return UIntArray(IntArray(size) { index ->
init(index).toInt()
})^n}^n^@SinceKotlin("1.3")^@ExperimentalUnsignedTypes^@kotlin.internal.InlineOnly^public inline fun
uintArrayOf(vararg elements: UInt): UIntArray = elements^n", /*^n * Copyright 2010-2021 JetBrains s.r.o. and
Kotlin Programming Language contributors.^n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.^n *^n// Auto-generated file. DO NOT EDIT!^n^package
kotlin^nimport kotlin.jvm.*^n^@SinceKotlin("1.3")^@ExperimentalUnsignedTypes^@JvmInline^public
value class ULongArray^@PublishedApi^internal constructor(@PublishedApi internal val storage: LongArray) :
Collection<ULong> {^n^    /** Creates a new array of the specified [size], with all elements initialized to zero. ^n
public constructor(size: Int) : this(LongArray(size))^n^    /**^n     * Returns the array element at the given [index].
This method can be called using the index operator.^n     *^n     * If the [index] is out of bounds of this array, throws
an [IndexOutOfBoundsException] except in Kotlin/JS^n     * where the behavior is unspecified.^n     *^n     public
operator fun get(index: Int): ULong = storage[index].toULong()^n^    /**^n     * Sets the element at the given
[index] to the given [value]. This method can be called using the index operator.^n     *^n     * If the [index] is out of
bounds of this array, throws an [IndexOutOfBoundsException] except in Kotlin/JS^n     * where the behavior is
unspecified.^n     *^n     public operator fun set(index: Int, value: ULong) {^n         storage[index] = value.toLong()^n
    }^n^    /** Returns the number of elements in the array. ^n     public override val size: Int get() = storage.size^n
    /** Creates an iterator over the elements of the array. ^n     public override operator fun iterator():
kotlin.collections.Iterator<ULong> = Iterator(storage)^n     @Suppress("DEPRECATION_ERROR")^n     private
class Iterator(private val array: LongArray) : ULongIterator() {^n         private var index = 0^n         override fun
hasNext() = index < array.size^n         override fun nextULong() = if (index < array.size) array[index++].toULong()
else throw NoSuchElementException(index.toString())^n     }^n^    override fun contains(element: ULong): Boolean
{^n         // TODO: Eliminate this check after KT-30016 gets fixed.^n         // Currently JS BE does not generate
special bridge method for this method.^n         @Suppress("USELESS_CAST")^n         if ((element as Any?) !is
ULong) return false^n         return storage.contains(element.toLong())^n     }^n^    override fun
containsAll(elements: Collection<ULong>): Boolean {^n         return (elements as Collection<*>).all { it is ULong
&& storage.contains(it.toLong()) }^n     }^n^    override fun isEmpty(): Boolean = this.storage.size == 0^n^n/**^n
 * Creates a new array of the specified [size], where each element is calculated by calling the specified^n * [init]
function.^n *^n * The function [init] is called for each array element sequentially starting from the first one.^n * It
should return the value for an array element given its index.^n
*^@SinceKotlin("1.3")^@ExperimentalUnsignedTypes^@kotlin.internal.InlineOnly^public inline fun
ULongArray(size: Int, init: (Int) -> ULong): ULongArray {^n    return ULongArray(LongArray(size) { index ->
init(index).toLong()
})^n}^n^@SinceKotlin("1.3")^@ExperimentalUnsignedTypes^@kotlin.internal.InlineOnly^public inline fun
ulongArrayOf(vararg elements: ULong): ULongArray = elements^n", /*^n * Copyright 2010-2021 JetBrains s.r.o.
and Kotlin Programming Language contributors.^n * Use of this source code is governed by the Apache 2.0 license
that can be found in the license/LICENSE.txt file.^n *^n// Auto-generated file. DO NOT EDIT!^n^package
kotlin^nimport kotlin.jvm.*^n^@SinceKotlin("1.3")^@ExperimentalUnsignedTypes^@JvmInline^public
value class UShortArray^@PublishedApi^internal constructor(@PublishedApi internal val storage: ShortArray) :
Collection<UShort> {^n^    /** Creates a new array of the specified [size], with all elements initialized to zero. ^n
public constructor(size: Int) : this(ShortArray(size))^n^    /**^n     * Returns the array element at the given [index].
This method can be called using the index operator.^n     *^n     * If the [index] is out of bounds of this array, throws
an [IndexOutOfBoundsException] except in Kotlin/JS^n     * where the behavior is unspecified.^n     *^n     public
operator fun get(index: Int): UShort = storage[index].toUShort()^n^    /**^n     * Sets the element at the given
[index] to the given [value]. This method can be called using the index operator.^n     *^n     * If the [index] is out of
bounds of this array, throws an [IndexOutOfBoundsException] except in Kotlin/JS^n     * where the behavior is
unspecified.^n     *^n     public operator fun set(index: Int, value: UShort) {^n         storage[index] = value.toShort()^n
    }^n^}^n^}^n

```

```

}\n\n /** Returns the number of elements in the array. */\n public override val size: Int get() = storage.size\n\n /** Creates an iterator over the elements of the array. */\n public override operator fun iterator():\n\n kotlin.collections.Iterator<UShort> = Iterator(storage)\n\n @Suppress(\"DEPRECATION_ERROR\")\n private\n class Iterator(private val array: ShortArray) : UShortIterator() {\n private var index = 0\n override fun\n hasNext() = index < array.size\n override fun nextUShort() = if (index < array.size) array[index++].toUShort()\n else throw NoSuchElementException(index.toString())\n }\n\n override fun contains(element: UShort): Boolean\n {\n // TODO: Eliminate this check after KT-30016 gets fixed.\n // Currently JS BE does not generate\n special bridge method for this method.\n @Suppress(\"USELESS_CAST\")\n if ((element as Any?) !is\n UShort) return false\n return storage.contains(element.toShort())\n }\n\n override fun\n containsAll(elements: Collection<UShort>): Boolean {\n return (elements as Collection<*>).all { it is UShort\n && storage.contains(it.toShort()) }\n }\n\n override fun isEmpty(): Boolean = this.storage.size == 0\n}\n\n /**\n * Creates a new array of the specified [size], where each element is calculated by calling the specified\n * [init]\n function.\n * The function [init] is called for each array element sequentially starting from the first one.\n * It\n should return the value for an array element given its index.\n\n */\n\n @SinceKotlin(\"1.3\")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public inline fun\n UShortArray(size: Int, init: (Int) -> UShort): UShortArray {\n return UShortArray(ShortArray(size) { index ->\n init(index).toShort()\n\n })\n}\n\n @SinceKotlin(\"1.3\")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public inline fun\n ushortArrayOf(vararg elements: UShort): UShortArray = elements\n\n\n /*\n * Copyright 2010-2021 JetBrains s.r.o.\n and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license\n that can be found in the license/LICENSE.txt file.\n\n */\n\n @file:kotlin.jvm.JvmMultifileClass\n @file:kotlin.jvm.JvmName(\"UArraysKt\")\n @file:kotlin.jvm.JvmPacka\n geName(\"kotlin.collections.unsigned\")\n\n package kotlin.collections\n\n\n // NOTE: THIS FILE IS AUTO-\n GENERATED by the GenerateStandardLib.kt\n // See:\n\n https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\n\n import kotlin.random.*\n import\n kotlin.ranges.contains\n import kotlin.ranges.reversed\n\n\n /**\n * Returns 1st *element* from the array.\n * If the\n size of this array is less than 1, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior\n is unspecified.\n\n */\n\n @SinceKotlin(\"1.3\")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public\n inline operator fun UIntArray.component1(): UInt {\n return get(0)\n}\n\n /**\n * Returns 1st *element* from the\n array.\n * If the size of this array is less than 1, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the behavior is unspecified.\n\n */\n\n @SinceKotlin(\"1.3\")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public inline operator fun\n ULongArray.component1(): ULong {\n return get(0)\n}\n\n /**\n * Returns 1st *element* from the array.\n * If the\n size of this array is less than 1, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the\n behavior is unspecified.\n\n */\n\n @SinceKotlin(\"1.3\")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public inline operator fun\n UByteArray.component1(): UByte {\n return get(0)\n}\n\n /**\n * Returns 1st *element* from the array.\n * If\n the size of this array is less than 1, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the\n behavior is unspecified.\n\n */\n\n @SinceKotlin(\"1.3\")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public inline operator fun\n UShortArray.component1(): UShort {\n return get(0)\n}\n\n /**\n * Returns 2nd *element* from the array.\n * If\n the size of this array is less than 2, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the\n behavior is unspecified.\n\n */\n\n @SinceKotlin(\"1.3\")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public inline operator fun\n UIntArray.component2(): UInt {\n return get(1)\n}\n\n /**\n * Returns 2nd *element* from the array.\n * If\n the size of this array is less than 2, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the\n behavior is unspecified.\n\n */\n\n @SinceKotlin(\"1.3\")\n @ExperimentalUnsignedTypes\n @kotlin.internal.InlineOnly\n public inline operator fun

```

UByteArray.component2(): ULong {
 return get(1)}
 Returns 2nd *element* from the array.
 If the size of this array is less than 2, throws an [IndexOutOfBoundsException] except in Kotlin/JS where the behavior is unspecified.

```
@SinceKotlin("1.3")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly\npublic inline operator fun
```

UByteArray.component2(): UByte {
 return get(1)}
 Returns 2nd *element* from the array.
 If the size of this array is less than 2, throws an [IndexOutOfBoundsException] except in Kotlin/JS where the behavior is unspecified.

```
@SinceKotlin("1.3")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly\npublic inline operator fun
```

UShortArray.component2(): UShort {
 return get(1)}
 Returns 3rd *element* from the array.
 If the size of this array is less than 3, throws an [IndexOutOfBoundsException] except in Kotlin/JS where the behavior is unspecified.

```
@SinceKotlin("1.3")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly\npublic inline operator fun
```

UIntArray.component3(): UInt {
 return get(2)}
 Returns 3rd *element* from the array.
 If the size of this array is less than 3, throws an [IndexOutOfBoundsException] except in Kotlin/JS where the behavior is unspecified.

```
@SinceKotlin("1.3")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly\npublic inline operator fun
```

UByteArray.component3(): UByte {
 return get(2)}
 Returns 3rd *element* from the array.
 If the size of this array is less than 3, throws an [IndexOutOfBoundsException] except in Kotlin/JS where the behavior is unspecified.

```
@SinceKotlin("1.3")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly\npublic inline operator fun
```

UShortArray.component3(): UShort {
 return get(2)}
 Returns 4th *element* from the array.
 If the size of this array is less than 4, throws an [IndexOutOfBoundsException] except in Kotlin/JS where the behavior is unspecified.

```
@SinceKotlin("1.3")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly\npublic inline operator fun
```

UIntArray.component4(): UInt {
 return get(3)}
 Returns 4th *element* from the array.
 If the size of this array is less than 4, throws an [IndexOutOfBoundsException] except in Kotlin/JS where the behavior is unspecified.

```
@SinceKotlin("1.3")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly\npublic inline operator fun
```

UByteArray.component4(): UByte {
 return get(3)}
 Returns 4th *element* from the array.
 If the size of this array is less than 4, throws an [IndexOutOfBoundsException] except in Kotlin/JS where the behavior is unspecified.

```
@SinceKotlin("1.3")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly\npublic inline operator fun
```

UShortArray.component4(): UShort {
 return get(3)}
 Returns 5th *element* from the array.
 If the size of this array is less than 5, throws an [IndexOutOfBoundsException] except in Kotlin/JS where the behavior is unspecified.

```
@SinceKotlin("1.3")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly\npublic inline operator fun
```

UIntArray.component5(): UInt {
 return get(4)}
 Returns 5th *element* from the array.
 If the size of this array is less than 5, throws an [IndexOutOfBoundsException] except in Kotlin/JS where the behavior is unspecified.

```
@SinceKotlin("1.3")@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly\npublic inline operator fun
```

UByteArray.component5(): UByte {
 return get(4)}
 Returns 5th *element* from the array.
 If the size of this array is less than 5, throws an [IndexOutOfBoundsException] except in

Kotlin/JS\n * where the behavior is unspecified.\n

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun  
UByteArray.component5(): UByte {\n    return get(4)\n}\n\n/**\n * Returns 5th *element* from the array.\n * \n *\n * If the size of this array is less than 5, throws an [IndexOutOfBoundsException] except in Kotlin/JS\n * where the  
behavior is unspecified.\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun  
UShortArray.component5(): UShort {\n    return get(4)\n}\n\n/**\n * Returns an element at the given [index] or  
throws an [IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n * \n *\n * @sample  
samples.collections.Collections.Elements.elementAt\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic expect fun UIntArray.elementAt(index: Int):  
UInt\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the [index] is  
out of bounds of this array.\n * \n *\n * @sample samples.collections.Collections.Elements.elementAt\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic expect fun ULongArray.elementAt(index: Int):  
ULong\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the [index]  
is out of bounds of this array.\n * \n *\n * @sample samples.collections.Collections.Elements.elementAt\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic expect fun UByteArray.elementAt(index: Int):  
UByte\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the [index]  
is out of bounds of this array.\n * \n *\n * @sample samples.collections.Collections.Elements.elementAt\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic expect fun UShortArray.elementAt(index: Int):  
UShort\n\n/**\n * Returns an element at the given [index] or the result of calling the [defaultValue] function if the  
[index] is out of bounds of this array.\n * \n *\n * @sample  
samples.collections.Collections.Elements.elementAtOrElse\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
UIntArray.elementAtOrElse(index: Int, defaultValue: (Int) -> UInt): UInt {\n    return if (index >= 0 && index <=  
lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or the result of  
calling the [defaultValue] function if the [index] is out of bounds of this array.\n * \n *\n * @sample  
samples.collections.Collections.Elements.elementAtOrElse\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
ULongArray.elementAtOrElse(index: Int, defaultValue: (Int) -> ULong): ULong {\n    return if (index >= 0 &&  
index <= lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or the  
result of calling the [defaultValue] function if the [index] is out of bounds of this array.\n * \n *\n * @sample  
samples.collections.Collections.Elements.elementAtOrElse\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
UByteArray.elementAtOrElse(index: Int, defaultValue: (Int) -> UByte): UByte {\n    return if (index >= 0 && index  
<= lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or the result  
of calling the [defaultValue] function if the [index] is out of bounds of this array.\n * \n *\n * @sample  
samples.collections.Collections.Elements.elementAtOrElse\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
UShortArray.elementAtOrElse(index: Int, defaultValue: (Int) -> UShort): UShort {\n    return if (index >= 0 &&  
index <= lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or  
'null' if the [index] is out of bounds of this array.\n * \n *\n * @sample  
samples.collections.Collections.Elements.elementAtOrNull\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
UIntArray.elementAtOrNull(index: Int): UInt? {\n    return this.getOrNull(index)\n}\n\n/**\n * Returns an element  
at the given [index] or 'null' if the [index] is out of bounds of this array.\n * \n *\n * @sample  
samples.collections.Collections.Elements.elementAtOrNull\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
ULongArray.elementAtOrNull(index: Int): ULong? {\n    return this.getOrNull(index)\n}\n\n/**\n * Returns an
```


element at the given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.elementAtOrNull\n

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  

UByteArray.elementAtOrNull(index: Int): UByte? {\n return this.getOrNull(index)\n}\n\n/**\n * Returns an  

element at the given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample  

samples.collections.Collections.Elements.elementAtOrNull\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  

UShortArray.elementAtOrNull(index: Int): UShort? {\n return this.getOrNull(index)\n}\n\n/**\n * Returns the  

first element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample  

samples.collections.Collections.Elements.find\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  

UIntArray.find(predicate: (UInt) -> Boolean): UInt? {\n return firstOrNull(predicate)\n}\n\n/**\n * Returns the  

first element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample  

samples.collections.Collections.Elements.find\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  

ULongArray.find(predicate: (ULong) -> Boolean): ULong? {\n return firstOrNull(predicate)\n}\n\n/**\n * Returns the  

first element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample  

samples.collections.Collections.Elements.find\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  

UByteArray.find(predicate: (UByte) -> Boolean): UByte? {\n return firstOrNull(predicate)\n}\n\n/**\n * Returns  

the first element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample  

samples.collections.Collections.Elements.find\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  

UShortArray.find(predicate: (UShort) -> Boolean): UShort? {\n return firstOrNull(predicate)\n}\n\n/**\n * Returns  

the last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample  

samples.collections.Collections.Elements.find\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  

UIntArray.findLast(predicate: (UInt) -> Boolean): UInt? {\n return lastOrNull(predicate)\n}\n\n/**\n * Returns the  

last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample  

samples.collections.Collections.Elements.find\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  

ULongArray.findLast(predicate: (ULong) -> Boolean): ULong? {\n return lastOrNull(predicate)\n}\n\n/**\n * Returns  

the last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample  

samples.collections.Collections.Elements.find\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  

UByteArray.findLast(predicate: (UByte) -> Boolean): UByte? {\n return lastOrNull(predicate)\n}\n\n/**\n * Returns  

the last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample  

samples.collections.Collections.Elements.find\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  

UShortArray.findLast(predicate: (UShort) -> Boolean): UShort? {\n return lastOrNull(predicate)\n}\n\n/**\n * Returns  

first element.\n * @throws [NoSuchElementException] if the array is empty.\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  

UIntArray.first(): UInt {\n return storage.first().toUInt()\n}\n\n/**\n * Returns first element.\n * @throws  

[NoSuchElementException] if the array is empty.\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  

ULongArray.first(): ULong {\n return storage.first().toULong()\n}\n\n/**\n * Returns first element.\n * @throws  

[NoSuchElementException] if the array is empty.\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
```

```

ByteArray.first(): UByte {\n  return storage.first().toUByte()\n}\n\n/**\n * Returns first element.\n * @throws [NoSuchElementException] if the array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.first(): UShort {\n  return storage.first().toUShort()\n}\n\n/**\n * Returns the first element matching
the given [predicate].\n * @throws [NoSuchElementException] if no such element is found.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.first(predicate: (UInt) -> Boolean): UInt {\n  for (element in this) if (predicate(element)) return
element\n  throw NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n *
Returns the first element matching the given [predicate].\n * @throws [NoSuchElementException] if no such
element is found.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.first(predicate: (ULong) -> Boolean): ULong {\n  for (element in this) if (predicate(element)) return
element\n  throw NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n *
Returns the first element matching the given [predicate].\n * @throws [NoSuchElementException] if no such
element is found.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ByteArray.first(predicate: (UByte) -> Boolean): UByte {\n  for (element in this) if (predicate(element)) return
element\n  throw NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n *
Returns the first element matching the given [predicate].\n * @throws [NoSuchElementException] if no such
element is found.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.first(predicate: (UShort) -> Boolean): UShort {\n  for (element in this) if (predicate(element)) return
element\n  throw NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n *
Returns the first element, or `null` if the array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.firstOrNull(): UInt? {\n  return
if (isEmpty()) null else this[0]\n}\n\n/**\n * Returns the first element, or `null` if the array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.firstOrNull(): ULong? {\n  return
if (isEmpty()) null else this[0]\n}\n\n/**\n * Returns the first element, or `null` if the array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ByteArray.firstOrNull(): UByte? {\n  return
if (isEmpty()) null else this[0]\n}\n\n/**\n * Returns the first element, or `null` if the array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.firstOrNull(): UShort? {\n  return
if (isEmpty()) null else this[0]\n}\n\n/**\n * Returns the first element matching the given [predicate], or `null`
if element was not found.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.firstOrNull(predicate: (UInt) -> Boolean): UInt? {\n  for (element in this) if (predicate(element)) return
element\n  return null\n}\n\n/**\n * Returns the first element matching the given [predicate], or `null` if element
was not found.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun ULongArray.firstOrNull(predicate: (ULong) -> Boolean): ULong? {\n  for (element in this) if
(predicate(element)) return element\n  return null\n}\n\n/**\n * Returns the first element matching the given
[predicate], or `null` if element was not found.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ByteArray.firstOrNull(predicate: (UByte) -> Boolean): UByte? {\n  for (element in this) if (predicate(element))
return element\n  return null\n}\n\n/**\n * Returns the first element matching the given [predicate], or `null` if
element was not found.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.firstOrNull(predicate: (UShort) -> Boolean): UShort? {\n  for (element in this) if (predicate(element))
return element\n  return null\n}\n\n/**\n * Returns an element at the given [index] or the result of calling the
[defaultValue] function if the [index] is out of bounds of this array.\n

```

```

*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.getOrElse(index: Int, defaultValue: (Int) -> UInt): UInt {\n    return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or the result of
calling the [defaultValue] function if the [index] is out of bounds of this array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.getOrElse(index: Int, defaultValue: (Int) -> ULong): ULong {\n    return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or the result of
calling the [defaultValue] function if the [index] is out of bounds of this array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.getOrElse(index: Int, defaultValue: (Int) -> UByte): UByte {\n    return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or the result of
calling the [defaultValue] function if the [index] is out of bounds of this array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.getOrElse(index: Int, defaultValue: (Int) -> UShort): UShort {\n    return if (index >= 0 && index <=
lastIndex) get(index) else defaultValue(index)\n}\n\n/**\n * Returns an element at the given [index] or `null` if the
[index] is out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.getOrNull\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.getOrNull(index: Int): UInt? {\n
return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n/**\n * Returns an element at the given
[index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.getOrNull\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.getOrNull(index: Int):
ULong? {\n    return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n/**\n * Returns an element at
the given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.getOrNull\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.getOrNull(index: Int): UByte?
{\n    return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n/**\n * Returns an element at the
given [index] or `null` if the [index] is out of bounds of this array.\n * \n * @sample
samples.collections.Collections.Elements.getOrNull\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.getOrNull(index: Int):
UShort? {\n    return if (index >= 0 && index <= lastIndex) get(index) else null\n}\n\n/**\n * Returns first index of
[element], or -1 if the array does not contain element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.indexOf(element: UInt): Int {\n    return storage.indexOf(element.toInt())\n}\n\n/**\n * Returns first
index of [element], or -1 if the array does not contain element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.indexOf(element: ULong): Int {\n    return storage.indexOf(element.toLong())\n}\n\n/**\n * Returns
first index of [element], or -1 if the array does not contain element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.indexOf(element: UByte): Int {\n    return storage.indexOf(element.toByte())\n}\n\n/**\n * Returns
first index of [element], or -1 if the array does not contain element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.indexOf(element: UShort): Int {\n    return storage.indexOf(element.toShort())\n}\n\n/**\n * Returns
index of the first element matching the given [predicate], or -1 if the array does not contain such element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.indexOfFirst(predicate: (UInt) -> Boolean): Int {\n    return storage.indexOfFirst { predicate(it.toUInt())
}\n}\n\n/**\n * Returns index of the first element matching the given [predicate], or -1 if the array does not contain
such element.\n * \n * @sample samples.collections.Collections.Elements.getOrNull\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun ULongArray.indexOfFirst(predicate: (ULong) -> Boolean): Int {\n    return storage.indexOfFirst {

```

```

predicate(it.toULong()) } \n} \n \n /** \n * Returns index of the first element matching the given [predicate], or -1 if the
array does not contain such element. \n
*\n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
UByteArray.indexOfFirst(predicate: (UByte) -> Boolean): Int { \n    return storage.indexOfFirst {
predicate(it.toUByte()) } \n} \n \n /** \n * Returns index of the first element matching the given [predicate], or -1 if the
array does not contain such element. \n
*\n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
UShortArray.indexOfFirst(predicate: (UShort) -> Boolean): Int { \n    return storage.indexOfFirst {
predicate(it.toUShort()) } \n} \n \n /** \n * Returns index of the last element matching the given [predicate], or -1 if the
array does not contain such element. \n
*\n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
UIntArray.indexOfLast(predicate: (UInt) -> Boolean): Int { \n    return storage.indexOfLast { predicate(it.toUInt())
} \n} \n \n /** \n * Returns index of the last element matching the given [predicate], or -1 if the array does not contain
such element. \n
*\n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public
inline fun ULongArray.indexOfLast(predicate: (ULong) -> Boolean): Int { \n    return storage.indexOfLast {
predicate(it.toULong()) } \n} \n \n /** \n * Returns index of the last element matching the given [predicate], or -1 if the
array does not contain such element. \n
*\n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
UByteArray.indexOfLast(predicate: (UByte) -> Boolean): Int { \n    return storage.indexOfLast {
predicate(it.toUByte()) } \n} \n \n /** \n * Returns index of the last element matching the given [predicate], or -1 if the
array does not contain such element. \n
*\n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
UShortArray.indexOfLast(predicate: (UShort) -> Boolean): Int { \n    return storage.indexOfLast {
predicate(it.toUShort()) } \n} \n \n /** \n * Returns the last element. \n * \n * @throws NoSuchElementException if the
array is empty. \n * \n * @sample samples.collections.Collections.Elements.last \n
*\n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
UIntArray.last(): UInt { \n    return storage.last().toUInt() \n} \n \n /** \n * Returns the last element. \n * \n * @throws
NoSuchElementException if the array is empty. \n * \n * @sample samples.collections.Collections.Elements.last \n
*\n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
ULongArray.last(): ULong { \n    return storage.last().toULong() \n} \n \n /** \n * Returns the last element. \n * \n *
@throws NoSuchElementException if the array is empty. \n * \n * @sample
samples.collections.Collections.Elements.last \n
*\n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
UByteArray.last(): UByte { \n    return storage.last().toUByte() \n} \n \n /** \n * Returns the last element. \n * \n *
@throws NoSuchElementException if the array is empty. \n * \n * @sample
samples.collections.Collections.Elements.last \n
*\n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
UShortArray.last(): UShort { \n    return storage.last().toUShort() \n} \n \n /** \n * Returns the last element matching
the given [predicate]. \n * \n * @throws NoSuchElementException if no such element is found. \n * \n * @sample
samples.collections.Collections.Elements.last \n
*\n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
UIntArray.last(predicate: (UInt) -> Boolean): UInt { \n    for (index in this.indices.reversed()) { \n        val element =
this[index] \n        if (predicate(element)) return element \n    } \n    throw NoSuchElementException("Array contains
no element matching the predicate.") \n} \n \n /** \n * Returns the last element matching the given [predicate]. \n * \n *
@throws NoSuchElementException if no such element is found. \n * \n * @sample
samples.collections.Collections.Elements.last \n
*\n @SinceKotlin("1.3") \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
ULongArray.last(predicate: (ULong) -> Boolean): ULong { \n    for (index in this.indices.reversed()) { \n        val

```

```

element = this[index]\n    if (predicate(element)) return element\n    }\n    throw
NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n * Returns the last
element matching the given [predicate].\n * \n * @throws NoSuchElementException if no such element is found.\n
* \n * @sample samples.collections.Collections.Elements.last\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.last(predicate: (UByte) -> Boolean): UByte {\n    for (index in this.indices.reversed()) {\n        val
element = this[index]\n        if (predicate(element)) return element\n    }\n    throw
NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n * Returns the last
element matching the given [predicate].\n * \n * @throws NoSuchElementException if no such element is found.\n
* \n * @sample samples.collections.Collections.Elements.last\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.last(predicate: (UShort) -> Boolean): UShort {\n    for (index in this.indices.reversed()) {\n        val
element = this[index]\n        if (predicate(element)) return element\n    }\n    throw
NoSuchElementException("Array contains no element matching the predicate.")\n}\n\n/**\n * Returns last index
of [element], or -1 if the array does not contain element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.lastIndexOf(element: UInt): Int {\n    return storage.lastIndexOf(element.toInt())\n}\n\n/**\n * Returns
last index of [element], or -1 if the array does not contain element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.lastIndexOf(element: ULong): Int {\n    return storage.lastIndexOf(element.toLong())\n}\n\n/**\n *
Returns last index of [element], or -1 if the array does not contain element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.lastIndexOf(element: UByte): Int {\n    return storage.lastIndexOf(element.toByte())\n}\n\n/**\n *
Returns last index of [element], or -1 if the array does not contain element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.lastIndexOf(element: UShort): Int {\n    return storage.lastIndexOf(element.toShort())\n}\n\n/**\n *
Returns the last element, or `null` if the array is empty.\n * \n * @sample
samples.collections.Collections.Elements.last\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic
fun UIntArray.lastOrNull(): UInt? {\n    return if (isEmpty()) null else this[size - 1]\n}\n\n/**\n * Returns the last
element, or `null` if the array is empty.\n * \n * @sample samples.collections.Collections.Elements.last\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.lastOrNull(): ULong? {\n    return if
(isEmpty()) null else this[size - 1]\n}\n\n/**\n * Returns the last element, or `null` if the array is empty.\n *
*\n * @sample samples.collections.Collections.Elements.last\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.lastOrNull(): UByte? {\n    return if
(isEmpty()) null else this[size - 1]\n}\n\n/**\n * Returns the last element, or `null` if the array is empty.\n *
*\n * @sample samples.collections.Collections.Elements.last\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.lastOrNull(): UShort? {\n    return if
(isEmpty()) null else this[size - 1]\n}\n\n/**\n * Returns the last element matching the given [predicate], or
`null` if no such element was found.\n * \n * @sample samples.collections.Collections.Elements.last\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.lastOrNull(predicate: (UInt) -> Boolean): UInt? {\n    for (index in this.indices.reversed()) {\n        val
element = this[index]\n        if (predicate(element)) return element\n    }\n    return null\n}\n\n/**\n * Returns the last
element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.last\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.lastOrNull(predicate: (ULong) -> Boolean): ULong? {\n    for (index in this.indices.reversed()) {\n
val element = this[index]\n        if (predicate(element)) return element\n    }\n    return null\n}\n\n/**\n * Returns the
last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample

```

```

samples.collections.Collections.Elements.last\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.lastOrNull(predicate: (UByte) -> Boolean): UByte? {\n for (index in this.indices.reversed()) {\n
val element = this[index]\n if (predicate(element)) return element\n }\n return null\n}\n\n/**\n * Returns the
last element matching the given [predicate], or `null` if no such element was found.\n * \n * @sample
samples.collections.Collections.Elements.last\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.lastOrNull(predicate: (UShort) -> Boolean): UShort? {\n for (index in this.indices.reversed()) {\n
val element = this[index]\n if (predicate(element)) return element\n }\n return null\n}\n\n/**\n * Returns a
random element from this array.\n * \n * @throws NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.random(): UInt {\n return random(Random)\n}\n\n/**\n * Returns a random element from this array.\n
* \n * @throws NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.random(): ULong {\n return random(Random)\n}\n\n/**\n * Returns a random element from this
array.\n * \n * @throws NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.random(): UByte {\n return random(Random)\n}\n\n/**\n * Returns a random element from this
array.\n * \n * @throws NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.random(): UShort {\n return random(Random)\n}\n\n/**\n * Returns a random element from this
array using the specified source of randomness.\n * \n * @throws NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.random(random: Random): UInt
{\n if (isEmpty())\n throw NoSuchElementException("Array is empty.")\n return
get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of
randomness.\n * \n * @throws NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.random(random: Random):
ULong {\n if (isEmpty())\n throw NoSuchElementException("Array is empty.")\n return
get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of
randomness.\n * \n * @throws NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.random(random: Random):
UByte {\n if (isEmpty())\n throw NoSuchElementException("Array is empty.")\n return
get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of
randomness.\n * \n * @throws NoSuchElementException if this array is empty.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.random(random: Random):
UShort {\n if (isEmpty())\n throw NoSuchElementException("Array is empty.")\n return
get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun UIntArray.randomOrNull(): UInt? {\n return
randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this array, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun ULongArray.randomOrNull(): ULong? {\n return
randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this array, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun UByteArray.randomOrNull(): UByte? {\n return
randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this array, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun UShortArray.randomOrNull(): UShort? {\n return

```

```

randomOrNull(Random)\n\n/**\n * Returns a random element from this array using the specified source of
randomness, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\np
ublic fun UIntArray.randomOrNull(random: Random): UInt? {\n if (isEmpty())\n return null\n return
get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of
randomness, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\np
ublic fun ULongArray.randomOrNull(random: Random): ULong? {\n if (isEmpty())\n return null\n return
get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of
randomness, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\np
ublic fun UByteArray.randomOrNull(random: Random): UByte? {\n if (isEmpty())\n return null\n return
get(random.nextInt(size))\n}\n\n/**\n * Returns a random element from this array using the specified source of
randomness, or `null` if this array is empty.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\np
ublic fun UShortArray.randomOrNull(random: Random): UShort? {\n if (isEmpty())\n return null\n return
get(random.nextInt(size))\n}\n\n/**\n * Returns the single element, or throws an exception if the array is empty or
has more than one element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.single(): UInt {\n return storage.single().toUInt()\n}\n\n/**\n * Returns the single element, or throws an
exception if the array is empty or has more than one element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.single(): ULong {\n return storage.single().toULong()\n}\n\n/**\n * Returns the single element, or
throws an exception if the array is empty or has more than one element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.single(): UByte {\n return storage.single().toUByte()\n}\n\n/**\n * Returns the single element, or
throws an exception if the array is empty or has more than one element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.single(): UShort {\n return storage.single().toUShort()\n}\n\n/**\n * Returns the single element
matching the given [predicate], or throws exception if there is no or more than one matching element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.single(predicate: (UInt) -> Boolean): UInt {\n var single: UInt? = null\n var found = false\n for
(element in this) {\n if (predicate(element)) {\n if (found) throw IllegalArgumentException("Array
contains more than one matching element.")\n single = element\n found = true\n }\n }\n if
(!found) throw NoSuchElementException("Array contains no element matching the predicate.")\n
@Suppress("UNCHECKED_CAST")\n return single as UInt\n}\n\n/**\n * Returns the single element matching
the given [predicate], or throws exception if there is no or more than one matching element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.single(predicate: (ULong) -> Boolean): ULong {\n var single: ULong? = null\n var found = false\n
for (element in this) {\n if (predicate(element)) {\n if (found) throw IllegalArgumentException("Array
contains more than one matching element.")\n single = element\n found = true\n }\n }\n if
(!found) throw NoSuchElementException("Array contains no element matching the predicate.")\n
@Suppress("UNCHECKED_CAST")\n return single as ULong\n}\n\n/**\n * Returns the single element
matching the given [predicate], or throws exception if there is no or more than one matching element.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.single(predicate: (UByte) -> Boolean): UByte {\n var single: UByte? = null\n var found = false\n
for (element in this) {\n if (predicate(element)) {\n if (found) throw IllegalArgumentException("Array
contains more than one matching element.")\n single = element\n found = true\n }\n }\n if

```

```

(!found) throw NoSuchElementException("Array contains no element matching the predicate.")\n
@Suppress("UNCHECKED_CAST")\n return single as UByte\n}\n\n/**\n * Returns the single element\n matching the given [predicate], or throws exception if there is no or more than one matching element.\n *\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\n UShortArray.single(predicate: (UShort) -> Boolean): UShort {\n var single: UShort? = null\n var found = false\n for (element in this) {\n if (predicate(element)) {\n if (found) throw IllegalArgumentException("Array\n contains more than one matching element.")\n single = element\n found = true\n }\n }\n if\n (!found) throw NoSuchElementException("Array contains no element matching the predicate.")\n }\n }\n @Suppress("UNCHECKED_CAST")\n return single as UShort\n}\n\n/**\n * Returns single element, or `null` if\n the array is empty or has more than one element.\n *\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.singleOrNull(): UInt? {\n return if (size == 1) this[0] else null\n}\n\n/**\n * Returns single element, or `null` if the array is empty or has more\n than one element.\n *\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun\n ULongArray.singleOrNull(): ULong? {\n return if (size == 1) this[0] else null\n}\n\n/**\n * Returns single\n element, or `null` if the array is empty or has more than one element.\n *\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.singleOrNull(): UByte? {\n return if (size == 1) this[0] else null\n}\n\n/**\n * Returns single element, or `null` if the array is empty or has more\n than one element.\n *\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun\n UShortArray.singleOrNull(predicate: (UShort) -> Boolean): UShort? {\n return if (size == 1) this[0] else null\n}\n\n/**\n * Returns the single\n element matching the given [predicate], or `null` if element was not found or more than one element was found.\n *\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\n UIntArray.singleOrNull(predicate: (UInt) -> Boolean): UInt? {\n var single: UInt? = null\n var found = false\n for (element in this) {\n if (predicate(element)) {\n if (found) return null\n single = element\n found = true\n }\n }\n if (!found) return null\n return single\n}\n\n/**\n * Returns the single element\n matching the given [predicate], or `null` if element was not found or more than one element was found.\n *\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\n ULongArray.singleOrNull(predicate: (ULong) -> Boolean): ULong? {\n var single: ULong? = null\n var found\n = false\n for (element in this) {\n if (predicate(element)) {\n if (found) return null\n single =\n element\n found = true\n }\n }\n if (!found) return null\n return single\n}\n\n/**\n * Returns the\n single element matching the given [predicate], or `null` if element was not found or more than one element was\n found.\n *\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline\n fun UByteArray.singleOrNull(predicate: (UByte) -> Boolean): UByte? {\n var single: UByte? = null\n var found\n = false\n for (element in this) {\n if (predicate(element)) {\n if (found) return null\n single =\n element\n found = true\n }\n }\n if (!found) return null\n return single\n}\n\n/**\n * Returns the\n single element matching the given [predicate], or `null` if element was not found or more than one element was\n found.\n *\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline\n fun UShortArray.singleOrNull(predicate: (UShort) -> Boolean): UShort? {\n var single: UShort? = null\n var\n found = false\n for (element in this) {\n if (predicate(element)) {\n if (found) return null\n single\n = element\n found = true\n }\n }\n if (!found) return null\n return single\n}\n\n/**\n * Returns a list\n containing all elements except first [n] elements.\n *\n * @throws IllegalArgumentException if [n] is negative.\n *\n * @sample samples.collections.Collections.Transformations.drop\n *\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.drop(n: Int): List<UInt> {\n require(n >= 0) { "Requested element count $n is less than zero." }\n return takeLast((size -\n n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements\n except first [n] elements.\n *\n * @throws\n IllegalArgumentException if [n] is negative.\n *\n * @sample\n samples.collections.Collections.Transformations.drop\n *\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.drop(n: Int): List<ULong> {\n require(n >= 0) { "Requested element count $n is less than zero." }\n return takeLast((size -

```



```

n).coerceAtLeast(0))\n\n/**\n * Returns a list containing all elements except first [n] elements.\n * \n * @throws
IllegalArgumentExcepion if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.drop(n: Int): List<UByte> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n  return takeLast((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except first [n] elements.\n * \n * @throws
IllegalArgumentExcepion if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.drop(n: Int): List<UShort> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n  return takeLast((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws
IllegalArgumentExcepion if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.dropLast(n: Int): List<UInt> {\n
require(n >= 0) { \"Requested element count $n is less than zero.\" }\n  return take((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws
IllegalArgumentExcepion if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.dropLast(n: Int):
List<ULong> {\n  require(n >= 0) { \"Requested element count $n is less than zero.\" }\n  return take((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws
IllegalArgumentExcepion if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.dropLast(n: Int): List<UByte>
{\n  require(n >= 0) { \"Requested element count $n is less than zero.\" }\n  return take((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last [n] elements.\n * \n * @throws
IllegalArgumentExcepion if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.dropLast(n: Int):
List<UShort> {\n  require(n >= 0) { \"Requested element count $n is less than zero.\" }\n  return take((size -
n).coerceAtLeast(0))\n}\n\n/**\n * Returns a list containing all elements except last elements that satisfy the given
[predicate].\n * \n * @sample samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.dropLastWhile(predicate: (UInt) -> Boolean): List<UInt> {\n  for (index in lastIndex downTo 0) {\n
if (!predicate(this[index])) {\n    return take(index + 1)\n  }\n  }\n  return emptyList()\n}\n\n/**\n *
Returns a list containing all elements except last elements that satisfy the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.dropLastWhile(predicate: (ULong) -> Boolean): List<ULong> {\n  for (index in lastIndex downTo 0)
{\n    if (!predicate(this[index])) {\n      return take(index + 1)\n    }\n  }\n  return emptyList()\n}\n\n/**\n *
Returns a list containing all elements except last elements that satisfy the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.dropLastWhile(predicate: (UByte) -> Boolean): List<UByte> {\n  for (index in lastIndex downTo 0)
{\n    if (!predicate(this[index])) {\n      return take(index + 1)\n    }\n  }\n  return emptyList()\n}\n\n/**\n *
Returns a list containing all elements except last elements that satisfy the given [predicate].\n * \n * @sample
samples.collections.Collections.Transformations.drop\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun

```

```

UShortArray.dropLastWhile(predicate: (UShort) -> Boolean): List<UShort> {\n  for (index in lastIndex downTo 0) {\n    if (!predicate(this[index])) {\n      return take(index + 1)\n    }\n  }\n  return emptyList()\n}\n\n/**\n * Returns a list containing all elements except first elements that satisfy the given [predicate].\n * \n * @sample samples.collections.Collections.Transformations.drop\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUIntArray.dropWhile(predicate: (UInt) -> Boolean): List<UInt> {\n  var yielding = false\n  val list = ArrayList<UInt>()\n  for (item in this)\n    if (yielding)\n      list.add(item)\n    else if (!predicate(item)) {\n      list.add(item)\n      yielding = true\n    }\n  return list\n}\n\n/**\n * Returns a list containing all elements except first elements that satisfy the given [predicate].\n * \n * @sample samples.collections.Collections.Transformations.drop\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nULongArray.dropWhile(predicate: (ULong) -> Boolean): List<ULong> {\n  var yielding = false\n  val list = ArrayList<ULong>()\n  for (item in this)\n    if (yielding)\n      list.add(item)\n    else if (!predicate(item)) {\n      list.add(item)\n      yielding = true\n    }\n  return list\n}\n\n/**\n * Returns a list containing all elements except first elements that satisfy the given [predicate].\n * \n * @sample samples.collections.Collections.Transformations.drop\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUByteArray.dropWhile(predicate: (UByte) -> Boolean): List<UByte> {\n  var yielding = false\n  val list = ArrayList<UByte>()\n  for (item in this)\n    if (yielding)\n      list.add(item)\n    else if (!predicate(item)) {\n      list.add(item)\n      yielding = true\n    }\n  return list\n}\n\n/**\n * Returns a list containing all elements except first elements that satisfy the given [predicate].\n * \n * @sample samples.collections.Collections.Transformations.drop\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUShortArray.dropWhile(predicate: (UShort) -> Boolean): List<UShort> {\n  var yielding = false\n  val list = ArrayList<UShort>()\n  for (item in this)\n    if (yielding)\n      list.add(item)\n    else if (!predicate(item)) {\n      list.add(item)\n      yielding = true\n    }\n  return list\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n * \n * @sample samples.collections.Collections.Filtering.filter\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUIntArray.filter(predicate: (UInt) -> Boolean): List<UInt> {\n  return filterTo(ArrayList<UInt>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n * \n * @sample samples.collections.Collections.Filtering.filter\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nULongArray.filter(predicate: (ULong) -> Boolean): List<ULong> {\n  return filterTo(ArrayList<ULong>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n * \n * @sample samples.collections.Collections.Filtering.filter\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUByteArray.filter(predicate: (UByte) -> Boolean): List<UByte> {\n  return filterTo(ArrayList<UByte>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n * \n * @sample samples.collections.Collections.Filtering.filter\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUShortArray.filter(predicate: (UShort) -> Boolean): List<UShort> {\n  return filterTo(ArrayList<UShort>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n * \n * @param [predicate] function that takes the index of an element and the element itself\n * and returns the result of predicate evaluation on the element.\n * \n * @sample samples.collections.Collections.Filtering.filterIndexed\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUIntArray.filterIndexed(predicate: (index: Int, UInt) -> Boolean): List<UInt> {\n  return filterIndexedTo(ArrayList<UInt>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the given [predicate].\n * \n * @param [predicate] function that takes the index of an element and the element itself\n * and

```

```

returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexed\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.filterIndexed(predicate: (index: Int, ULong) -> Boolean): List<ULong> {\n return
filterIndexedTo(ArrayList<ULong>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the
given [predicate].\n * @param [predicate] function that takes the index of an element and the element itself\n * and
returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexed\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.filterIndexed(predicate: (index: Int, UByte) -> Boolean): List<UByte> {\n return
filterIndexedTo(ArrayList<UByte>(), predicate)\n}\n\n/**\n * Returns a list containing only elements matching the
given [predicate].\n * @param [predicate] function that takes the index of an element and the element itself\n * and
returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexed\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.filterIndexed(predicate: (index: Int, UShort) -> Boolean): List<UShort> {\n return
filterIndexedTo(ArrayList<UShort>(), predicate)\n}\n\n/**\n * Appends all elements matching the given [predicate]
to the given [destination].\n * @param [predicate] function that takes the index of an element and the element
itself\n * and returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexedTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in UInt>> UIntArray.filterIndexedTo(destination: C, predicate: (index: Int, UInt) -> Boolean): C
{\n forEachIndexed { index, element ->\n if (predicate(index, element)) destination.add(element)\n }\n
return destination\n}\n\n/**\n * Appends all elements matching the given [predicate] to the given [destination].\n *
@param [predicate] function that takes the index of an element and the element itself\n * and returns the result of
predicate evaluation on the element.\n * \n * @sample samples.collections.Collections.Filtering.filterIndexedTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in ULong>> ULongArray.filterIndexedTo(destination: C, predicate: (index: Int, ULong) ->
Boolean): C {\n forEachIndexed { index, element ->\n if (predicate(index, element))
destination.add(element)\n }\n return destination\n}\n\n/**\n * Appends all elements matching the given
[predicate] to the given [destination].\n * @param [predicate] function that takes the index of an element and the
element itself\n * and returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexedTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in UByte>> UByteArray.filterIndexedTo(destination: C, predicate: (index: Int, UByte) ->
Boolean): C {\n forEachIndexed { index, element ->\n if (predicate(index, element))
destination.add(element)\n }\n return destination\n}\n\n/**\n * Appends all elements matching the given
[predicate] to the given [destination].\n * @param [predicate] function that takes the index of an element and the
element itself\n * and returns the result of predicate evaluation on the element.\n * \n * @sample
samples.collections.Collections.Filtering.filterIndexedTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in UShort>> UShortArray.filterIndexedTo(destination: C, predicate: (index: Int, UShort) ->
Boolean): C {\n forEachIndexed { index, element ->\n if (predicate(index, element))
destination.add(element)\n }\n return destination\n}\n\n/**\n * Returns a list containing all elements not
matching the given [predicate].\n * \n * @sample samples.collections.Collections.Filtering.filter\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.filterNot(predicate: (UInt) -> Boolean): List<UInt> {\n return filterNotTo(ArrayList<UInt>(),
predicate)\n}\n\n/**\n * Returns a list containing all elements not matching the given [predicate].\n * \n * @sample

```

```

samples.collections.Collections.Filtering.filter\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.filterNot(predicate: (UByte) -> Boolean): List<UByte> {\n return filterNotTo(ArrayList<UByte>(),
predicate)\n}\n\n/**\n * Returns a list containing all elements not matching the given [predicate].\n * \n * @sample
samples.collections.Collections.Filtering.filter\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.filterNot(predicate: (UShort) -> Boolean): List<UShort> {\n return
filterNotTo(ArrayList<UShort>(), predicate)\n}\n\n/**\n * Appends all elements not matching the given [predicate]
to the given [destination].\n * \n * @sample samples.collections.Collections.Filtering.filterTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in UInt>> UIntArray.filterNotTo(destination: C, predicate: (UInt) -> Boolean): C {\n for
(element in this) if (!predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends all
elements not matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in ULong>> ULongArray.filterNotTo(destination: C, predicate: (ULong) -> Boolean): C {\n
for (element in this) if (!predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends
all elements not matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in UByte>> UByteArray.filterNotTo(destination: C, predicate: (UByte) -> Boolean): C {\n for
(element in this) if (!predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends all
elements not matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in UShort>> UShortArray.filterNotTo(destination: C, predicate: (UShort) -> Boolean): C {\n
for (element in this) if (!predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends
all elements matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in UInt>> UIntArray.filterTo(destination: C, predicate: (UInt) -> Boolean): C {\n for (element
in this) if (predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends all elements
matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in ULong>> ULongArray.filterTo(destination: C, predicate: (ULong) -> Boolean): C {\n for
(element in this) if (predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends all
elements matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in UByte>> UByteArray.filterTo(destination: C, predicate: (UByte) -> Boolean): C {\n for
(element in this) if (predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Appends all
elements matching the given [predicate] to the given [destination].\n * \n * @sample
samples.collections.Collections.Filtering.filterTo\n

```

```

*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <C :
MutableCollection<in UShort>> UShortArray.filterTo(destination: C, predicate: (UShort) -> Boolean): C {\n for
(element in this) if (predicate(element)) destination.add(element)\n return destination\n}\n\n/**\n * Returns a list
containing elements at indices in the specified [indices] range.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.slice(indices: IntRange):
List<UInt> {\n if (indices.isEmpty()) return listOf()\n return copyOfRange(indices.start, indices.endInclusive +
1).asList()\n}\n\n/**\n * Returns a list containing elements at indices in the specified [indices] range.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.slice(indices: IntRange):
List<ULong> {\n if (indices.isEmpty()) return listOf()\n return copyOfRange(indices.start, indices.endInclusive
+ 1).asList()\n}\n\n/**\n * Returns a list containing elements at indices in the specified [indices] range.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.slice(indices: IntRange):
List<UByte> {\n if (indices.isEmpty()) return listOf()\n return copyOfRange(indices.start, indices.endInclusive
+ 1).asList()\n}\n\n/**\n * Returns a list containing elements at indices in the specified [indices] range.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.slice(indices: IntRange):
List<UShort> {\n if (indices.isEmpty()) return listOf()\n return copyOfRange(indices.start, indices.endInclusive
+ 1).asList()\n}\n\n/**\n * Returns a list containing elements at specified [indices].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.slice(indices: Iterable<Int>):
List<UInt> {\n val size = indices.collectionSizeOrDefault(10)\n if (size == 0) return emptyList()\n val list =
ArrayList<UInt>(size)\n for (index in indices) {\n list.add(get(index))\n }\n return list\n}\n\n/**\n *
Returns a list containing elements at specified [indices].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.slice(indices: Iterable<Int>):
List<ULong> {\n val size = indices.collectionSizeOrDefault(10)\n if (size == 0) return emptyList()\n val list =
ArrayList<ULong>(size)\n for (index in indices) {\n list.add(get(index))\n }\n return list\n}\n\n/**\n *
Returns a list containing elements at specified [indices].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.slice(indices: Iterable<Int>):
List<UByte> {\n val size = indices.collectionSizeOrDefault(10)\n if (size == 0) return emptyList()\n val list =
ArrayList<UByte>(size)\n for (index in indices) {\n list.add(get(index))\n }\n return list\n}\n\n/**\n *
Returns a list containing elements at specified [indices].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.slice(indices: Iterable<Int>):
List<UShort> {\n val size = indices.collectionSizeOrDefault(10)\n if (size == 0) return emptyList()\n val list =
ArrayList<UShort>(size)\n for (index in indices) {\n list.add(get(index))\n }\n return list\n}\n\n/**\n *
Returns an array containing elements of this array at specified [indices].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.sliceArray(indices:
Collection<Int>): UIntArray {\n return UIntArray(storage.sliceArray(indices))\n}\n\n/**\n * Returns an array
containing elements of this array at specified [indices].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.sliceArray(indices:
Collection<Int>): ULongArray {\n return ULongArray(storage.sliceArray(indices))\n}\n\n/**\n * Returns an array
containing elements of this array at specified [indices].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.sliceArray(indices:
Collection<Int>): UByteArray {\n return UByteArray(storage.sliceArray(indices))\n}\n\n/**\n * Returns an array
containing elements of this array at specified [indices].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.sliceArray(indices:
Collection<Int>): UShortArray {\n return UShortArray(storage.sliceArray(indices))\n}\n\n/**\n * Returns an
array containing elements at indices in the specified [indices] range.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.sliceArray(indices: IntRange):
UIntArray {\n return UIntArray(storage.sliceArray(indices))\n}\n\n/**\n * Returns an array containing elements at
indices in the specified [indices] range.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
ULongArray.sliceArray(indices: IntRange): ULongArray {\n return

```

```

UByteArray(storage.sliceArray(indices))\n\n/**\n * Returns an array containing elements at indices in the
specified [indices] range.\n *^\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
UByteArray.sliceArray(indices: IntRange): UByteArray {\n    return
UByteArray(storage.sliceArray(indices))\n\n\n/**\n * Returns an array containing elements at indices in the
specified [indices] range.\n *^\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
UShortArray.sliceArray(indices: IntRange): UShortArray {\n    return
UShortArray(storage.sliceArray(indices))\n\n\n/**\n * Returns a list containing first [n] elements.\n * \n *
@throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n
*^\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.take(n: Int): List<UInt> {\n
require(n >= 0) { "\nRequested element count $n is less than zero.\n" }\n    if (n == 0) return emptyList()\n    if (n >=
size) return toList()\n    if (n == 1) return listOf(this[0])\n    var count = 0\n    val list = ArrayList<UInt>(n)\n    for
(item in this) {\n        list.add(item)\n        if (++count == n)\n            break\n    }\n    return list\n}\n\n/**\n * Returns
a list containing first [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n
*^\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.take(n: Int): List<ULong> {\n
require(n >= 0) { "\nRequested element count $n is less than zero.\n" }\n    if (n == 0) return emptyList()\n    if (n >=
size) return toList()\n    if (n == 1) return listOf(this[0])\n    var count = 0\n    val list = ArrayList<ULong>(n)\n    for
(item in this) {\n        list.add(item)\n        if (++count == n)\n            break\n    }\n    return list\n}\n\n/**\n * Returns
a list containing first [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n
*^\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.take(n: Int): List<UByte> {\n
require(n >= 0) { "\nRequested element count $n is less than zero.\n" }\n    if (n == 0) return emptyList()\n    if (n >=
size) return toList()\n    if (n == 1) return listOf(this[0])\n    var count = 0\n    val list = ArrayList<UByte>(n)\n    for
(item in this) {\n        list.add(item)\n        if (++count == n)\n            break\n    }\n    return list\n}\n\n/**\n * Returns
a list containing first [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n
*^\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.take(n: Int): List<UShort> {\n
require(n >= 0) { "\nRequested element count $n is less than zero.\n" }\n    if (n == 0) return emptyList()\n    if (n >=
size) return toList()\n    if (n == 1) return listOf(this[0])\n    var count = 0\n    val list = ArrayList<UShort>(n)\n    for
(item in this) {\n        list.add(item)\n        if (++count == n)\n            break\n    }\n    return list\n}\n\n/**\n * Returns
a list containing last [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n
*^\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.takeLast(n: Int): List<UInt> {\n
require(n >= 0) { "\nRequested element count $n is less than zero.\n" }\n    if (n == 0) return emptyList()\n    val size =
size\n    if (n >= size) return toList()\n    if (n == 1) return listOf(this[size - 1])\n    val list = ArrayList<UInt>(n)\n
for (index in size - n until size)\n        list.add(this[index])\n    return list\n}\n\n/**\n * Returns a list containing last
[n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n
*^\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.takeLast(n: Int): List<ULong>\n
{\n    require(n >= 0) { "\nRequested element count $n is less than zero.\n" }\n    if (n == 0) return emptyList()\n    val
size = size\n    if (n >= size) return toList()\n    if (n == 1) return listOf(this[size - 1])\n    val list =
ArrayList<ULong>(n)\n    for (index in size - n until size)\n        list.add(this[index])\n    return list\n}\n\n/**\n * Returns
a list containing last [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample
samples.collections.Collections.Transformations.take\n
*^\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.takeLast(n: Int): List<UByte>\n
{\n    require(n >= 0) { "\nRequested element count $n is less than zero.\n" }\n    if (n == 0) return emptyList()\n    val
size = size\n    if (n >= size) return toList()\n    if (n == 1) return listOf(this[size - 1])\n    val list =

```

```

ArrayList<UByte>(n)\n  for (index in size - n until size)\n    list.add(this[index])\n  return list\n}\n\n/**\n * Returns a list containing last [n] elements.\n * \n * @throws IllegalArgumentException if [n] is negative.\n * \n * @sample samples.collections.Collections.Transformations.take\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.takeLast(n: Int): List<UShort>\n{\n  require(n >= 0) { "Requested element count $n is less than zero." }\n  if (n == 0) return emptyList()\n  val size = size\n  if (n >= size) return toList()\n  if (n == 1) return listOf(this[size - 1])\n  val list =\n  ArrayList<UShort>(n)\n  for (index in size - n until size)\n    list.add(this[index])\n  return list\n}\n\n/**\n * Returns a list containing last elements satisfying the given [predicate].\n * \n * @sample\n * samples.collections.Collections.Transformations.take\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUIntArray.takeLastWhile(predicate: (UInt) -> Boolean): List<UInt> {\n  for (index in lastIndex downTo 0) {\n    if (!predicate(this[index]))\n      return drop(index + 1)\n  }\n  return toList()\n}\n\n/**\n * Returns a list containing last elements satisfying the given [predicate].\n * \n * @sample\n * samples.collections.Collections.Transformations.take\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nULongArray.takeLastWhile(predicate: (ULong) -> Boolean): List<ULong> {\n  for (index in lastIndex downTo 0)\n  {\n    if (!predicate(this[index]))\n      return drop(index + 1)\n  }\n  return toList()\n}\n\n/**\n * Returns a list containing last elements satisfying the given [predicate].\n * \n * @sample\n * samples.collections.Collections.Transformations.take\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUByteArray.takeLastWhile(predicate: (UByte) -> Boolean): List<UByte> {\n  for (index in lastIndex downTo 0)\n  {\n    if (!predicate(this[index]))\n      return drop(index + 1)\n  }\n  return toList()\n}\n\n/**\n * Returns a list containing last elements satisfying the given [predicate].\n * \n * @sample\n * samples.collections.Collections.Transformations.take\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUShortArray.takeLastWhile(predicate: (UShort) -> Boolean): List<UShort> {\n  for (index in lastIndex downTo 0)\n  {\n    if (!predicate(this[index]))\n      return drop(index + 1)\n  }\n  return toList()\n}\n\n/**\n * Returns a list containing first elements satisfying the given [predicate].\n * \n * @sample\n * samples.collections.Collections.Transformations.take\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUIntArray.takeWhile(predicate: (UInt) -> Boolean): List<UInt> {\n  val list = ArrayList<UInt>()\n  for (item in this) {\n    if (!predicate(item))\n      break\n    list.add(item)\n  }\n  return list\n}\n\n/**\n * Returns a list containing first elements satisfying the given [predicate].\n * \n * @sample\n * samples.collections.Collections.Transformations.take\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nULongArray.takeWhile(predicate: (ULong) -> Boolean): List<ULong> {\n  val list = ArrayList<ULong>()\n  for (item in this) {\n    if (!predicate(item))\n      break\n    list.add(item)\n  }\n  return list\n}\n\n/**\n * Returns a list containing first elements satisfying the given [predicate].\n * \n * @sample\n * samples.collections.Collections.Transformations.take\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUByteArray.takeWhile(predicate: (UByte) -> Boolean): List<UByte> {\n  val list = ArrayList<UByte>()\n  for (item in this) {\n    if (!predicate(item))\n      break\n    list.add(item)\n  }\n  return list\n}\n\n/**\n * Returns a list containing first elements satisfying the given [predicate].\n * \n * @sample\n * samples.collections.Collections.Transformations.take\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUShortArray.takeWhile(predicate: (UShort) -> Boolean): List<UShort> {\n  val list = ArrayList<UShort>()\n  for (item in this) {\n    if (!predicate(item))\n      break\n    list.add(item)\n  }\n  return list\n}\n\n/**\n * Reverses elements in the array in-place.\n */

```

```

*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.reverse(): Unit {\n    storage.reverse()\n}\n\n/**\n * Reverses elements in the array in-place.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.reverse(): Unit {\n    storage.reverse()\n}\n\n/**\n * Reverses elements in the array in-place.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.reverse(): Unit {\n    storage.reverse()\n}\n\n/**\n * Reverses elements in the array in-place.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.reverse(): Unit {\n    storage.reverse()\n}\n\n/**\n * Reverses elements of the array in the specified
range in-place.\n * \n * @param fromIndex the start of the range (inclusive) to reverse.\n * @param toIndex the end
of the range (exclusive) to reverse.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero
or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater
than [toIndex].\n *\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun UIntArray.reverse(fromIndex: Int, toIndex: Int): Unit {\n    storage.reverse(fromIndex,
toIndex)\n}\n\n/**\n * Reverses elements of the array in the specified range in-place.\n * \n * @param fromIndex
the start of the range (inclusive) to reverse.\n * @param toIndex the end of the range (exclusive) to reverse.\n * \n *
@throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this
array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.reverse(fromIndex: Int, toIndex: Int): Unit {\n    storage.reverse(fromIndex, toIndex)\n}\n\n/**\n *
Reverses elements of the array in the specified range in-place.\n * \n * @param fromIndex the start of the range
(inclusive) to reverse.\n * @param toIndex the end of the range (exclusive) to reverse.\n * \n * @throws
IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n *
@throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.reverse(fromIndex: Int, toIndex: Int): Unit {\n    storage.reverse(fromIndex, toIndex)\n}\n\n/**\n *
Reverses elements of the array in the specified range in-place.\n * \n * @param fromIndex the start of the range
(inclusive) to reverse.\n * @param toIndex the end of the range (exclusive) to reverse.\n * \n * @throws
IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n *
@throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.reverse(fromIndex: Int, toIndex: Int): Unit {\n    storage.reverse(fromIndex, toIndex)\n}\n\n/**\n *
Returns a list with elements in reversed order.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic
fun UIntArray.reversed(): List<UInt> {\n    if (isEmpty()) return emptyList()\n    val list = toMutableList()\n
list.reverse()\n    return list\n}\n\n/**\n * Returns a list with elements in reversed order.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.reversed(): List<ULong> {\n
if (isEmpty()) return emptyList()\n    val list = toMutableList()\n    list.reverse()\n    return list\n}\n\n/**\n *
Returns a list with elements in reversed order.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
UByteArray.reversed(): List<UByte> {\n    if (isEmpty()) return emptyList()\n    val list = toMutableList()\n
list.reverse()\n    return list\n}\n\n/**\n * Returns a list with elements in reversed order.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.reversed(): List<UShort> {\n
if (isEmpty()) return emptyList()\n    val list = toMutableList()\n    list.reverse()\n    return list\n}\n\n/**\n *
Returns an array with elements of this array in reversed order.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.reversedArray(): UIntArray {\n    return UIntArray(storage.reversedArray())\n}\n\n/**\n * Returns an
array with elements of this array in reversed order.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.reversedArray(): ULongArray {\n    return ULongArray(storage.reversedArray())\n}\n\n/**\n * Returns
an array with elements of this array in reversed order.\n

```



```

*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.reversedArray(): UByteArray {\n    return UByteArray(storage.reversedArray())\n}\n\n/**\n * Returns
an array with elements of this array in reversed order.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.reversedArray(): UShortArray {\n    return UShortArray(storage.reversedArray())\n}\n\n/**\n *
Randomly shuffles elements in this array in-place.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.shuffle(): Unit {\n
shuffle(Random)\n}\n\n/**\n * Randomly shuffles elements in this array in-place.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.shuffle(): Unit {\n
shuffle(Random)\n}\n\n/**\n * Randomly shuffles elements in this array in-place.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.shuffle(): Unit {\n
shuffle(Random)\n}\n\n/**\n * Randomly shuffles elements in this array in-place.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.shuffle(): Unit {\n
shuffle(Random)\n}\n\n/**\n * Randomly shuffles elements in this array in-place using the specified [random]
instance as the source of randomness.\n * \n * See:
https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\_shuffle#The\_modern\_algorithm\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.shuffle(random: Random): Unit
{\n    for (i in lastIndex downTo 1) {\n        val j = random.nextInt(i + 1)\n        val copy = this[i]\n        this[i] =
this[j]\n        this[j] = copy\n    }\n}\n\n/**\n * Randomly shuffles elements in this array in-place using the specified
[random] instance as the source of randomness.\n * \n * See:
https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\_shuffle#The\_modern\_algorithm\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.shuffle(random: Random):
Unit {\n    for (i in lastIndex downTo 1) {\n        val j = random.nextInt(i + 1)\n        val copy = this[i]\n        this[i] =
this[j]\n        this[j] = copy\n    }\n}\n\n/**\n * Randomly shuffles elements in this array in-place using the specified
[random] instance as the source of randomness.\n * \n * See:
https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\_shuffle#The\_modern\_algorithm\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.shuffle(random: Random):
Unit {\n    for (i in lastIndex downTo 1) {\n        val j = random.nextInt(i + 1)\n        val copy = this[i]\n        this[i] =
this[j]\n        this[j] = copy\n    }\n}\n\n/**\n * Randomly shuffles elements in this array in-place using the specified
[random] instance as the source of randomness.\n * \n * See:
https://en.wikipedia.org/wiki/Fisher%20%80%93Yates\_shuffle#The\_modern\_algorithm\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.shuffle(random: Random):
Unit {\n    for (i in lastIndex downTo 1) {\n        val j = random.nextInt(i + 1)\n        val copy = this[i]\n        this[i] =
this[j]\n        this[j] = copy\n    }\n}\n\n/**\n * Sorts elements in the array in-place descending according to their
natural sort order.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
UIntArray.sortDescending(): Unit {\n    if (size > 1) {\n        sort()\n        reverse()\n    }\n}\n\n/**\n * Sorts elements
in the array in-place descending according to their natural sort order.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
ULongArray.sortDescending(): Unit {\n    if (size > 1) {\n        sort()\n        reverse()\n    }\n}\n\n/**\n * Sorts
elements in the array in-place descending according to their natural sort order.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
UShortArray.sortDescending(): Unit {\n    if (size > 1) {\n        sort()\n        reverse()\n    }\n}\n\n/**\n * Returns a list of all elements sorted according to their
natural sort order.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
UIntArray.sorted(): List<UInt> {\n    return copyOf().apply { sort() }.asList()\n}\n\n/**\n * Returns a list of all elements sorted
according to their natural sort order.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
ULongArray.sorted(): List<ULong> {\n    return copyOf().apply { sort() }.asList()\n}\n\n/**\n * Returns a list of all

```

elements sorted according to their natural sort order.\n

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.sorted(): List<UByte> {\n    return copyOf().apply { sort() }.asList()\n}\n\n/**\n * Returns a list of all elements sorted according to their natural\n * sort order.\n */\n\n*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.sorted():\nList<UShort> {\n    return copyOf().apply { sort() }.asList()\n}\n\n/**\n * Returns an array with all elements of this\n * array sorted according to their natural sort order.\n */
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.sortedArray(): UIntArray {\n    if (isEmpty()) return this\n    return this.copyOf().apply { sort() }\n}\n\n/**\n * Returns an array with all elements of\n * this array sorted according to their natural sort order.\n */
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.sortedArray(): ULongArray\n{\n    if (isEmpty()) return this\n    return this.copyOf().apply { sort() }\n}\n\n/**\n * Returns an array with all\n * elements of this array sorted according to their natural sort order.\n */
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.sortedArray(): UByteArray {\n    if (isEmpty()) return this\n    return this.copyOf().apply { sort() }\n}\n\n/**\n * Returns an array with all elements\n * of this array sorted according to their natural sort order.\n */
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.sortedArray(): UShortArray\n{\n    if (isEmpty()) return this\n    return this.copyOf().apply { sort() }\n}\n\n/**\n * Returns an array with all\n * elements of this array sorted descending according to their natural sort order.\n */
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.sortedArrayDescending():\nUIntArray {\n    if (isEmpty()) return this\n    return this.copyOf().apply { sortDescending() }\n}\n\n/**\n * Returns\n * an array with all elements of this array sorted descending according to their natural sort order.\n */
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.sortedArrayDescending():\nULongArray {\n    if (isEmpty()) return this\n    return this.copyOf().apply { sortDescending() }\n}\n\n/**\n * Returns an array with all elements of this array sorted descending according to their natural sort order.\n */
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.sortedArrayDescending():\nUByteArray {\n    if (isEmpty()) return this\n    return this.copyOf().apply { sortDescending() }\n}\n\n/**\n * Returns an array with all elements of this array sorted descending according to their natural sort order.\n */
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.sortedArrayDescending():\nUShortArray {\n    if (isEmpty()) return this\n    return this.copyOf().apply { sortDescending() }\n}\n\n/**\n * Returns a list of all elements sorted descending according to their natural sort order.\n * \n * The sort is _stable_. It\n * means that equal elements preserve their order relative to each other after sorting.\n */
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.sortedDescending(): List<UInt>\n{\n    return copyOf().apply { sort() }.reversed()\n}\n\n/**\n * Returns a list of all elements sorted descending\n * according to their natural sort order.\n * \n * The sort is _stable_. It means that equal elements preserve their order\n * relative to each other after sorting.\n */
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun\nULongArray.sortedDescending(): List<ULong> {\n    return copyOf().apply { sort() }.reversed()\n}\n\n/**\n * Returns a list of all elements sorted descending according to their natural sort order.\n * \n * The sort is _stable_. It\n * means that equal elements preserve their order relative to each other after sorting.\n */
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.sortedDescending():\nList<UByte> {\n    return copyOf().apply { sort() }.reversed()\n}\n\n/**\n * Returns a list of all elements sorted\n * descending according to their natural sort order.\n * \n * The sort is _stable_. It means that equal elements preserve\n * their order relative to each other after sorting.\n */\n\n*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.sortedDescending(): List<UShort> {\n    return copyOf().apply { sort() }.reversed()\n}\n\n/**\n * Returns an array of type [ByteArray], which is a view of this array where each element is a signed reinterpretation\n * of the corresponding element of this array.\n */
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUByteArray.asByteArray(): ByteArray {\n    return storage\n}\n\n/**\n * Returns an array of type [IntArray], which\n * is a view of this array where each element is a signed reinterpretation\n * of the corresponding element of this
```

```

array.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.asIntArray(): IntArray {\n    return storage\n}\n\n/**\n * Returns a [List] that wraps the original array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic expect fun UIntArray.asList():
List<UInt>\n\n/**\n * Returns a [List] that wraps the original array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic expect fun ULongArray.asList():
List<ULong>\n\n/**\n * Returns a [List] that wraps the original array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic expect fun UByteArray.asList():
List<UByte>\n\n/**\n * Returns a [List] that wraps the original array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic expect fun UShortArray.asList():
List<UShort>\n\n/**\n * Returns an array of type [LongArray], which is a view of this array where each element is
a signed reinterpretation\n * of the corresponding element of this array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.asLongArray(): LongArray {\n    return storage\n}\n\n/**\n * Returns an array of type [ShortArray],
which is a view of this array where each element is a signed reinterpretation\n * of the corresponding element of this
array.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.asShortArray(): ShortArray {\n    return storage\n}\n\n/**\n * Returns an array of type [UByteArray],
which is a view of this array where each element is an unsigned reinterpretation\n * of the corresponding element of
this array.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline
fun ByteArray.asUByteArray(): UByteArray {\n    return UByteArray(this)\n}\n\n/**\n * Returns an array of type
[UIntArray], which is a view of this array where each element is an unsigned reinterpretation\n * of the
corresponding element of this array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
IntArray.asUIntArray(): UIntArray {\n    return UIntArray(this)\n}\n\n/**\n * Returns an array of type
[ULongArray], which is a view of this array where each element is an unsigned reinterpretation\n * of the
corresponding element of this array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
LongArray.asULongArray(): ULongArray {\n    return ULongArray(this)\n}\n\n/**\n * Returns an array of type
[UShortArray], which is a view of this array where each element is an unsigned reinterpretation\n * of the
corresponding element of this array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ShortArray.asUShortArray(): UShortArray {\n    return UShortArray(this)\n}\n\n/**\n * Returns `true` if the two
specified arrays are *structurally* equal to one another,\n * i.e. contain the same number of the same elements in the
same order.\n *\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.")\n@SinceKotlin("1.3")\n@DeprecatedSinceKotlin(hiddenSince =
"1.4")\n@ExperimentalUnsignedTypes\npublic infix fun UIntArray.contentEquals(other: UIntArray): Boolean {\n
return this.contentEquals(other)\n}\n\n/**\n * Returns `true` if the two specified arrays are *structurally* equal to
one another,\n * i.e. contain the same number of the same elements in the same order.\n *\n@Deprecated("Use
Kotlin compiler 1.4 to avoid deprecation
warning.")\n@SinceKotlin("1.3")\n@DeprecatedSinceKotlin(hiddenSince =
"1.4")\n@ExperimentalUnsignedTypes\npublic infix fun ULongArray.contentEquals(other: ULongArray):
Boolean {\n    return this.contentEquals(other)\n}\n\n/**\n * Returns `true` if the two specified arrays are
*structurally* equal to one another,\n * i.e. contain the same number of the same elements in the same order.\n
*\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.")\n@SinceKotlin("1.3")\n@DeprecatedSinceKotlin(hiddenSince =
"1.4")\n@ExperimentalUnsignedTypes\npublic infix fun UByteArray.contentEquals(other: UByteArray): Boolean
{\n    return this.contentEquals(other)\n}\n\n/**\n * Returns `true` if the two specified arrays are *structurally* equal
to one another,\n * i.e. contain the same number of the same elements in the same order.\n *\n@Deprecated("Use
Kotlin compiler 1.4 to avoid deprecation

```

```

warning.\")\n@SinceKotlin("1.3")\n@DeprecatedSinceKotlin(hiddenSince =
"1.4")\n@ExperimentalUnsignedTypes\npublic infix fun UShortArray.contentEquals(other: UShortArray):
Boolean {\n    return this.contentEquals(other)\n}\n\n/**\n * Returns `true` if the two specified arrays are
*structurally* equal to one another,\n * i.e. contain the same number of the same elements in the same order.\n
*\n@\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic infix fun UIntArray?.contentEquals(other:
UIntArray?): Boolean {\n    return this?.storage.contentEquals(other?.storage)\n}\n\n/**\n * Returns `true` if the two
specified arrays are *structurally* equal to one another,\n * i.e. contain the same number of the same elements in the
same order.\n * \n@\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic infix fun
ULongArray?.contentEquals(other: ULongArray?): Boolean {\n    return
this?.storage.contentEquals(other?.storage)\n}\n\n/**\n * Returns `true` if the two specified arrays are *structurally*
equal to one another,\n * i.e. contain the same number of the same elements in the same order.\n
*\n@\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic infix fun UByteArray?.contentEquals(other:
UByteArray?): Boolean {\n    return this?.storage.contentEquals(other?.storage)\n}\n\n/**\n * Returns `true` if the
two specified arrays are *structurally* equal to one another,\n * i.e. contain the same number of the same elements
in the same order.\n * \n@\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic infix fun
UShortArray?.contentEquals(other: UShortArray?): Boolean {\n    return
this?.storage.contentEquals(other?.storage)\n}\n\n/**\n * Returns a hash code based on the contents of this array as
if it is [List].\n * \n@\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.\")\n@SinceKotlin("1.3")\n@DeprecatedSinceKotlin(hiddenSince =
"1.4")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.contentHashCode(): Int {\n    return
this.contentHashCode()\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n
*\n@\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.\")\n@SinceKotlin("1.3")\n@DeprecatedSinceKotlin(hiddenSince =
"1.4")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.contentHashCode(): Int {\n    return
this.contentHashCode()\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n
*\n@\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.\")\n@SinceKotlin("1.3")\n@DeprecatedSinceKotlin(hiddenSince =
"1.4")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.contentHashCode(): Int {\n    return
this.contentHashCode()\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n
*\n@\n@Deprecated("Use Kotlin compiler 1.4 to avoid deprecation
warning.\")\n@SinceKotlin("1.3")\n@DeprecatedSinceKotlin(hiddenSince =
"1.4")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.contentHashCode(): Int {\n    return
this.contentHashCode()\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it is [List].\n
*\n@\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UIntArray?.contentHashCode(): Int {\n
return this?.storage.contentHashCode()\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it
is [List].\n * \n@\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun
ULongArray?.contentHashCode(): Int {\n    return this?.storage.contentHashCode()\n}\n\n/**\n * Returns a hash
code based on the contents of this array as if it is [List].\n
*\n@\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UByteArray?.contentHashCode(): Int {\n
return this?.storage.contentHashCode()\n}\n\n/**\n * Returns a hash code based on the contents of this array as if it
is [List].\n * \n@\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun
UShortArray?.contentHashCode(): Int {\n    return this?.storage.contentHashCode()\n}\n\n/**\n * Returns a string
representation of the contents of the specified array as if it is [List].\n * \n * @sample
samples.collections.Arrays.ContentOperations.contentToString\n * \n@\n@Deprecated("Use Kotlin compiler 1.4 to
avoid deprecation warning.\")\n@SinceKotlin("1.3")\n@DeprecatedSinceKotlin(hiddenSince =
"1.4")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.contentToString(): String {\n    return
this.contentToString()\n}\n\n/**\n * Returns a string representation of the contents of the specified array as if it is
[List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n * \n@\n@Deprecated("Use

```

Kotlin compiler 1.4 to avoid deprecation

```
warning.\")\n@SinceKotlin(\"1.3\")\n@DeprecatedSinceKotlin(hiddenSince =  
\"1.4\")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.contentToString(): String {\n    return  
this.contentToString()\n}\n\n/**\n * Returns a string representation of the contents of the specified array as if it is  
[List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated(\"Use  
Kotlin compiler 1.4 to avoid deprecation
```

```
warning.\")\n@SinceKotlin(\"1.3\")\n@DeprecatedSinceKotlin(hiddenSince =  
\"1.4\")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.contentToString(): String {\n    return  
this.contentToString()\n}\n\n/**\n * Returns a string representation of the contents of the specified array as if it is  
[List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n */\n@Deprecated(\"Use  
Kotlin compiler 1.4 to avoid deprecation
```

```
warning.\")\n@SinceKotlin(\"1.3\")\n@DeprecatedSinceKotlin(hiddenSince =  
\"1.4\")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.contentToString(): String {\n    return  
this.contentToString()\n}\n\n/**\n * Returns a string representation of the contents of the specified array as if it is  
[List].\n * \n * @sample samples.collections.Arrays.ContentOperations.contentToString\n */
```

```
@SinceKotlin(\"1.4\")\n@ExperimentalUnsignedTypes\npublic fun UIntArray?.contentToString(): String {\n    return this?.joinToString(\" \", \" \", \"[\", \"]\") ?: \"null\"\n}\n\n/**\n * Returns a string representation of the contents of  
the specified array as if it is [List].\n * \n * @sample  
samples.collections.Arrays.ContentOperations.contentToString\n */
```

```
@SinceKotlin(\"1.4\")\n@ExperimentalUnsignedTypes\npublic fun ULongArray?.contentToString(): String {\n    return this?.joinToString(\" \", \" \", \"[\", \"]\") ?: \"null\"\n}\n\n/**\n * Returns a string representation of the contents of  
the specified array as if it is [List].\n * \n * @sample  
samples.collections.Arrays.ContentOperations.contentToString\n */
```

```
@SinceKotlin(\"1.4\")\n@ExperimentalUnsignedTypes\npublic fun UByteArray?.contentToString(): String {\n    return this?.joinToString(\" \", \" \", \"[\", \"]\") ?: \"null\"\n}\n\n/**\n * Returns a string representation of the contents of  
the specified array as if it is [List].\n * \n * @sample  
samples.collections.Arrays.ContentOperations.contentToString\n */
```

```
@SinceKotlin(\"1.4\")\n@ExperimentalUnsignedTypes\npublic fun UShortArray?.contentToString(): String {\n    return this?.joinToString(\" \", \" \", \"[\", \"]\") ?: \"null\"\n}\n\n/**\n * Copies this array or its subrange into the  
[destination] array and returns that array.\n * \n * It's allowed to pass the same array in the [destination] and even  
specify the subrange so that it overlaps with the destination range.\n * \n * @param destination the array to copy  
to.\n * @param destinationOffset the position in the [destination] array to copy to, 0 by default.\n * @param startIndex the beginning (inclusive) of the subrange to copy, 0 by default.\n * @param endIndex the end (exclusive)  
of the subrange to copy, size of this array by default.\n * @throws IndexOutOfBoundsException or  
[IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this array indices or when `startIndex  
> endIndex`.\n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array  
starting at the specified [destinationOffset],\n * or when that index is out of the [destination] array indices range.\n * \n * @return the [destination] array.\n */
```

```
@SinceKotlin(\"1.3\")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
UIntArray.copyInto(destination: UIntArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size):  
UIntArray {\n    storage.copyInto(destination.storage, destinationOffset, startIndex, endIndex)\n    return  
destination\n}\n\n/**\n * Copies this array or its subrange into the [destination] array and returns that array.\n * \n * It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the  
destination range.\n * \n * @param destination the array to copy to.\n * @param destinationOffset the position in the  
[destination] array to copy to, 0 by default.\n * @param startIndex the beginning (inclusive) of the subrange to copy,  
0 by default.\n * @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n * \n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of  
range of this array indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException when the
```

```

subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n * or when that index is
out of the [destination] array indices range.\n * \n * @return the [destination] array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.copyInto(destination: ULongArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size):
ULongArray {\n    storage.copyInto(destination.storage, destinationOffset, startIndex, endIndex)\n    return
destination}\n}\n\n/**\n * Copies this array or its subrange into the [destination] array and returns that array.\n * \n *
It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the
destination range.\n * \n * @param destination the array to copy to.\n * @param destinationOffset the position in the
[destination] array to copy to, 0 by default.\n * @param startIndex the beginning (inclusive) of the subrange to copy,
0 by default.\n * @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n * \n *
@throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of
range of this array indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException when the
subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n * or when that index is
out of the [destination] array indices range.\n * \n * @return the [destination] array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.copyInto(destination: UByteArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = size):
UByteArray {\n    storage.copyInto(destination.storage, destinationOffset, startIndex, endIndex)\n    return
destination}\n}\n\n/**\n * Copies this array or its subrange into the [destination] array and returns that array.\n * \n *
It's allowed to pass the same array in the [destination] and even specify the subrange so that it overlaps with the
destination range.\n * \n * @param destination the array to copy to.\n * @param destinationOffset the position in the
[destination] array to copy to, 0 by default.\n * @param startIndex the beginning (inclusive) of the subrange to copy,
0 by default.\n * @param endIndex the end (exclusive) of the subrange to copy, size of this array by default.\n * \n *
@throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of
range of this array indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException when the
subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n * or when that index is
out of the [destination] array indices range.\n * \n * @return the [destination] array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.copyInto(destination: UShortArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int =
size): UShortArray {\n    storage.copyInto(destination.storage, destinationOffset, startIndex, endIndex)\n    return
destination}\n}\n\n/**\n * Returns new array which is a copy of the original array.\n * \n * @sample
samples.collections.Arrays.CopyOfOperations.copyOfOf\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.copyOfOf(): UIntArray {\n    return UIntArray(storage.copyOfOf())}\n}\n\n/**\n * Returns new array which is
a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.copyOfOf(): ULongArray {\n    return ULongArray(storage.copyOfOf())}\n}\n\n/**\n * Returns new array
which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.copyOfOf(): UByteArray {\n    return UByteArray(storage.copyOfOf())}\n}\n\n/**\n * Returns new array
which is a copy of the original array.\n * \n * @sample samples.collections.Arrays.CopyOfOperations.copyOfOf\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.copyOfOf(): UShortArray {\n    return UShortArray(storage.copyOfOf())}\n}\n\n/**\n * Returns new array
which is a copy of the original array, resized to the given [newSize].\n * The copy is either truncated or padded at
the end with zero values if necessary.\n * \n * - If [newSize] is less than the size of the original array, the copy array
is truncated to the [newSize].\n * - If [newSize] is greater than the size of the original array, the extra elements in the
copy array are filled with zero values.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.copyOfOf(newSize: Int): UIntArray {\n    return UIntArray(storage.copyOfOf(newSize))}\n}\n\n/**\n *

```

Returns new array which is a copy of the original array, resized to the given [newSize].\n * The copy is either truncated or padded at the end with zero values if necessary.\n * - If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].\n * - If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with zero values.\n

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
ULongArray.copyOf(newSize: Int): ULongArray {\n    return ULongArray(storage.copyOf(newSize))\n}\n\n/n/**\n
```

Returns new array which is a copy of the original array, resized to the given [newSize].\n * The copy is either truncated or padded at the end with zero values if necessary.\n * - If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].\n * - If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with zero values.\n

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
UByteArray.copyOf(newSize: Int): UByteArray {\n    return UByteArray(storage.copyOf(newSize))\n}\n\n/n/**\n
```

Returns new array which is a copy of the original array, resized to the given [newSize].\n * The copy is either truncated or padded at the end with zero values if necessary.\n * - If [newSize] is less than the size of the original array, the copy array is truncated to the [newSize].\n * - If [newSize] is greater than the size of the original array, the extra elements in the copy array are filled with zero values.\n

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
UShortArray.copyOf(newSize: Int): UShortArray {\n    return UShortArray(storage.copyOf(newSize))\n}\n\n/n/**\n
```

Returns a new array which is a copy of the specified range of the original array.\n * \n * @param fromIndex the start of the range (inclusive) to copy.\n * @param toIndex the end of the range (exclusive) to copy.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
UIntArray.copyOfRange(fromIndex: Int, toIndex: Int): UIntArray {\n    return  
    UIntArray(storage.copyOfRange(fromIndex, toIndex))\n}\n\n/n/**\n
```

Returns a new array which is a copy of the specified range of the original array.\n * \n * @param fromIndex the start of the range (inclusive) to copy.\n * @param toIndex the end of the range (exclusive) to copy.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws
 IllegalArgumentException if [fromIndex] is greater than [toIndex].\n

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
ULongArray.copyOfRange(fromIndex: Int, toIndex: Int): ULongArray {\n    return  
    ULongArray(storage.copyOfRange(fromIndex, toIndex))\n}\n\n/n/**\n
```

Returns a new array which is a copy of the specified range of the original array.\n * \n * @param fromIndex the start of the range (inclusive) to copy.\n * @param toIndex the end of the range (exclusive) to copy.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws
 IllegalArgumentException if [fromIndex] is greater than [toIndex].\n

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
UByteArray.copyOfRange(fromIndex: Int, toIndex: Int): UByteArray {\n    return  
    UByteArray(storage.copyOfRange(fromIndex, toIndex))\n}\n\n/n/**\n
```

Returns a new array which is a copy of the specified range of the original array.\n * \n * @param fromIndex the start of the range (inclusive) to copy.\n * @param toIndex the end of the range (exclusive) to copy.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws
 IllegalArgumentException if [fromIndex] is greater than [toIndex].\n

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
UShortArray.copyOfRange(fromIndex: Int, toIndex: Int): UShortArray {\n    return  
    UShortArray(storage.copyOfRange(fromIndex, toIndex))\n}\n\n/n/**\n
```

Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n * \n * @throws

IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n *
 @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.fill(element: UInt, fromIndex: Int = 0, toIndex: Int = size): Unit {\n    storage.fill(element.toInt(), fromIndex, toIndex)\n}\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.fill(element: ULong, fromIndex: Int = 0, toIndex: Int = size): Unit {\n    storage.fill(element.toLong(), fromIndex, toIndex)\n}\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.fill(element: UByte, fromIndex: Int = 0, toIndex: Int = size): Unit {\n    storage.fill(element.toByte(), fromIndex, toIndex)\n}\n\n/**\n * Fills this array or its subrange with the specified [element] value.\n * \n * @param fromIndex the start of the range (inclusive) to fill, 0 by default.\n * @param toIndex the end of the range (exclusive) to fill, size of this array by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.fill(element: UShort, fromIndex: Int = 0, toIndex: Int = size): Unit {\n    storage.fill(element.toShort(), fromIndex, toIndex)\n}\n\n/**\n * Returns the range of valid indices for the array.\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic inline val UIntArray.indices: IntRange\n    get() = storage.indices\n\n/**\n * Returns the range of valid indices for the array.\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic inline val ULongArray.indices: IntRange\n    get() = storage.indices\n\n/**\n * Returns the range of valid indices for the array.\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic inline val UByteArray.indices: IntRange\n    get() = storage.indices\n\n/**\n * Returns the range of valid indices for the array.\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic inline val UShortArray.indices: IntRange\n    get() = storage.indices\n\n/**\n * Returns the last valid index for the array.\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic inline val UIntArray.lastIndex: Int\n    get() = storage.lastIndex\n\n/**\n * Returns the last valid index for the array.\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic inline val ULongArray.lastIndex: Int\n    get() = storage.lastIndex\n\n/**\n * Returns the last valid index for the array.\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic inline val UByteArray.lastIndex: Int\n    get() = storage.lastIndex\n\n/**\n * Returns the last valid index for the array.\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic inline val UShortArray.lastIndex: Int\n    get() = storage.lastIndex\n\n/**\n * Returns an array containing all elements of the original array and then the given [element].\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun UIntArray.plus(element: UInt): UIntArray {\n    return UIntArray(storage + element.toInt())\n}\n\n/**\n * Returns an array containing all elements of the original array and then the given [element].\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun ULongArray.plus(element: ULong): ULongArray {\n    return ULongArray(storage + element.toLong())\n}\n\n/**\n * Returns an array containing all elements of the original array and then the given [element].\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun UByteArray.plus(element: UByte): UByteArray {\n    return UByteArray(storage + element.toByte())\n}\n\n/**\n * Returns an array containing all elements of the original array and then the given [element].\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun UShortArray.plus(element: UShort): UShortArray {\n    return UShortArray(storage + element.toShort())\n}\n\n/**\n * Returns an array containing all elements of the original array and then the given [element].\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun UIntArray.plus(element: UInt): UIntArray {\n    return UIntArray(storage + element.toInt())\n}\n\n/**\n * Returns an array containing all elements of the original array and then the given [element].\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun ULongArray.plus(element: ULong): ULongArray {\n    return ULongArray(storage + element.toLong())\n}\n\n/**\n * Returns an array containing all elements of the original array and then the given [element].\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun UByteArray.plus(element: UByte): UByteArray {\n    return UByteArray(storage + element.toByte())\n}\n\n/**\n * Returns an array containing all elements of the original array and then the given [element].\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun UShortArray.plus(element: UShort): UShortArray {\n    return UShortArray(storage + element.toShort())\n}
```



```

[element].\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline
operator fun UShortArray.plus(element: UShort): UShortArray {\n    return UShortArray(storage +
element.toShort())\n}\n\n/**\n * Returns an array containing all elements of the original array and then all elements
of the given [elements] collection.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic operator
fun UIntArray.plus(elements: Collection<UInt>): UIntArray {\n    var index = size\n    val result =
storage.copyOfOf(size + elements.size)\n    for (element in elements) result[index++] = element.toInt()\n    return
UIntArray(result)\n}\n\n/**\n * Returns an array containing all elements of the original array and then all elements
of the given [elements] collection.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic operator
fun ULongArray.plus(elements: Collection<ULong>): ULongArray {\n    var index = size\n    val result =
storage.copyOfOf(size + elements.size)\n    for (element in elements) result[index++] = element.toLong()\n    return
ULongArray(result)\n}\n\n/**\n * Returns an array containing all elements of the original array and then all
elements of the given [elements] collection.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic
operator fun UByteArray.plus(elements: Collection<UByte>): UByteArray {\n    var index = size\n    val result =
storage.copyOfOf(size + elements.size)\n    for (element in elements) result[index++] = element.toByte()\n    return
UByteArray(result)\n}\n\n/**\n * Returns an array containing all elements of the original array and then all elements
of the given [elements] collection.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic operator
fun UShortArray.plus(elements: Collection<UShort>): UShortArray {\n    var index = size\n    val result =
storage.copyOfOf(size + elements.size)\n    for (element in elements) result[index++] = element.toShort()\n    return
UShortArray(result)\n}\n\n/**\n * Returns an array containing all elements of the original array and then all
elements of the given [elements] array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun
UIntArray.plus(elements: UIntArray): UIntArray {\n    return UIntArray(storage + elements.storage)\n}\n\n/**\n *
Returns an array containing all elements of the original array and then all elements of the given [elements] array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun
ULongArray.plus(elements: ULongArray): ULongArray {\n    return ULongArray(storage +
elements.storage)\n}\n\n/**\n * Returns an array containing all elements of the original array and then all elements
of the given [elements] array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun
UByteArray.plus(elements: UByteArray): UByteArray {\n    return UByteArray(storage +
elements.storage)\n}\n\n/**\n * Returns an array containing all elements of the original array and then all elements
of the given [elements] array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline operator fun
UShortArray.plus(elements: UShortArray): UShortArray {\n    return UShortArray(storage +
elements.storage)\n}\n\n/**\n * Sorts the array in-place.\n * \n * @sample
samples.collections.Arrays.Sorting.sortArray\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic
fun UIntArray.sort(): Unit {\n    if (size > 1) sortArray(this, 0, size)\n}\n\n/**\n * Sorts the array in-place.\n * \n *
@sample samples.collections.Arrays.Sorting.sortArray\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.sort(): Unit {\n    if (size > 1)
sortArray(this, 0, size)\n}\n\n/**\n * Sorts the array in-place.\n * \n * @sample
samples.collections.Arrays.Sorting.sortArray\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic
fun UByteArray.sort(): Unit {\n    if (size > 1) sortArray(this, 0, size)\n}\n\n/**\n * Sorts the array in-place.\n * \n *
@sample samples.collections.Arrays.Sorting.sortArray\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.sort(): Unit {\n    if (size > 1)
sortArray(this, 0, size)\n}\n\n/**\n * Sorts a range in the array in-place.\n * \n * @param fromIndex the start of the
range (inclusive) to sort, 0 by default.\n * @param toIndex the end of the range (exclusive) to sort, size of this array
by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater
than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n * \n *
@sample samples.collections.Arrays.Sorting.sortRangeOfArray\n

```

```

*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.sort(fromIndex: Int = 0, toIndex:
Int = size): Unit {\n  AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n  sortArray(this, fromIndex,
toIndex)\n}\n\n/**\n * Sorts a range in the array in-place.\n * \n * @param fromIndex the start of the range
(inclusive) to sort, 0 by default.\n * @param toIndex the end of the range (exclusive) to sort, size of this array by
default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater than
the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n * \n *
@sample samples.collections.Arrays.Sorting.sortRangeOfArray\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.sort(fromIndex: Int = 0,
toIndex: Int = size): Unit {\n  AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n  sortArray(this,
fromIndex, toIndex)\n}\n\n/**\n * Sorts a range in the array in-place.\n * \n * @param fromIndex the start of the
range (inclusive) to sort, 0 by default.\n * @param toIndex the end of the range (exclusive) to sort, size of this array
by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater
than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n * \n *
@sample samples.collections.Arrays.Sorting.sortRangeOfArray\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.sort(fromIndex: Int = 0,
toIndex: Int = size): Unit {\n  AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n  sortArray(this,
fromIndex, toIndex)\n}\n\n/**\n * Sorts a range in the array in-place.\n * \n * @param fromIndex the start of the
range (inclusive) to sort, 0 by default.\n * @param toIndex the end of the range (exclusive) to sort, size of this array
by default.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is greater
than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n * \n *
@sample samples.collections.Arrays.Sorting.sortRangeOfArray\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.sort(fromIndex: Int = 0,
toIndex: Int = size): Unit {\n  AbstractList.checkRangeIndexes(fromIndex, toIndex, size)\n  sortArray(this,
fromIndex, toIndex)\n}\n\n/**\n * Sorts elements of the array in the specified range in-place.\n * The elements are
sorted descending according to their natural sort order.\n * \n * @param fromIndex the start of the range (inclusive)
to sort.\n * @param toIndex the end of the range (exclusive) to sort.\n * \n * @throws IndexOutOfBoundsException
if [fromIndex] is less than zero or [toIndex] is greater than the size of this array.\n * @throws
IllegalArgumentException if [fromIndex] is greater than [toIndex].\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.sortDescending(fromIndex: Int,
toIndex: Int): Unit {\n  sort(fromIndex, toIndex)\n  reverse(fromIndex, toIndex)\n}\n\n/**\n * Sorts elements of
the array in the specified range in-place.\n * The elements are sorted descending according to their natural sort
order.\n * \n * @param fromIndex the start of the range (inclusive) to sort.\n * @param toIndex the end of the range
(exclusive) to sort.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is
greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.sortDescending(fromIndex:
Int, toIndex: Int): Unit {\n  sort(fromIndex, toIndex)\n  reverse(fromIndex, toIndex)\n}\n\n/**\n * Sorts elements
of the array in the specified range in-place.\n * The elements are sorted descending according to their natural sort
order.\n * \n * @param fromIndex the start of the range (inclusive) to sort.\n * @param toIndex the end of the range
(exclusive) to sort.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is
greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.sortDescending(fromIndex:
Int, toIndex: Int): Unit {\n  sort(fromIndex, toIndex)\n  reverse(fromIndex, toIndex)\n}\n\n/**\n * Sorts elements
of the array in the specified range in-place.\n * The elements are sorted descending according to their natural sort
order.\n * \n * @param fromIndex the start of the range (inclusive) to sort.\n * @param toIndex the end of the range
(exclusive) to sort.\n * \n * @throws IndexOutOfBoundsException if [fromIndex] is less than zero or [toIndex] is
greater than the size of this array.\n * @throws IllegalArgumentException if [fromIndex] is greater than [toIndex].\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.sortDescending(fromIndex:
Int, toIndex: Int): Unit {\n  sort(fromIndex, toIndex)\n  reverse(fromIndex, toIndex)\n}\n\n/**\n * Returns an

```

array of type [ByteArray], which is a copy of this array where each element is a signed reinterpretation of the corresponding element of this array.

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
UByteArray.toByteArray(): ByteArray {\n    return storage.copyOf()\n}\n\n/**\n * Returns an array of type  
[IntArray], which is a copy of this array where each element is a signed reinterpretation  
of the corresponding  
element of this array.
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
UIntArray.toIntArray(): IntArray {\n    return storage.copyOf()\n}\n\n/**\n * Returns an array of type [LongArray],  
which is a copy of this array where each element is a signed reinterpretation  
of the corresponding element of this  
array.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
ULongArray.toLongArray(): LongArray {\n    return storage.copyOf()\n}\n\n/**\n * Returns an array of type  
[ShortArray], which is a copy of this array where each element is a signed reinterpretation  
of the corresponding  
element of this array.
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
UShortArray.toShortArray(): ShortArray {\n    return storage.copyOf()\n}\n\n/**\n * Returns a *typed* object array  
containing all of the elements of this primitive array.
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.toTypedArray(): Array<UInt>  
{\n    return Array(size) { index -> this[index] }\n}\n\n/**\n * Returns a *typed* object array containing all of the  
elements of this primitive array.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun  
ULongArray.toTypedArray(): Array<ULong> {\n    return Array(size) { index -> this[index] }\n}\n\n/**\n * Returns a *typed* object array containing all of the elements of this primitive array.
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.toTypedArray():  
Array<UByte> {\n    return Array(size) { index -> this[index] }\n}\n\n/**\n * Returns a *typed* object array  
containing all of the elements of this primitive array.
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.toTypedArray():  
Array<UShort> {\n    return Array(size) { index -> this[index] }\n}\n\n/**\n * Returns an array of UByte containing  
all of the elements of this generic array.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun  
Array<out UByte>.toUByteArray(): UByteArray {\n    return UByteArray(size) { index -> this[index] }\n}\n\n/**\n * Returns an array of type [UByteArray], which is a copy of this array where each element is an unsigned  
reinterpretation  
of the corresponding element of this array.
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
ByteArray.toUByteArray(): UByteArray {\n    return UByteArray(this.copyOf())\n}\n\n/**\n * Returns an array of  
UInt containing all of the elements of this generic array.
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun Array<out UInt>.toUIntArray(): UIntArray  
{\n    return UIntArray(size) { index -> this[index] }\n}\n\n/**\n * Returns an array of type [UIntArray], which is a  
copy of this array where each element is an unsigned reinterpretation  
of the corresponding element of this  
array.
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
IntArray.toUIntArray(): UIntArray {\n    return UIntArray(this.copyOf())\n}\n\n/**\n * Returns an array of ULong  
containing all of the elements of this generic array.
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun Array<out ULong>.toULongArray():  
ULongArray {\n    return ULongArray(size) { index -> this[index] }\n}\n\n/**\n * Returns an array of type  
[ULongArray], which is a copy of this array where each element is an unsigned reinterpretation  
of the  
corresponding element of this array.
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
LongArray.toULongArray(): ULongArray {\n    return ULongArray(this.copyOf())\n}\n\n/**\n * Returns an array  
of UShort containing all of the elements of this generic array.
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun Array<out UShort>.toUShortArray():  
UShortArray {\n    return UShortArray(size) { index -> this[index] }\n}\n\n/**\n * Returns an array of type
```

[UShortArray], which is a copy of this array where each element is an unsigned reinterpretation of the corresponding element of this array.

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun  
ShortArray.toUShortArray(): UShortArray {\n    return UShortArray(this.copyOf())\n}\n\n/**\n * Returns a [Map]  
where keys are elements from the given array and values are  
* produced by the [valueSelector] function applied to  
each element.\n * \n * If any two elements are equal, the last one gets added to the map.\n * \n * The returned map  
preserves the entry iteration order of the original array.\n * \n * @sample  
samples.collections.Collections.Transformations.associateWith\n
```

```
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V>  
UIntArray.associateWith(valueSelector: (UInt) -> V): Map<UInt, V> {\n    val result = LinkedHashMap<UInt,  
V>(mapCapacity(size).coerceAtLeast(16))\n    return associateWithTo(result, valueSelector)\n}\n\n/**\n * Returns a [Map] where keys are elements from the given array and values are  
* produced by the [valueSelector] function  
applied to each element.\n * \n * If any two elements are equal, the last one gets added to the map.\n * \n * The  
returned map preserves the entry iteration order of the original array.\n * \n * @sample  
samples.collections.Collections.Transformations.associateWith\n
```

```
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V>  
ULongArray.associateWith(valueSelector: (ULong) -> V): Map<ULong, V> {\n    val result =  
LinkedHashMap<ULong, V>(mapCapacity(size).coerceAtLeast(16))\n    return associateWithTo(result,  
valueSelector)\n}\n\n/**\n * Returns a [Map] where keys are elements from the given array and values are  
* produced by the [valueSelector] function applied to each element.\n * \n * If any two elements are equal, the last one  
gets added to the map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n *  
@sample samples.collections.Collections.Transformations.associateWith\n
```

```
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V>  
UByteArray.associateWith(valueSelector: (UByte) -> V): Map<UByte, V> {\n    val result =  
LinkedHashMap<UByte, V>(mapCapacity(size).coerceAtLeast(16))\n    return associateWithTo(result,  
valueSelector)\n}\n\n/**\n * Returns a [Map] where keys are elements from the given array and values are  
* produced by the [valueSelector] function applied to each element.\n * \n * If any two elements are equal, the last one  
gets added to the map.\n * \n * The returned map preserves the entry iteration order of the original array.\n * \n *  
@sample samples.collections.Collections.Transformations.associateWith\n
```

```
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V>  
UShortArray.associateWith(valueSelector: (UShort) -> V): Map<UShort, V> {\n    val result =  
LinkedHashMap<UShort, V>(mapCapacity(size).coerceAtLeast(16))\n    return associateWithTo(result,  
valueSelector)\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs for each  
element of the given array,\n * where key is the element itself and value is provided by the [valueSelector] function  
applied to that key.\n * \n * If any two elements are equal, the last one overwrites the former value in the map.\n * \n *  
@sample samples.collections.Collections.Transformations.associateWithTo\n
```

```
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V, M :  
MutableMap<in UInt, in V>> UIntArray.associateWithTo(destination: M, valueSelector: (UInt) -> V): M {\n    for  
(element in this) {\n        destination.put(element, valueSelector(element))\n    }\n    return destination\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs for each element of the given array,\n * where key is the element itself and value is provided by the [valueSelector] function applied to that key.\n * \n * If  
any two elements are equal, the last one overwrites the former value in the map.\n * \n * @sample  
samples.collections.Collections.Transformations.associateWithTo\n
```

```
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V, M :  
MutableMap<in ULong, in V>> ULongArray.associateWithTo(destination: M, valueSelector: (ULong) -> V): M  
{\n    for (element in this) {\n        destination.put(element, valueSelector(element))\n    }\n    return  
destination\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs for each element  
of the given array,\n * where key is the element itself and value is provided by the [valueSelector] function applied
```

to that key.\n * \n * If any two elements are equal, the last one overwrites the former value in the map.\n * \n *
@sample samples.collections.Collections.Transformations.associateWithTo\n

```
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V, M : MutableMap<in UByte, in V>> UByteArray.associateWithTo(destination: M, valueSelector: (UByte) -> V): M {\n    for (element in this) {\n        destination.put(element, valueSelector(element))\n    }\n    return destination\n}\n\n/**\n * Populates and returns the [destination] mutable map with key-value pairs for each element of the given array,\n * where key is the element itself and value is provided by the [valueSelector] function applied to that key.\n * \n * If any two elements are equal, the last one overwrites the former value in the map.\n * \n * @sample samples.collections.Collections.Transformations.associateWithTo\n */\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V, M : MutableMap<in UShort, in V>> UShortArray.associateWithTo(destination: M, valueSelector: (UShort) -> V): M {\n    for (element in this) {\n        destination.put(element, valueSelector(element))\n    }\n    return destination\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being invoked on each element of original array.\n * \n * @sample samples.collections.Collections.Transformations.flatMap\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R> UIntArray.flatMap(transform: (UInt) -> Iterable<R>): List<R> {\n    return flatMapTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being invoked on each element of original array.\n * \n * @sample samples.collections.Collections.Transformations.flatMap\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R> ULongArray.flatMap(transform: (ULong) -> Iterable<R>): List<R> {\n    return flatMapTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being invoked on each element of original array.\n * \n * @sample samples.collections.Collections.Transformations.flatMap\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R> UByteArray.flatMap(transform: (UByte) -> Iterable<R>): List<R> {\n    return flatMapTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being invoked on each element of original array.\n * \n * @sample samples.collections.Collections.Transformations.flatMap\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R> UShortArray.flatMap(transform: (UShort) -> Iterable<R>): List<R> {\n    return flatMapTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n * @sample samples.collections.Collections.Transformations.flatMapIndexed\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R> UIntArray.flatMapIndexed(transform: (index: Int, UInt) -> Iterable<R>): List<R> {\n    return flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n * @sample samples.collections.Collections.Transformations.flatMapIndexed\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolutionByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R> ULongArray.flatMapIndexed(transform: (index: Int, ULong) -> Iterable<R>): List<R> {\n    return flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n * @sample samples.collections.Collections.Transformations.flatMapIndexed\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
```

```

ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UByteArray.flatMapIndexed(transform: (index: Int, UByte) -> Iterable<R>): List<R> {\n return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Returns a single list of all elements yielded from
results of [transform] function being invoked on each element\n * and its index in the original array.\n * \n *
@sample samples.collections.Collections.Transformations.flatMapIndexed\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UShortArray.flatMapIndexed(transform: (index: Int, UShort) -> Iterable<R>): List<R> {\n return
flatMapIndexedTo(ArrayList<R>(), transform)\n}\n\n/**\n * Appends all elements yielded from results of
[transform] function being invoked on each element\n * and its index in the original array, to the given
[destination].\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
MutableCollection<in R>> UIntArray.flatMapIndexedTo(destination: C, transform: (index: Int, UInt) ->
Iterable<R>): C {\n var index = 0\n for (element in this) {\n val list = transform(index++, element)\n
destination.addAll(list)\n }\n return destination\n}\n\n/**\n * Appends all elements yielded from results of
[transform] function being invoked on each element\n * and its index in the original array, to the given
[destination].\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
MutableCollection<in R>> ULongArray.flatMapIndexedTo(destination: C, transform: (index: Int, ULong) ->
Iterable<R>): C {\n var index = 0\n for (element in this) {\n val list = transform(index++, element)\n
destination.addAll(list)\n }\n return destination\n}\n\n/**\n * Appends all elements yielded from results of
[transform] function being invoked on each element\n * and its index in the original array, to the given
[destination].\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
MutableCollection<in R>> UByteArray.flatMapIndexedTo(destination: C, transform: (index: Int, UByte) ->
Iterable<R>): C {\n var index = 0\n for (element in this) {\n val list = transform(index++, element)\n
destination.addAll(list)\n }\n return destination\n}\n\n/**\n * Appends all elements yielded from results of
[transform] function being invoked on each element\n * and its index in the original array, to the given
[destination].\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
MutableCollection<in R>> UShortArray.flatMapIndexedTo(destination: C, transform: (index: Int, UShort) ->
Iterable<R>): C {\n var index = 0\n for (element in this) {\n val list = transform(index++, element)\n
destination.addAll(list)\n }\n return destination\n}\n\n/**\n * Appends all elements yielded from results of
[transform] function being invoked on each element of original array, to the given [destination].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
MutableCollection<in R>> UIntArray.flatMapTo(destination: C, transform: (UInt) -> Iterable<R>): C {\n for
(element in this) {\n val list = transform(element)\n destination.addAll(list)\n }\n return
destination\n}\n\n/**\n * Appends all elements yielded from results of [transform] function being invoked on each
element of original array, to the given [destination].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
MutableCollection<in R>> ULongArray.flatMapTo(destination: C, transform: (ULong) -> Iterable<R>): C {\n for
(element in this) {\n val list = transform(element)\n destination.addAll(list)\n }\n return
destination\n}\n\n/**\n * Appends all elements yielded from results of [transform] function being invoked on each
element of original array, to the given [destination].\n

```

```

*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
MutableCollection<in R>> UByteArray.flatMapTo(destination: C, transform: (UByte) -> Iterable<R>): C {\n for
(element in this) {\n val list = transform(element)\n destination.addAll(list)\n }\n return
destination\n}\n\n/**\n * Appends all elements yielded from results of [transform] function being invoked on each
element of original array, to the given [destination].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
MutableCollection<in R>> UShortArray.flatMapTo(destination: C, transform: (UShort) -> Iterable<R>): C {\n for
(element in this) {\n val list = transform(element)\n destination.addAll(list)\n }\n return
destination\n}\n\n/**\n * Groups elements of the original array by the key returned by the given [keySelector]
function\n * applied to each element and returns a map where each group key is associated with a list of
corresponding elements.\n * \n * The returned map preserves the entry iteration order of the keys produced from the
original array.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K>
UIntArray.groupBy(keySelector: (UInt) -> K): Map<K, List<UInt>> {\n return groupByTo(LinkedHashMap<K,
MutableList<UInt>>(), keySelector)\n}\n\n/**\n * Groups elements of the original array by the key returned by the
given [keySelector] function\n * applied to each element and returns a map where each group key is associated with
a list of corresponding elements.\n * \n * The returned map preserves the entry iteration order of the keys produced
from the original array.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K>
ULongArray.groupBy(keySelector: (ULong) -> K): Map<K, List<ULong>> {\n return
groupByTo(LinkedHashMap<K, MutableList<ULong>>(), keySelector)\n}\n\n/**\n * Groups elements of the
original array by the key returned by the given [keySelector] function\n * applied to each element and returns a map
where each group key is associated with a list of corresponding elements.\n * \n * The returned map preserves the
entry iteration order of the keys produced from the original array.\n * \n * @sample
samples.collections.Collections.Transformations.groupBy\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K>
UByteArray.groupBy(keySelector: (UByte) -> K): Map<K, List<UByte>> {\n return
groupByTo(LinkedHashMap<K, MutableList<UByte>>(), keySelector)\n}\n\n/**\n * Groups elements of the
original array by the key returned by the given [keySelector] function\n * applied to each element and returns a map
where each group key is associated with a list of corresponding elements.\n * \n * The returned map preserves the
entry iteration order of the keys produced from the original array.\n * \n * @sample
samples.collections.Collections.Transformations.groupBy\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K>
UShortArray.groupBy(keySelector: (UShort) -> K): Map<K, List<UShort>> {\n return
groupByTo(LinkedHashMap<K, MutableList<UShort>>(), keySelector)\n}\n\n/**\n * Groups values returned by
the [valueTransform] function applied to each element of the original array\n * by the key returned by the given
[keySelector] function applied to the element\n * and returns a map where each group key is associated with a list of
corresponding values.\n * \n * The returned map preserves the entry iteration order of the keys produced from the
original array.\n * \n * @sample samples.collections.Collections.Transformations.groupByKeysAndValues\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K, V>
UIntArray.groupBy(keySelector: (UInt) -> K, valueTransform: (UInt) -> V): Map<K, List<V>> {\n return
groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n}\n\n/**\n * Groups values
returned by the [valueTransform] function applied to each element of the original array\n * by the key returned by
the given [keySelector] function applied to the element\n * and returns a map where each group key is associated
with a list of corresponding values.\n * \n * The returned map preserves the entry iteration order of the keys
produced from the original array.\n * \n * @sample
samples.collections.Collections.Transformations.groupByKeysAndValues\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K, V>

```

```

ULongArray.groupBy(keySelector: (ULong) -> K, valueTransform: (ULong) -> V): Map<K, List<V>> {\n  return
groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n}\n\n/**\n * Groups values
returned by the [valueTransform] function applied to each element of the original array\n * by the key returned by
the given [keySelector] function applied to the element\n * and returns a map where each group key is associated
with a list of corresponding values.\n * \n * The returned map preserves the entry iteration order of the keys
produced from the original array.\n * \n * @sample
samples.collections.Collections.Transformations.groupByKeysAndValues\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K, V>
UByteArray.groupBy(keySelector: (UByte) -> K, valueTransform: (UByte) -> V): Map<K, List<V>> {\n  return
groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n}\n\n/**\n * Groups values
returned by the [valueTransform] function applied to each element of the original array\n * by the key returned by
the given [keySelector] function applied to the element\n * and returns a map where each group key is associated
with a list of corresponding values.\n * \n * The returned map preserves the entry iteration order of the keys
produced from the original array.\n * \n * @sample
samples.collections.Collections.Transformations.groupByKeysAndValues\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K, V>
UShortArray.groupBy(keySelector: (UShort) -> K, valueTransform: (UShort) -> V): Map<K, List<V>> {\n  return
groupByTo(LinkedHashMap<K, MutableList<V>>(), keySelector, valueTransform)\n}\n\n/**\n * Groups elements
of the original array by the key returned by the given [keySelector] function\n * applied to each element and puts to
the [destination] map each group key associated with a list of corresponding elements.\n * \n * @return The
[destination] map.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K, M :
MutableMap<in K, MutableList<UInt>>> UIntArray.groupByTo(destination: M, keySelector: (UInt) -> K): M {\n
for (element in this) {\n    val key = keySelector(element)\n    val list = destination.getOrPut(key) {\n
ArrayList<UInt>()\n    list.add(element)\n    }\n    return destination\n}\n\n/**\n * Groups elements of the
original array by the key returned by the given [keySelector] function\n * applied to each element and puts to the
[destination] map each group key associated with a list of corresponding elements.\n * \n * @return The
[destination] map.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K, M :
MutableMap<in K, MutableList<ULong>>> ULongArray.groupByTo(destination: M, keySelector: (ULong) -> K):
M {\n for (element in this) {\n    val key = keySelector(element)\n    val list = destination.getOrPut(key) {\n
ArrayList<ULong>()\n    list.add(element)\n    }\n    return destination\n}\n\n/**\n * Groups elements of the
original array by the key returned by the given [keySelector] function\n * applied to each element and puts to the
[destination] map each group key associated with a list of corresponding elements.\n * \n * @return The
[destination] map.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K, M :
MutableMap<in K, MutableList<UByte>>> UByteArray.groupByTo(destination: M, keySelector: (UByte) -> K):
M {\n for (element in this) {\n    val key = keySelector(element)\n    val list = destination.getOrPut(key) {\n
ArrayList<UByte>()\n    list.add(element)\n    }\n    return destination\n}\n\n/**\n * Groups elements of the
original array by the key returned by the given [keySelector] function\n * applied to each element and puts to the
[destination] map each group key associated with a list of corresponding elements.\n * \n * @return The
[destination] map.\n * \n * @sample samples.collections.Collections.Transformations.groupBy\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K, M :
MutableMap<in K, MutableList<UShort>>> UShortArray.groupByTo(destination: M, keySelector: (UShort) -> K):
M {\n for (element in this) {\n    val key = keySelector(element)\n    val list = destination.getOrPut(key) {\n
ArrayList<UShort>()\n    list.add(element)\n    }\n    return destination\n}\n\n/**\n * Groups values returned by
the [valueTransform] function applied to each element of the original array\n * by the key returned by the given
[keySelector] function applied to the element\n * and puts to the [destination] map each group key associated with a

```



```

list of corresponding values.\n * \n * @return The [destination] map.\n * \n * @sample
samples.collections.Collections.Transformations.groupByKeysAndValues\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K, V,
M : MutableMap<in K, MutableList<V>>> UIntArray.groupByTo(destination: M, keySelector: (UInt) -> K,
valueTransform: (UInt) -> V): M {\n    for (element in this) {\n        val key = keySelector(element)\n        val list =
destination.getOrPut(key) { ArrayList<V>() }\n        list.add(valueTransform(element))\n    }\n    return
destination\n}\n\n**\n * Groups values returned by the [valueTransform] function applied to each element of the
original array\n * by the key returned by the given [keySelector] function applied to the element\n * and puts to the
[destination] map each group key associated with a list of corresponding values.\n * \n * @return The [destination]
map.\n * \n * @sample samples.collections.Collections.Transformations.groupByKeysAndValues\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K, V,
M : MutableMap<in K, MutableList<V>>> ULongArray.groupByTo(destination: M, keySelector: (ULong) -> K,
valueTransform: (ULong) -> V): M {\n    for (element in this) {\n        val key = keySelector(element)\n        val list =
destination.getOrPut(key) { ArrayList<V>() }\n        list.add(valueTransform(element))\n    }\n    return
destination\n}\n\n**\n * Groups values returned by the [valueTransform] function applied to each element of the
original array\n * by the key returned by the given [keySelector] function applied to the element\n * and puts to the
[destination] map each group key associated with a list of corresponding values.\n * \n * @return The [destination]
map.\n * \n * @sample samples.collections.Collections.Transformations.groupByKeysAndValues\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K, V,
M : MutableMap<in K, MutableList<V>>> UByteArray.groupByTo(destination: M, keySelector: (UByte) -> K,
valueTransform: (UByte) -> V): M {\n    for (element in this) {\n        val key = keySelector(element)\n        val list =
destination.getOrPut(key) { ArrayList<V>() }\n        list.add(valueTransform(element))\n    }\n    return
destination\n}\n\n**\n * Groups values returned by the [valueTransform] function applied to each element of the
original array\n * by the key returned by the given [keySelector] function applied to the element\n * and puts to the
[destination] map each group key associated with a list of corresponding values.\n * \n * @return The [destination]
map.\n * \n * @sample samples.collections.Collections.Transformations.groupByKeysAndValues\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <K, V,
M : MutableMap<in K, MutableList<V>>> UShortArray.groupByTo(destination: M, keySelector: (UShort) -> K,
valueTransform: (UShort) -> V): M {\n    for (element in this) {\n        val key = keySelector(element)\n        val list =
destination.getOrPut(key) { ArrayList<V>() }\n        list.add(valueTransform(element))\n    }\n    return
destination\n}\n\n**\n * Returns a list containing the results of applying the given [transform] function\n * to each
element in the original array.\n * \n * @sample samples.collections.Collections.Transformations.map\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UIntArray.map(transform: (UInt) -> R): List<R> {\n    return mapTo(ArrayList<R>(size), transform)\n}\n\n**\n * Returns a list containing the results of applying the given [transform] function\n * to each element in the original
array.\n * \n * @sample samples.collections.Collections.Transformations.map\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
ULongArray.map(transform: (ULong) -> R): List<R> {\n    return mapTo(ArrayList<R>(size),
transform)\n}\n\n**\n * Returns a list containing the results of applying the given [transform] function\n * to each
element in the original array.\n * \n * @sample samples.collections.Collections.Transformations.map\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UByteArray.map(transform: (UByte) -> R): List<R> {\n    return mapTo(ArrayList<R>(size),
transform)\n}\n\n**\n * Returns a list containing the results of applying the given [transform] function\n * to each
element in the original array.\n * \n * @sample samples.collections.Collections.Transformations.map\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UShortArray.map(transform: (UShort) -> R): List<R> {\n    return mapTo(ArrayList<R>(size),
transform)\n}\n\n**\n * Returns a list containing the results of applying the given [transform] function\n * to each
element and its index in the original array.\n * @param [transform] function that takes the index of an element and

```

the element itself\n * and returns the result of the transform applied to the element.\n

```

*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UIntArray.mapIndexed(transform: (index: Int, UInt) -> R): List<R> {\n    return
mapIndexedTo(ArrayList<R>(size), transform)\n}\n\n/**\n * Returns a list containing the results of applying the
given [transform] function\n * to each element and its index in the original array.\n * @param [transform] function
that takes the index of an element and the element itself\n * and returns the result of the transform applied to the
element.\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline
fun <R> ULongArray.mapIndexed(transform: (index: Int, ULong) -> R): List<R> {\n    return
mapIndexedTo(ArrayList<R>(size), transform)\n}\n\n/**\n * Returns a list containing the results of applying the
given [transform] function\n * to each element and its index in the original array.\n * @param [transform] function
that takes the index of an element and the element itself\n * and returns the result of the transform applied to the
element.\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline
fun <R> UByteArray.mapIndexed(transform: (index: Int, UByte) -> R): List<R> {\n    return
mapIndexedTo(ArrayList<R>(size), transform)\n}\n\n/**\n * Returns a list containing the results of applying the
given [transform] function\n * to each element and its index in the original array.\n * @param [transform] function
that takes the index of an element and the element itself\n * and returns the result of the transform applied to the
element.\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline
fun <R> UShortArray.mapIndexed(transform: (index: Int, UShort) -> R): List<R> {\n    return
mapIndexedTo(ArrayList<R>(size), transform)\n}\n\n/**\n * Applies the given [transform] function to each
element and its index in the original array\n * and appends the results to the given [destination].\n * @param
[transform] function that takes the index of an element and the element itself\n * and returns the result of the
transform applied to the element.\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
MutableCollection<in R>> UIntArray.mapIndexedTo(destination: C, transform: (index: Int, UInt) -> R): C {\n    var
index = 0\n    for (item in this)\n        destination.add(transform(index++, item))\n    return destination\n}\n\n/**\n * Applies the given [transform] function to each element and its index in the original array\n * and appends the results to the given [destination].\n * @param [transform] function that takes the index of an element and the element
itself\n * and returns the result of the transform applied to the element.\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
MutableCollection<in R>> ULongArray.mapIndexedTo(destination: C, transform: (index: Int, ULong) -> R): C {\n    var
index = 0\n    for (item in this)\n        destination.add(transform(index++, item))\n    return
destination\n}\n\n/**\n * Applies the given [transform] function to each element and its index in the original array\n *
and appends the results to the given [destination].\n * @param [transform] function that takes the index of an
element and the element itself\n * and returns the result of the transform applied to the element.\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
MutableCollection<in R>> UByteArray.mapIndexedTo(destination: C, transform: (index: Int, UByte) -> R): C {\n    var
index = 0\n    for (item in this)\n        destination.add(transform(index++, item))\n    return
destination\n}\n\n/**\n * Applies the given [transform] function to each element and its index in the original array\n *
and appends the results to the given [destination].\n * @param [transform] function that takes the index of an
element and the element itself\n * and returns the result of the transform applied to the element.\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
MutableCollection<in R>> UShortArray.mapIndexedTo(destination: C, transform: (index: Int, UShort) -> R): C {\n    var
index = 0\n    for (item in this)\n        destination.add(transform(index++, item))\n    return
destination\n}\n\n/**\n * Applies the given [transform] function to each element of the original array\n * and
appends the results to the given [destination].\n */\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
MutableCollection<in R>> UIntArray.mapTo(destination: C, transform: (UInt) -> R): C {\n    for (item in this)\n        destination.add(transform(item))\n    return destination\n}\n\n/**\n * Applies the given [transform] function to each

```

element of the original array\n * and appends the results to the given [destination].\n

```

*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
MutableCollection<in R>> ULongArray.mapTo(destination: C, transform: (ULong) -> R): C {\n  for (item in
this)\n    destination.add(transform(item))\n  return destination\n}\n\n/**\n * Applies the given [transform]
function to each element of the original array\n * and appends the results to the given [destination].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
MutableCollection<in R>> UByteArray.mapTo(destination: C, transform: (UByte) -> R): C {\n  for (item in this)\n
destination.add(transform(item))\n  return destination\n}\n\n/**\n * Applies the given [transform] function to
each element of the original array\n * and appends the results to the given [destination].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, C :
MutableCollection<in R>> UShortArray.mapTo(destination: C, transform: (UShort) -> R): C {\n  for (item in
this)\n    destination.add(transform(item))\n  return destination\n}\n\n/**\n * Returns a lazy [Iterable] that wraps
each element of the original array\n * into an [IndexedValue] containing the index of that element and the element
itself.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.withIndex():
Iterable<IndexedValue<UInt>> {\n  return IndexingIterable { iterator() }\n}\n\n/**\n * Returns a lazy [Iterable]
that wraps each element of the original array\n * into an [IndexedValue] containing the index of that element and the
element itself.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.withIndex():
Iterable<IndexedValue<ULong>> {\n  return IndexingIterable { iterator() }\n}\n\n/**\n * Returns a lazy [Iterable]
that wraps each element of the original array\n * into an [IndexedValue] containing the index of that element and the
element itself.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.withIndex():
Iterable<IndexedValue<UByte>> {\n  return IndexingIterable { iterator() }\n}\n\n/**\n * Returns a lazy [Iterable]
that wraps each element of the original array\n * into an [IndexedValue] containing the index of that element and the
element itself.\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.withIndex():
Iterable<IndexedValue<UShort>> {\n  return IndexingIterable { iterator() }\n}\n\n/**\n * Returns `true` if all
elements match the given [predicate].\n *\n * @sample samples.collections.Collections.Aggregates.all\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.all(predicate: (UInt) -> Boolean): Boolean {\n  for (element in this) if (!predicate(element)) return
false\n  return true\n}\n\n/**\n * Returns `true` if all elements match the given [predicate].\n *\n * @sample
samples.collections.Collections.Aggregates.all\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.all(predicate: (ULong) -> Boolean): Boolean {\n  for (element in this) if (!predicate(element)) return
false\n  return true\n}\n\n/**\n * Returns `true` if all elements match the given [predicate].\n *\n * @sample
samples.collections.Collections.Aggregates.all\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.all(predicate: (UByte) -> Boolean): Boolean {\n  for (element in this) if (!predicate(element)) return
false\n  return true\n}\n\n/**\n * Returns `true` if all elements match the given [predicate].\n *\n * @sample
samples.collections.Collections.Aggregates.all\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.all(predicate: (UShort) -> Boolean): Boolean {\n  for (element in this) if (!predicate(element)) return
false\n  return true\n}\n\n/**\n * Returns `true` if array has at least one element.\n *\n * @sample
samples.collections.Collections.Aggregates.any\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.any(): Boolean {\n  return storage.any()\n}\n\n/**\n * Returns `true` if array has at least one element.\n
*\n * @sample samples.collections.Collections.Aggregates.any\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.any(): Boolean {\n  return storage.any()\n}\n\n/**\n * Returns `true` if array has at least one
element.\n *\n * @sample samples.collections.Collections.Aggregates.any\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun

```

```

UByteArray.any(): Boolean {\n  return storage.any()\n}\n\n/**\n * Returns `true` if array has at least one
element.\n * \n * @sample samples.collections.Collections.Aggregates.any\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.any(): Boolean {\n  return storage.any()\n}\n\n/**\n * Returns `true` if at least one element matches
the given [predicate].\n * \n * @sample samples.collections.Collections.Aggregates.anyWithPredicate\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.any(predicate: (UInt) -> Boolean): Boolean {\n  for (element in this) if (predicate(element)) return true\n
return false\n}\n\n/**\n * Returns `true` if at least one element matches the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.anyWithPredicate\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.any(predicate: (ULong) -> Boolean): Boolean {\n  for (element in this) if (predicate(element)) return
true\n  return false\n}\n\n/**\n * Returns `true` if at least one element matches the given [predicate].\n * \n *
@sample samples.collections.Collections.Aggregates.anyWithPredicate\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.any(predicate: (UByte) -> Boolean): Boolean {\n  for (element in this) if (predicate(element)) return
true\n  return false\n}\n\n/**\n * Returns `true` if at least one element matches the given [predicate].\n * \n *
@sample samples.collections.Collections.Aggregates.anyWithPredicate\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.any(predicate: (UShort) -> Boolean): Boolean {\n  for (element in this) if (predicate(element)) return
true\n  return false\n}\n\n/**\n * Returns the number of elements matching the given [predicate].\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.count(predicate: (UInt) -> Boolean): Int {\n  var count = 0\n  for (element in this) if
(predicate(element)) ++count\n  return count\n}\n\n/**\n * Returns the number of elements matching the given
[predicate].\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun ULongArray.count(predicate: (ULong) -> Boolean): Int {\n  var count = 0\n  for (element in this) if
(predicate(element)) ++count\n  return count\n}\n\n/**\n * Returns the number of elements matching the given
[predicate].\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun UByteArray.count(predicate: (UByte) -> Boolean): Int {\n  var count = 0\n  for (element in this) if
(predicate(element)) ++count\n  return count\n}\n\n/**\n * Returns the number of elements matching the given
[predicate].\n *\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun UShortArray.count(predicate: (UShort) -> Boolean): Int {\n  var count = 0\n  for (element in this) if
(predicate(element)) ++count\n  return count\n}\n\n/**\n * Accumulates value starting with [initial] value and
applying [operation] from left to right\n * to current accumulator value and each element.\n * \n * Returns the
specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes current accumulator
value and an element, and calculates the next accumulator value.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UIntArray.fold(initial: R, operation: (acc: R, UInt) -> R): R {\n  var accumulator = initial\n  for (element in this)
accumulator = operation(accumulator, element)\n  return accumulator\n}\n\n/**\n * Accumulates value starting
with [initial] value and applying [operation] from left to right\n * to current accumulator value and each element.\n
*\n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that takes
current accumulator value and an element, and calculates the next accumulator value.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
ULongArray.fold(initial: R, operation: (acc: R, ULong) -> R): R {\n  var accumulator = initial\n  for (element in
this) accumulator = operation(accumulator, element)\n  return accumulator\n}\n\n/**\n * Accumulates value
starting with [initial] value and applying [operation] from left to right\n * to current accumulator value and each
element.\n * \n * Returns the specified [initial] value if the array is empty.\n * \n * @param [operation] function that
takes current accumulator value and an element, and calculates the next accumulator value.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>

```

UByteArray.fold(initial: R, operation: (acc: R, UByte) -> R): R {\n var accumulator = initial\n for (element in this) accumulator = operation(accumulator, element)\n return accumulator}\n\n * Accumulates value starting with [initial] value and applying [operation] from left to right\n * to current accumulator value and each element.\n * Returns the specified [initial] value if the array is empty.\n * @param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.\n

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>  
UShortArray.fold(initial: R, operation: (acc: R, UShort) -> R): R {\n var accumulator = initial\n for (element in this) accumulator = operation(accumulator, element)\n return accumulator}\n\n * Accumulates value starting with [initial] value and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * Returns the specified [initial] value if the array is empty.\n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>  
UIntArray.foldIndexed(initial: R, operation: (index: Int, acc: R, UInt) -> R): R {\n var index = 0\n var accumulator = initial\n for (element in this) accumulator = operation(index++, accumulator, element)\n return accumulator}\n\n * Accumulates value starting with [initial] value and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * Returns the specified [initial] value if the array is empty.\n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>  
ULongArray.foldIndexed(initial: R, operation: (index: Int, acc: R, ULong) -> R): R {\n var index = 0\n var accumulator = initial\n for (element in this) accumulator = operation(index++, accumulator, element)\n return accumulator}\n\n * Accumulates value starting with [initial] value and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * Returns the specified [initial] value if the array is empty.\n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>  
UByteArray.foldIndexed(initial: R, operation: (index: Int, acc: R, UByte) -> R): R {\n var index = 0\n var accumulator = initial\n for (element in this) accumulator = operation(index++, accumulator, element)\n return accumulator}\n\n * Accumulates value starting with [initial] value and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * Returns the specified [initial] value if the array is empty.\n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the next accumulator value.\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>  
UShortArray.foldIndexed(initial: R, operation: (index: Int, acc: R, UShort) -> R): R {\n var index = 0\n var accumulator = initial\n for (element in this) accumulator = operation(index++, accumulator, element)\n return accumulator}\n\n * Accumulates value starting with [initial] value and applying [operation] from right to left\n * to each element and current accumulator value.\n * Returns the specified [initial] value if the array is empty.\n * @param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>  
UIntArray.foldRight(initial: R, operation: (UInt, acc: R) -> R): R {\n var index = lastIndex\n var accumulator = initial\n while (index >= 0) {\n accumulator = operation(get(index--), accumulator)\n }\n return accumulator}\n\n * Accumulates value starting with [initial] value and applying [operation] from right to left\n * to each element and current accumulator value.\n * Returns the specified [initial] value if the array is empty.\n * @param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.\n
```

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
```

UByteArray.foldRight(initial: R, operation: (UByte, acc: R) -> R): R {
 var index = lastIndex
 var accumulator = initial
 while (index >= 0) {
 accumulator = operation(get(index--), accumulator)
 }
 return accumulator
}

Accumulates value starting with [initial] value and applying [operation] from right to left to each element and current accumulator value.
Returns the specified [initial] value if the array is empty.
@param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>  
UByteArray.foldRight(initial: R, operation: (UByte, acc: R) -> R): R {  
    var index = lastIndex  
    var accumulator = initial  
    while (index >= 0) {  
        accumulator = operation(get(index--), accumulator)  
    }  
    return accumulator  
}
```

Accumulates value starting with [initial] value and applying [operation] from right to left to each element and current accumulator value.
Returns the specified [initial] value if the array is empty.
@param [operation] function that takes an element and current accumulator value, and calculates the next accumulator value.

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>  
UShortArray.foldRight(initial: R, operation: (UShort, acc: R) -> R): R {  
    var index = lastIndex  
    var accumulator = initial  
    while (index >= 0) {  
        accumulator = operation(get(index--), accumulator)  
    }  
    return accumulator  
}
```

Accumulates value starting with [initial] value and applying [operation] from right to left to each element with its index in the original array and current accumulator value.
Returns the specified [initial] value if the array is empty.
@param [operation] function that takes the index of an element, the element itself and current accumulator value, and calculates the next accumulator value.

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>  
UIntArray.foldRightIndexed(initial: R, operation: (index: Int, UInt, acc: R) -> R): R {  
    var index = lastIndex  
    var accumulator = initial  
    while (index >= 0) {  
        accumulator = operation(index, get(index), accumulator)  
        --index  
    }  
    return accumulator  
}
```

Accumulates value starting with [initial] value and applying [operation] from right to left to each element with its index in the original array and current accumulator value.
Returns the specified [initial] value if the array is empty.
@param [operation] function that takes the index of an element, the element itself and current accumulator value, and calculates the next accumulator value.

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>  
ULongArray.foldRightIndexed(initial: R, operation: (index: Int, ULong, acc: R) -> R): R {  
    var index = lastIndex  
    var accumulator = initial  
    while (index >= 0) {  
        accumulator = operation(index, get(index), accumulator)  
        --index  
    }  
    return accumulator  
}
```

Accumulates value starting with [initial] value and applying [operation] from right to left to each element with its index in the original array and current accumulator value.
Returns the specified [initial] value if the array is empty.
@param [operation] function that takes the index of an element, the element itself and current accumulator value, and calculates the next accumulator value.

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>  
UByteArray.foldRightIndexed(initial: R, operation: (index: Int, UByte, acc: R) -> R): R {  
    var index = lastIndex  
    var accumulator = initial  
    while (index >= 0) {  
        accumulator = operation(index, get(index), accumulator)  
        --index  
    }  
    return accumulator  
}
```

Accumulates value starting with [initial] value and applying [operation] from right to left to each element with its index in the original array and current accumulator value.
Returns the specified [initial] value if the array is empty.
@param [operation] function that takes the index of an element, the element itself and current accumulator value, and calculates the next accumulator value.

```
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>  
UShortArray.foldRightIndexed(initial: R, operation: (index: Int, UShort, acc: R) -> R): R {  
    var index = lastIndex  
    var accumulator = initial  
    while (index >= 0) {  
        accumulator = operation(index, get(index), accumulator)  
        --index  
    }  
    return accumulator  
}
```

Performs the given [action] on each element.

```

fun UIntArray.forEach(action: (UInt) -> Unit): Unit {
    for (element in this) action(element)
}
Performs the given [action] on each element.

*\/n@SinceKotlin("1.3")\/n@ExperimentalUnsignedTypes\/n@kotlin.internal.InlineOnly\/npublic inline fun
ULongArray.forEach(action: (ULong) -> Unit): Unit {
    for (element in this) action(element)
}
Performs the given [action] on each element.

*\/n@SinceKotlin("1.3")\/n@ExperimentalUnsignedTypes\/n@kotlin.internal.InlineOnly\/npublic inline fun
UByteArray.forEach(action: (UByte) -> Unit): Unit {
    for (element in this) action(element)
}
Performs the given [action] on each element.

*\/n@SinceKotlin("1.3")\/n@ExperimentalUnsignedTypes\/n@kotlin.internal.InlineOnly\/npublic inline fun
UShortArray.forEach(action: (UShort) -> Unit): Unit {
    for (element in this) action(element)
}
Performs the given [action] on each element, providing sequential index with the element.
* @param [action]
function that takes the index of an element and the element itself
* and performs the action on the element.

*\/n@SinceKotlin("1.3")\/n@ExperimentalUnsignedTypes\/n@kotlin.internal.InlineOnly\/npublic inline fun
UIntArray.forEachIndexed(action: (index: Int, UInt) -> Unit): Unit {
    var index = 0
    for (item in this)
        action(index++, item)
}
Performs the given [action] on each element, providing sequential index with
the element.
* @param [action] function that takes the index of an element and the element itself
* and performs
the action on the element.

*\/n@SinceKotlin("1.3")\/n@ExperimentalUnsignedTypes\/n@kotlin.internal.InlineOnly\/npublic inline fun
ULongArray.forEachIndexed(action: (index: Int, ULong) -> Unit): Unit {
    var index = 0
    for (item in this)
        action(index++, item)
}
Performs the given [action] on each element, providing sequential index with
the element.
* @param [action] function that takes the index of an element and the element itself
* and performs
the action on the element.

*\/n@SinceKotlin("1.3")\/n@ExperimentalUnsignedTypes\/n@kotlin.internal.InlineOnly\/npublic inline fun
UByteArray.forEachIndexed(action: (index: Int, UByte) -> Unit): Unit {
    var index = 0
    for (item in this)
        action(index++, item)
}
Performs the given [action] on each element, providing sequential index with
the element.
* @param [action] function that takes the index of an element and the element itself
* and performs
the action on the element.

*\/n@SinceKotlin("1.3")\/n@ExperimentalUnsignedTypes\/n@kotlin.internal.InlineOnly\/npublic inline fun
UShortArray.forEachIndexed(action: (index: Int, UShort) -> Unit): Unit {
    var index = 0
    for (item in this)
        action(index++, item)
}
@Deprecated("Use maxOrNull instead.",
ReplaceWith("this.maxOrNull()"))
@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")
@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public fun UIntArray.max():
UInt? {
    return maxOrNull()
}
@Deprecated("Use maxOrNull instead.",
ReplaceWith("this.maxOrNull()"))
@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")
@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public fun ULongArray.max():
ULong? {
    return maxOrNull()
}
@Deprecated("Use maxOrNull instead.",
ReplaceWith("this.maxOrNull()"))
@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")
@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public fun UByteArray.max():
UByte? {
    return maxOrNull()
}
@Deprecated("Use maxOrNull instead.",
ReplaceWith("this.maxOrNull()"))
@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")
@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public fun UShortArray.max():
UShort? {
    return maxOrNull()
}
@Deprecated("Use maxByOrNull instead.",
ReplaceWith("this.maxByOrNull(selector)"))
@DeprecatedSinceKotlin(warningSince = "1.4", errorSince =
"1.5", hiddenSince =
"1.6")
@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun
<R : Comparable<R>> UIntArray.maxBy(selector: (UInt) -> R): UInt? {
    return
maxByOrNull(selector)
}
@Deprecated("Use maxByOrNull instead.",
ReplaceWith("this.maxByOrNull(selector)"))
@DeprecatedSinceKotlin(warningSince = "1.4", errorSince =

```

```

\"1.5\", hiddenSince =
\"1.6\")\n@SinceKotlin(\"1.3\")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
<R : Comparable<R>> ULongArray.maxBy(selector: (ULong) -> R): ULong? {\n    return
maxByOrNull(selector)\n}\n\n@Deprecated(\"Use maxByOrNull instead.\",
ReplaceWith(\"this.maxByOrNull(selector)\"))\n@DeprecatedSinceKotlin(warningSince = \"1.4\", errorSince =
\"1.5\", hiddenSince =
\"1.6\")\n@SinceKotlin(\"1.3\")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
<R : Comparable<R>> UByteArray.maxBy(selector: (UByte) -> R): UByte? {\n    return
maxByOrNull(selector)\n}\n\n@Deprecated(\"Use maxByOrNull instead.\",
ReplaceWith(\"this.maxByOrNull(selector)\"))\n@DeprecatedSinceKotlin(warningSince = \"1.4\", errorSince =
\"1.5\", hiddenSince =
\"1.6\")\n@SinceKotlin(\"1.3\")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
<R : Comparable<R>> UShortArray.maxBy(selector: (UShort) -> R): UShort? {\n    return
maxByOrNull(selector)\n}\n\n/**\n * Returns the first element yielding the largest value of the given function or
`null` if there are no elements.\n * \n * @sample samples.collections.Collections.Aggregates.maxByOrNull\n
*\n*\n@SinceKotlin(\"1.4\")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> UIntArray.maxByOrNull(selector: (UInt) -> R): UInt? {\n    if (isEmpty()) return null\n    var
maxElem = this[0]\n    val lastIndex = this.lastIndex\n    if (lastIndex == 0) return maxElem\n    var maxValue =
selector(maxElem)\n    for (i in 1..lastIndex) {\n        val e = this[i]\n        val v = selector(e)\n        if (maxValue < v)
{\n            maxElem = e\n            maxValue = v\n        }\n    }\n    return maxElem\n}\n\n/**\n * Returns the first
element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.maxByOrNull\n
*\n*\n@SinceKotlin(\"1.4\")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> ULongArray.maxByOrNull(selector: (ULong) -> R): ULong? {\n    if (isEmpty()) return null\n
var maxElem = this[0]\n    val lastIndex = this.lastIndex\n    if (lastIndex == 0) return maxElem\n    var maxValue =
selector(maxElem)\n    for (i in 1..lastIndex) {\n        val e = this[i]\n        val v = selector(e)\n        if (maxValue < v)
{\n            maxElem = e\n            maxValue = v\n        }\n    }\n    return maxElem\n}\n\n/**\n * Returns the first
element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.maxByOrNull\n
*\n*\n@SinceKotlin(\"1.4\")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> UByteArray.maxByOrNull(selector: (UByte) -> R): UByte? {\n    if (isEmpty()) return null\n
var maxElem = this[0]\n    val lastIndex = this.lastIndex\n    if (lastIndex == 0) return maxElem\n    var maxValue =
selector(maxElem)\n    for (i in 1..lastIndex) {\n        val e = this[i]\n        val v = selector(e)\n        if (maxValue < v)
{\n            maxElem = e\n            maxValue = v\n        }\n    }\n    return maxElem\n}\n\n/**\n * Returns the first
element yielding the largest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.maxByOrNull\n
*\n*\n@SinceKotlin(\"1.4\")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> UShortArray.maxByOrNull(selector: (UShort) -> R): UShort? {\n    if (isEmpty()) return null\n
var maxElem = this[0]\n    val lastIndex = this.lastIndex\n    if (lastIndex == 0) return maxElem\n    var maxValue =
selector(maxElem)\n    for (i in 1..lastIndex) {\n        val e = this[i]\n        val v = selector(e)\n        if (maxValue < v)
{\n            maxElem = e\n            maxValue = v\n        }\n    }\n    return maxElem\n}\n\n/**\n * Returns the largest
value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of
values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws
NoSuchElementException if the array is empty.\n
*\n*\n@SinceKotlin(\"1.4\")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.maxOf(selector: (UInt) -> Double): Double {\n    if (isEmpty()) throw NoSuchElementException()\n
var maxValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        maxValue =

```



```

maxOf(maxValue, v) } return maxValue}

 * Returns the largest value among all values produced
by [selector] function * applied to each element in the array.
 * If any of values produced by [selector]
function is NaN, the returned result is NaN.
 * @throws NoSuchElementException if the array is empty.
 * \n @SinceKotlin("1.4") \n @OptIn(kotlin.experimental.ExperimentalTypeInference::class) \n @OverloadResolution
ByLambdaReturnType \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
UByteArray.maxOf(selector: (UByte) -> Double): Double {
    if (isEmpty()) throw NoSuchElementException()
    var maxValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        maxValue =
maxOf(maxValue, v)
    }
    return maxValue}

 * Returns the largest value among all values produced
by [selector] function * applied to each element in the array.
 * If any of values produced by [selector]
function is NaN, the returned result is NaN.
 * @throws NoSuchElementException if the array is empty.
 * \n @SinceKotlin("1.4") \n @OptIn(kotlin.experimental.ExperimentalTypeInference::class) \n @OverloadResolution
ByLambdaReturnType \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
UByteArray.maxOf(selector: (UByte) -> Double): Double {
    if (isEmpty()) throw NoSuchElementException()
    var maxValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        maxValue =
maxOf(maxValue, v)
    }
    return maxValue}

 * Returns the largest value among all values produced
by [selector] function * applied to each element in the array.
 * If any of values produced by [selector]
function is NaN, the returned result is NaN.
 * @throws NoSuchElementException if the array is empty.
 * \n @SinceKotlin("1.4") \n @OptIn(kotlin.experimental.ExperimentalTypeInference::class) \n @OverloadResolution
ByLambdaReturnType \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
UShortArray.maxOf(selector: (UShort) -> Double): Double {
    if (isEmpty()) throw
NoSuchElementException()
    var maxValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v =
selector(this[i])
        maxValue = maxOf(maxValue, v)
    }
    return maxValue}

 * Returns the
largest value among all values produced by [selector] function * applied to each element in the array.
 * If
any of values produced by [selector] function is NaN, the returned result is NaN.
 * @throws
NoSuchElementException if the array is empty.
 * \n @SinceKotlin("1.4") \n @OptIn(kotlin.experimental.ExperimentalTypeInference::class) \n @OverloadResolution
ByLambdaReturnType \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
UIntArray.maxOf(selector: (UInt) -> Float): Float {
    if (isEmpty()) throw NoSuchElementException()
    var
maxValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        maxValue =
maxOf(maxValue, v)
    }
    return maxValue}

 * Returns the largest value among all values produced
by [selector] function * applied to each element in the array.
 * If any of values produced by [selector]
function is NaN, the returned result is NaN.
 * @throws NoSuchElementException if the array is empty.
 * \n @SinceKotlin("1.4") \n @OptIn(kotlin.experimental.ExperimentalTypeInference::class) \n @OverloadResolution
ByLambdaReturnType \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
UByteArray.maxOf(selector: (UByte) -> Float): Float {
    if (isEmpty()) throw NoSuchElementException()
    var
maxValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        maxValue =
maxOf(maxValue, v)
    }
    return maxValue}

 * Returns the largest value among all values produced
by [selector] function * applied to each element in the array.
 * If any of values produced by [selector]
function is NaN, the returned result is NaN.
 * @throws NoSuchElementException if the array is empty.
 * \n @SinceKotlin("1.4") \n @OptIn(kotlin.experimental.ExperimentalTypeInference::class) \n @OverloadResolution
ByLambdaReturnType \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun
UByteArray.maxOf(selector: (UByte) -> Float): Float {
    if (isEmpty()) throw NoSuchElementException()
    var
maxValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        maxValue =
maxOf(maxValue, v)
    }
    return maxValue}

 * Returns the largest value among all values produced
by [selector] function * applied to each element in the array.
 * If any of values produced by [selector]
function is NaN, the returned result is NaN.
 * @throws NoSuchElementException if the array is empty.
 * \n @SinceKotlin("1.4") \n @OptIn(kotlin.experimental.ExperimentalTypeInference::class) \n @OverloadResolution
ByLambdaReturnType \n @ExperimentalUnsignedTypes \n @kotlin.internal.InlineOnly \n public inline fun

```

```

UShortArray.maxOf(selector: (UShort) -> Float): Float {
    if (isEmpty()) throw NoSuchElementException()
    var maxValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        maxValue = maxOf(maxValue, v)
    }
    return maxValue
}

```

Returns the largest value among all values produced by [selector] function applied to each element in the array. @throws NoSuchElementException if the array is empty.

```

* Since Kotlin("1.4")
* OptIn(kotlin.experimental.ExperimentalTypeInference::class)
* OverloadResolution
ByLambdaReturnType
* ExperimentalUnsignedTypes
* kotlin.internal.InlineOnly
public inline fun <R : Comparable<R>> UIntArray.maxOf(selector: (UInt) -> R): R {
    if (isEmpty()) throw NoSuchElementException()
    var maxValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        if (maxValue < v) {
            maxValue = v
        }
    }
    return maxValue
}

```

Returns the largest value among all values produced by [selector] function applied to each element in the array. @throws NoSuchElementException if the array is empty.

```

* Since Kotlin("1.4")
* OptIn(kotlin.experimental.ExperimentalTypeInference::class)
* OverloadResolution
ByLambdaReturnType
* ExperimentalUnsignedTypes
* kotlin.internal.InlineOnly
public inline fun <R : Comparable<R>> ULongArray.maxOf(selector: (ULong) -> R): R {
    if (isEmpty()) throw NoSuchElementException()
    var maxValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        if (maxValue < v) {
            maxValue = v
        }
    }
    return maxValue
}

```

Returns the largest value among all values produced by [selector] function applied to each element in the array. @throws NoSuchElementException if the array is empty.

```

* Since Kotlin("1.4")
* OptIn(kotlin.experimental.ExperimentalTypeInference::class)
* OverloadResolution
ByLambdaReturnType
* ExperimentalUnsignedTypes
* kotlin.internal.InlineOnly
public inline fun <R : Comparable<R>> UByteArray.maxOf(selector: (UByte) -> R): R {
    if (isEmpty()) throw NoSuchElementException()
    var maxValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        if (maxValue < v) {
            maxValue = v
        }
    }
    return maxValue
}

```

Returns the largest value among all values produced by [selector] function applied to each element in the array. @throws NoSuchElementException if the array is empty.

```

* Since Kotlin("1.4")
* OptIn(kotlin.experimental.ExperimentalTypeInference::class)
* OverloadResolution
ByLambdaReturnType
* ExperimentalUnsignedTypes
* kotlin.internal.InlineOnly
public inline fun <R : Comparable<R>> UShortArray.maxOf(selector: (UShort) -> R): R {
    if (isEmpty()) throw NoSuchElementException()
    var maxValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        if (maxValue < v) {
            maxValue = v
        }
    }
    return maxValue
}

```

Returns the largest value among all values produced by [selector] function applied to each element in the array or `null` if there are no elements. If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.

```

* Since Kotlin("1.4")
* OptIn(kotlin.experimental.ExperimentalTypeInference::class)
* OverloadResolution
ByLambdaReturnType
* ExperimentalUnsignedTypes
* kotlin.internal.InlineOnly
public inline fun UIntArray.maxOfOrNull(selector: (UInt) -> Double): Double? {
    if (isEmpty()) return null
    var maxValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        maxValue = maxOf(maxValue, v)
    }
    return maxValue
}

```

Returns the largest value among all values produced by [selector] function applied to each element in the array or `null` if there are no elements. If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.

```

* Since Kotlin("1.4")
* OptIn(kotlin.experimental.ExperimentalTypeInference::class)
* OverloadResolution
ByLambdaReturnType
* ExperimentalUnsignedTypes
* kotlin.internal.InlineOnly
public inline fun ULongArray.maxOfOrNull(selector: (ULong) -> Double): Double? {
    if (isEmpty()) return null
    var maxValue = selector(this[0])
    for (i in 1..lastIndex) {
        val v = selector(this[i])
        maxValue = maxOf(maxValue, v)
    }
    return maxValue
}

```

Returns the largest value among all values produced by [selector] function applied to each element in the array or `null` if there are no elements. If any of values produced by [selector] function is `NaN`, the returned result is `NaN`.

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUByteArray.maxOfOrNull(selector: (UByte) -> Double): Double? {\n    if (isEmpty()) return null\n    var maxValue =\n    selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        maxValue = maxOf(maxValue,\n        v)\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector]\n * function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced\n * by [selector] function is `NaN`, the returned result is `NaN`.\n */
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUShortArray.maxOfOrNull(selector: (UShort) -> Double): Double? {\n    if (isEmpty()) return null\n    var\n    maxValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        maxValue =\n        maxOf(maxValue, v)\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value among all values produced\n * by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of\n * values produced by [selector] function is `NaN`, the returned result is `NaN`.\n */
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUIntArray.maxOfOrNull(selector: (UInt) -> Float): Float? {\n    if (isEmpty()) return null\n    var maxValue =\n    selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        maxValue = maxOf(maxValue, v)\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector]\n * function is `NaN`, the returned result is `NaN`.\n */
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nULongArray.maxOfOrNull(selector: (ULong) -> Float): Float? {\n    if (isEmpty()) return null\n    var maxValue =\n    selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        maxValue = maxOf(maxValue, v)\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector]\n * function is `NaN`, the returned result is `NaN`.\n */
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUByteArray.maxOfOrNull(selector: (UByte) -> Float): Float? {\n    if (isEmpty()) return null\n    var maxValue =\n    selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        maxValue = maxOf(maxValue, v)\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector]\n * function is `NaN`, the returned result is `NaN`.\n */
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun\nUShortArray.maxOfOrNull(selector: (UShort) -> Float): Float? {\n    if (isEmpty()) return null\n    var maxValue =\n    selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        maxValue = maxOf(maxValue, v)\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value among all values produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n */
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R : Comparable<R>>\nUIntArray.maxOfOrNull(selector: (UInt) -> R): R? {\n    if (isEmpty()) return null\n    var\n    maxValue = selector(this[0])\n    for (i in 1..lastIndex) {\n        val v = selector(this[i])\n        if (maxValue < v) {\n            maxValue = v\n        }\n    }\n    return maxValue\n}\n\n/**\n * Returns the largest value among all values\n * produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n */
```

```
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
```

```

ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> ULongArray.maxOfOrNull(selector: (ULong) -> R): R? {\n  if (isEmpty()) return null\n  var
maxValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    if (maxValue < v) {\n
      maxValue = v\n    }\n  }\n  return maxValue\n}\n\n/**\n * Returns the largest value among all values
produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> UByteArray.maxOfOrNull(selector: (UByte) -> R): R? {\n  if (isEmpty()) return null\n  var
maxValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    if (maxValue < v) {\n
      maxValue = v\n    }\n  }\n  return maxValue\n}\n\n/**\n * Returns the largest value among all values
produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> UShortArray.maxOfOrNull(selector: (UShort) -> R): R? {\n  if (isEmpty()) return null\n  var
maxValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    if (maxValue < v) {\n
      maxValue = v\n    }\n  }\n  return maxValue\n}\n\n/**\n * Returns the largest value according to the
provided [comparator]\n * among all values produced by [selector] function applied to each element in the array.\n
*\n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UIntArray.maxOfWith(comparator: Comparator<in R>, selector: (UInt) -> R): R {\n  if (isEmpty()) throw
NoSuchElementException()\n  var maxValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v =
selector(this[i])\n    if (comparator.compare(maxValue, v) < 0) {\n      maxValue = v\n    }\n  }\n  return
maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all values
produced by [selector] function applied to each element in the array.\n * \n * @throws NoSuchElementException if
the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
ULongArray.maxOfWith(comparator: Comparator<in R>, selector: (ULong) -> R): R {\n  if (isEmpty()) throw
NoSuchElementException()\n  var maxValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v =
selector(this[i])\n    if (comparator.compare(maxValue, v) < 0) {\n      maxValue = v\n    }\n  }\n  return
maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all values
produced by [selector] function applied to each element in the array.\n * \n * @throws NoSuchElementException if
the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UByteArray.maxOfWith(comparator: Comparator<in R>, selector: (UByte) -> R): R {\n  if (isEmpty()) throw
NoSuchElementException()\n  var maxValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v =
selector(this[i])\n    if (comparator.compare(maxValue, v) < 0) {\n      maxValue = v\n    }\n  }\n  return
maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all values
produced by [selector] function applied to each element in the array.\n * \n * @throws NoSuchElementException if
the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UShortArray.maxOfWith(comparator: Comparator<in R>, selector: (UShort) -> R): R {\n  if (isEmpty()) throw
NoSuchElementException()\n  var maxValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v =
selector(this[i])\n    if (comparator.compare(maxValue, v) < 0) {\n      maxValue = v\n    }\n  }\n  return
maxValue\n}\n\n/**\n * Returns the largest value according to the provided [comparator]\n * among all values

```

```

produced by [selector] function applied to each element in the array or `null` if there are no elements.
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UIntArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (UInt) -> R): R? {\n if (isEmpty()) return
null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(comparator.compare(maxValue, v) < 0) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n *
Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]
function applied to each element in the array or `null` if there are no elements.
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
ULongArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (ULong) -> R): R? {\n if (isEmpty())
return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(comparator.compare(maxValue, v) < 0) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n *
Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]
function applied to each element in the array or `null` if there are no elements.
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UByteArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (UByte) -> R): R? {\n if (isEmpty())
return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(comparator.compare(maxValue, v) < 0) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n *
Returns the largest value according to the provided [comparator]\n * among all values produced by [selector]
function applied to each element in the array or `null` if there are no elements.
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UShortArray.maxOfWithOrNull(comparator: Comparator<in R>, selector: (UShort) -> R): R? {\n if (isEmpty())
return null\n var maxValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(comparator.compare(maxValue, v) < 0) {\n maxValue = v\n }\n }\n return maxValue\n}\n\n/**\n *
Returns the largest element or `null` if there are no elements.
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.maxOrNull(): UInt? {\n if
(isEmpty()) return null\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (max < e) max
= e\n }\n return max\n}\n\n/**\n * Returns the largest element or `null` if there are no elements.
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.maxOrNull(): ULong? {\n if
(isEmpty()) return null\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (max < e) max
= e\n }\n return max\n}\n\n/**\n * Returns the largest element or `null` if there are no elements.
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.maxOrNull(): UByte? {\n if
(isEmpty()) return null\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (max < e) max
= e\n }\n return max\n}\n\n/**\n * Returns the largest element or `null` if there are no elements.
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.maxOrNull(): UShort? {\n if
(isEmpty()) return null\n var max = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (max < e) max
= e\n }\n return max\n}\n\n@Deprecated("Use maxWithOrNull instead.",
ReplaceWith("this.maxWithOrNull(comparator)"))\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
UIntArray.maxWith(comparator: Comparator<in UInt>): UInt? {\n return
maxWithOrNull(comparator)\n}\n\n@Deprecated("Use maxWithOrNull instead.",
ReplaceWith("this.maxWithOrNull(comparator)"))\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
ULongArray.maxWith(comparator: Comparator<in ULong>): ULong? {\n return
maxWithOrNull(comparator)\n}\n\n@Deprecated("Use maxWithOrNull instead.",

```

```

ReplaceWith("this.maxWithOrNull(comparator)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5", hiddenSince = "1.6")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
ByteArray.maxWith(comparator: Comparator<in UByte>): UByte? {\n    return
maxWithOrNull(comparator)\n}\n\n@Deprecated("Use maxWithOrNull instead."),
ReplaceWith("this.maxWithOrNull(comparator)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5", hiddenSince = "1.6")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
UShortArray.maxWith(comparator: Comparator<in UShort>): UShort? {\n    return
maxWithOrNull(comparator)\n}\n\n/**\n * Returns the first element having the largest value according to the
provided [comparator] or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.maxWithOrNull(comparator:
Comparator<in UInt>): UInt? {\n    if (isEmpty()) return null\n    var max = this[0]\n    for (i in 1..lastIndex) {\n
val e = this[i]\n        if (comparator.compare(max, e) < 0) max = e\n    }\n    return max\n}\n\n/**\n * Returns the
first element having the largest value according to the provided [comparator] or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.maxWithOrNull(comparator:
Comparator<in ULong>): ULong? {\n    if (isEmpty()) return null\n    var max = this[0]\n    for (i in 1..lastIndex) {\n
val e = this[i]\n        if (comparator.compare(max, e) < 0) max = e\n    }\n    return max\n}\n\n/**\n * Returns the
first element having the largest value according to the provided [comparator] or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun ByteArray.maxWithOrNull(comparator:
Comparator<in UByte>): UByte? {\n    if (isEmpty()) return null\n    var max = this[0]\n    for (i in 1..lastIndex) {\n
val e = this[i]\n        if (comparator.compare(max, e) < 0) max = e\n    }\n    return max\n}\n\n/**\n * Returns the
first element having the largest value according to the provided [comparator] or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.maxWithOrNull(comparator:
Comparator<in UShort>): UShort? {\n    if (isEmpty()) return null\n    var max = this[0]\n    for (i in 1..lastIndex) {\n
val e = this[i]\n        if (comparator.compare(max, e) < 0) max = e\n    }\n    return
max\n}\n\n@Deprecated("Use minOrNull instead."),
ReplaceWith("this.minOrNull()")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.min(): UInt?
{\n    return minOrNull()\n}\n\n@Deprecated("Use minOrNull instead."),
ReplaceWith("this.minOrNull()")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.min():
ULong? {\n    return minOrNull()\n}\n\n@Deprecated("Use minOrNull instead."),
ReplaceWith("this.minOrNull()")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun ByteArray.min():
UByte? {\n    return minOrNull()\n}\n\n@Deprecated("Use minOrNull instead."),
ReplaceWith("this.minOrNull()")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.5",
hiddenSince = "1.6")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.min():
UShort? {\n    return minOrNull()\n}\n\n@Deprecated("Use minByOrNull instead."),
ReplaceWith("this.minByOrNull(selector)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince =
"1.5", hiddenSince =
"1.6")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
<R : Comparable<R>> UIntArray.minBy(selector: (UInt) -> R): UInt? {\n    return
minByOrNull(selector)\n}\n\n@Deprecated("Use minByOrNull instead."),
ReplaceWith("this.minByOrNull(selector)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince =
"1.5", hiddenSince =
"1.6")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
<R : Comparable<R>> ULongArray.minBy(selector: (ULong) -> R): ULong? {\n    return
minByOrNull(selector)\n}\n\n@Deprecated("Use minByOrNull instead."),
ReplaceWith("this.minByOrNull(selector)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince =

```

```

\"1.5\", hiddenSince =
\"1.6\")\n@SinceKotlin(\"1.3\")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
<R : Comparable<R>> UByteArray.minBy(selector: (UByte) -> R): UByte? {\n return
minByOrNull(selector)\n}\n\n@Deprecated(\"Use minByOrNull instead.\",
ReplaceWith(\"this.minByOrNull(selector)\")\n)\n@DeprecatedSinceKotlin(warningSince = \"1.4\", errorSince =
\"1.5\", hiddenSince =
\"1.6\")\n@SinceKotlin(\"1.3\")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
<R : Comparable<R>> UShortArray.minBy(selector: (UShort) -> R): UShort? {\n return
minByOrNull(selector)\n}\n\n/**\n * Returns the first element yielding the smallest value of the given function or
`null` if there are no elements.\n * \n * @sample samples.collections.Collections.Aggregates.minByOrNull\n
*\n*\n@SinceKotlin(\"1.4\")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> UIntArray.minByOrNull(selector: (UInt) -> R): UInt? {\n if (isEmpty()) return null\n var
minElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return minElem\n var minValue =
selector(minElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (minValue > v)
{\n minElem = e\n minValue = v\n }\n }\n return minElem\n}\n\n/**\n * Returns the first
element yielding the smallest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.minByOrNull\n
*\n*\n@SinceKotlin(\"1.4\")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> ULongArray.minByOrNull(selector: (ULong) -> R): ULong? {\n if (isEmpty()) return null\n
var minElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return minElem\n var minValue =
selector(minElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (minValue > v)
{\n minElem = e\n minValue = v\n }\n }\n return minElem\n}\n\n/**\n * Returns the first
element yielding the smallest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.minByOrNull\n
*\n*\n@SinceKotlin(\"1.4\")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> UByteArray.minByOrNull(selector: (UByte) -> R): UByte? {\n if (isEmpty()) return null\n
var minElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return minElem\n var minValue =
selector(minElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (minValue > v)
{\n minElem = e\n minValue = v\n }\n }\n return minElem\n}\n\n/**\n * Returns the first
element yielding the smallest value of the given function or `null` if there are no elements.\n * \n * @sample
samples.collections.Collections.Aggregates.minByOrNull\n
*\n*\n@SinceKotlin(\"1.4\")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> UShortArray.minByOrNull(selector: (UShort) -> R): UShort? {\n if (isEmpty()) return null\n
var minElem = this[0]\n val lastIndex = this.lastIndex\n if (lastIndex == 0) return minElem\n var minValue =
selector(minElem)\n for (i in 1..lastIndex) {\n val e = this[i]\n val v = selector(e)\n if (minValue > v)
{\n minElem = e\n minValue = v\n }\n }\n return minElem\n}\n\n/**\n * Returns the smallest
value among all values produced by [selector] function\n * applied to each element in the array.\n * \n * If any of
values produced by [selector] function is `NaN`, the returned result is `NaN`.\n * \n * @throws
NoSuchElementException if the array is empty.\n
*\n*\n@SinceKotlin(\"1.4\")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.minOf(selector: (UInt) -> Double): Double {\n if (isEmpty()) throw NoSuchElementException()\n
var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue =
minOf(minValue, v)\n }\n return minValue\n}\n\n/**\n * Returns the smallest value among all values produced
by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector]
function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n*\n@SinceKotlin(\"1.4\")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun

```

```

ULongArray.minOf(selector: (ULong) -> Double): Double {\n  if (isEmpty()) throw NoSuchElementException()\n  var minValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    minValue =\n    minOf(minValue, v)\n  }\n  return minValue\n}\n\n/**\n * Returns the smallest value among all values produced\n * by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector]\n * function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.minOf(selector: (UByte) -> Double): Double {\n  if (isEmpty()) throw NoSuchElementException()\n  var minValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    minValue =\n    minOf(minValue, v)\n  }\n  return minValue\n}\n\n/**\n * Returns the smallest value among all values produced\n * by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector]\n * function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.minOf(selector: (UShort) -> Double): Double {\n  if (isEmpty()) throw NoSuchElementException()\n  var minValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    minValue =\n    minOf(minValue, v)\n  }\n  return minValue\n}\n\n/**\n * Returns the smallest value among all values produced\n * by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector]\n * function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.minOf(selector: (UInt) -> Float): Float {\n  if (isEmpty()) throw NoSuchElementException()\n  var\n  minValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    minValue =\n    minOf(minValue, v)\n  }\n  return minValue\n}\n\n/**\n * Returns the smallest value among all values produced\n * by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector]\n * function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.minOf(selector: (ULong) -> Float): Float {\n  if (isEmpty()) throw NoSuchElementException()\n  var\n  minValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    minValue =\n    minOf(minValue, v)\n  }\n  return minValue\n}\n\n/**\n * Returns the smallest value among all values produced\n * by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector]\n * function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.minOf(selector: (UByte) -> Float): Float {\n  if (isEmpty()) throw NoSuchElementException()\n  var\n  minValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    minValue =\n    minOf(minValue, v)\n  }\n  return minValue\n}\n\n/**\n * Returns the smallest value among all values produced\n * by [selector] function\n * applied to each element in the array.\n * \n * If any of values produced by [selector]\n * function is `NaN`, the returned result is `NaN`.\n * \n * @throws NoSuchElementException if the array is empty.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution\nByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.minOf(selector: (UShort) -> Float): Float {\n  if (isEmpty()) throw NoSuchElementException()\n  var\n  minValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    minValue =\n    minOf(minValue, v)\n  }\n  return minValue\n}\n\n/**\n * Returns the smallest value among all values produced\n * by [selector] function\n * applied to each element in the array.\n * \n * @throws NoSuchElementException if the\n * array is empty.\n */\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution

```



```

ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> UIntArray.minOf(selector: (UInt) -> R): R {\n  if (isEmpty()) throw
NoSuchElementException()\n  var minValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v =
selector(this[i])\n    if (minValue > v) {\n      minValue = v\n    }\n  }\n  return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the
array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> ULongArray.minOf(selector: (ULong) -> R): R {\n  if (isEmpty()) throw
NoSuchElementException()\n  var minValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v =
selector(this[i])\n    if (minValue > v) {\n      minValue = v\n    }\n  }\n  return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the
array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> UByteArray.minOf(selector: (UByte) -> R): R {\n  if (isEmpty()) throw
NoSuchElementException()\n  var minValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v =
selector(this[i])\n    if (minValue > v) {\n      minValue = v\n    }\n  }\n  return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the
array.\n * \n * @throws NoSuchElementException if the array is empty.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> UShortArray.minOf(selector: (UShort) -> R): R {\n  if (isEmpty()) throw
NoSuchElementException()\n  var minValue = selector(this[0])\n  for (i in 1..lastIndex) {\n    val v =
selector(this[i])\n    if (minValue > v) {\n      minValue = v\n    }\n  }\n  return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n * applied to each element in the array
or `null` if there are no elements.\n * \n * If any of values produced by [selector] function is `NaN`, the returned
result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.minOfOrNull(selector: (UInt) -> Double): Double? {\n  if (isEmpty()) return null\n  var minValue =
selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    minValue = minOf(minValue, v)\n
  }\n  return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n *
applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector]
function is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.minOfOrNull(selector: (ULong) -> Double): Double? {\n  if (isEmpty()) return null\n  var minValue
= selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    minValue = minOf(minValue, v)\n
  }\n  return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n *
applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by
[selector] function is `NaN`, the returned result is `NaN`.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.minOfOrNull(selector: (UByte) -> Double): Double? {\n  if (isEmpty()) return null\n  var minValue
= selector(this[0])\n  for (i in 1..lastIndex) {\n    val v = selector(this[i])\n    minValue = minOf(minValue, v)\n
  }\n  return minValue\n}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n *
applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by

```

```

[selector] function is `NaN`, the returned result is `NaN`.
*/@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.minOfOrNull(selector: (UShort) -> Double): Double? {\n if (isEmpty()) return null\n var minValue
= selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n
}\n return minValue}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n
* applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by
[selector] function is `NaN`, the returned result is `NaN`.
*/@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.minOfOrNull(selector: (UInt) -> Float): Float? {\n if (isEmpty()) return null\n var minValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n
}\n return minValue}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n
* applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector]
function is `NaN`, the returned result is `NaN`.
*/@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.minOfOrNull(selector: (ULong) -> Float): Float? {\n if (isEmpty()) return null\n var minValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n
}\n return minValue}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n
* applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector]
function is `NaN`, the returned result is `NaN`.
*/@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.minOfOrNull(selector: (UByte) -> Float): Float? {\n if (isEmpty()) return null\n var minValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n
}\n return minValue}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n
* applied to each element in the array or `null` if there are no elements.\n * \n * If any of values produced by [selector]
function is `NaN`, the returned result is `NaN`.
*/@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.minOfOrNull(selector: (UShort) -> Float): Float? {\n if (isEmpty()) return null\n var minValue =
selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n minValue = minOf(minValue, v)\n
}\n return minValue}\n\n/**\n * Returns the smallest value among all values produced by [selector] function\n
* applied to each element in the array or `null` if there are no elements.\n
*/@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> UIntArray.minOfOrNull(selector: (UInt) -> R): R? {\n if (isEmpty()) return null\n var
minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (minValue > v) {\n
minValue = v\n }\n }\n return minValue}\n\n/**\n * Returns the smallest value among all values
produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.
*/@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution
ByLambdaReturnType@ExperimentalUnsignedTypes@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> ULongArray.minOfOrNull(selector: (ULong) -> R): R? {\n if (isEmpty()) return null\n var
minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (minValue > v) {\n
minValue = v\n }\n }\n return minValue}\n\n/**\n * Returns the smallest value among all values
produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.
*/@SinceKotlin("1.4")@OptIn(kotlin.experimental.ExperimentalTypeInference::class)@OverloadResolution

```

```

ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> UByteArray.minOfOrNull(selector: (UByte) -> R): R? {\n if (isEmpty()) return null\n var
minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (minValue > v) {\n
minValue = v\n }\n }\n return minValue}\n\n/**\n * Returns the smallest value among all values
produced by [selector] function\n * applied to each element in the array or `null` if there are no elements.\n
*/\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R :
Comparable<R>> UShortArray.minOfOrNull(selector: (UShort) -> R): R? {\n if (isEmpty()) return null\n var
minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if (minValue > v) {\n
minValue = v\n }\n }\n return minValue}\n\n/**\n * Returns the smallest value according to the
provided [comparator]\n * among all values produced by [selector] function applied to each element in the array.\n
*\n * @throws NoSuchElementException if the array is empty.\n
*/\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UIntArray.minOfWith(comparator: Comparator<in R>, selector: (UInt) -> R): R {\n if (isEmpty()) throw
NoSuchElementException()\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =
selector(this[i])\n if (comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return
minValue}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values
produced by [selector] function applied to each element in the array.\n *\n * @throws NoSuchElementException if
the array is empty.\n
*/\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
ULongArray.minOfWith(comparator: Comparator<in R>, selector: (ULong) -> R): R {\n if (isEmpty()) throw
NoSuchElementException()\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =
selector(this[i])\n if (comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return
minValue}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values
produced by [selector] function applied to each element in the array.\n *\n * @throws NoSuchElementException if
the array is empty.\n
*/\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UByteArray.minOfWith(comparator: Comparator<in R>, selector: (UByte) -> R): R {\n if (isEmpty()) throw
NoSuchElementException()\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =
selector(this[i])\n if (comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return
minValue}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values
produced by [selector] function applied to each element in the array.\n *\n * @throws NoSuchElementException if
the array is empty.\n
*/\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UShortArray.minOfWith(comparator: Comparator<in R>, selector: (UShort) -> R): R {\n if (isEmpty()) throw
NoSuchElementException()\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v =
selector(this[i])\n if (comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return
minValue}\n\n/**\n * Returns the smallest value according to the provided [comparator]\n * among all values
produced by [selector] function applied to each element in the array or `null` if there are no elements.\n
*/\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UIntArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (UInt) -> R): R? {\n if (isEmpty()) return
null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return minValue}\n\n/**\n

```

Returns the smallest value according to the provided [comparator] * among all values produced by [selector] function applied to each element in the array or `null` if there are no elements.

```

*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
ULongArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (ULong) -> R): R? {\n if (isEmpty())
return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n *
Returns the smallest value according to the provided [comparator] * among all values produced by [selector]
function applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UByteArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (UByte) -> R): R? {\n if (isEmpty())
return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n *
Returns the smallest value according to the provided [comparator] * among all values produced by [selector]
function applied to each element in the array or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>
UShortArray.minOfWithOrNull(comparator: Comparator<in R>, selector: (UShort) -> R): R? {\n if (isEmpty())
return null\n var minValue = selector(this[0])\n for (i in 1..lastIndex) {\n val v = selector(this[i])\n if
(comparator.compare(minValue, v) > 0) {\n minValue = v\n }\n }\n return minValue\n}\n\n/**\n *
Returns the smallest element or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.minOrNull(): UInt? {\n if
(isEmpty()) return null\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min =
e\n }\n return min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.minOrNull(): ULong? {\n if
(isEmpty()) return null\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min =
e\n }\n return min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.minOrNull(): UByte? {\n if
(isEmpty()) return null\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min =
e\n }\n return min\n}\n\n/**\n * Returns the smallest element or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.minOrNull(): UShort? {\n if
(isEmpty()) return null\n var min = this[0]\n for (i in 1..lastIndex) {\n val e = this[i]\n if (min > e) min =
e\n }\n return min\n}\n\n@Deprecated("Use minWithOrNull instead.")\n
ReplaceWith("this.minWithOrNull(comparator)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
UIntArray.minWith(comparator: Comparator<in UInt>): UInt? {\n return
minWithOrNull(comparator)\n}\n\n@Deprecated("Use minWithOrNull instead.")\n
ReplaceWith("this.minWithOrNull(comparator)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
ULongArray.minWith(comparator: Comparator<in ULong>): ULong? {\n return
minWithOrNull(comparator)\n}\n\n@Deprecated("Use minWithOrNull instead.")\n
ReplaceWith("this.minWithOrNull(comparator)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun
UByteArray.minWith(comparator: Comparator<in UByte>): UByte? {\n return
minWithOrNull(comparator)\n}\n\n@Deprecated("Use minWithOrNull instead.")\n
ReplaceWith("this.minWithOrNull(comparator)")\n@DeprecatedSinceKotlin(warningSince = "1.4", errorSince
= "1.5", hiddenSince = "1.6")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic fun

```

```

UShortArray.minWith(comparator: Comparator<in UShort>): UShort? {\n  return
minWithOrNull(comparator)\n}\n\n/**\n * Returns the first element having the smallest value according to the
provided [comparator] or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UIntArray.minWithOrNull(comparator:
Comparator<in UInt>): UInt? {\n  if (isEmpty()) return null\n  var min = this[0]\n  for (i in 1..lastIndex) {\n
val e = this[i]\n    if (comparator.compare(min, e) > 0) min = e\n  }\n  return min\n}\n\n/**\n * Returns the first
element having the smallest value according to the provided [comparator] or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun ULongArray.minWithOrNull(comparator:
Comparator<in ULong>): ULong? {\n  if (isEmpty()) return null\n  var min = this[0]\n  for (i in 1..lastIndex) {\n
val e = this[i]\n    if (comparator.compare(min, e) > 0) min = e\n  }\n  return min\n}\n\n/**\n * Returns the
first element having the smallest value according to the provided [comparator] or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UByteArray.minWithOrNull(comparator:
Comparator<in UByte>): UByte? {\n  if (isEmpty()) return null\n  var min = this[0]\n  for (i in 1..lastIndex) {\n
val e = this[i]\n    if (comparator.compare(min, e) > 0) min = e\n  }\n  return min\n}\n\n/**\n * Returns the
first element having the smallest value according to the provided [comparator] or `null` if there are no elements.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\npublic fun UShortArray.minWithOrNull(comparator:
Comparator<in UShort>): UShort? {\n  if (isEmpty()) return null\n  var min = this[0]\n  for (i in 1..lastIndex) {\n
val e = this[i]\n    if (comparator.compare(min, e) > 0) min = e\n  }\n  return min\n}\n\n/**\n * Returns
`true` if the array has no elements.\n * \n * @sample samples.collections.Collections.Aggregates.none\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.none(): Boolean {\n  return isEmpty()\n}\n\n/**\n * Returns `true` if the array has no elements.\n * \n *
@sample samples.collections.Collections.Aggregates.none\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.none(): Boolean {\n  return isEmpty()\n}\n\n/**\n * Returns `true` if the array has no elements.\n * \n *
@sample samples.collections.Collections.Aggregates.none\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.none(): Boolean {\n  return isEmpty()\n}\n\n/**\n * Returns `true` if the array has no elements.\n * \n *
@sample samples.collections.Collections.Aggregates.none\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.none(): Boolean {\n  return isEmpty()\n}\n\n/**\n * Returns `true` if no elements match the given
[predicate].\n * \n * @sample samples.collections.Collections.Aggregates.noneWithPredicate\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.none(predicate: (UInt) -> Boolean): Boolean {\n  for (element in this) if (predicate(element)) return
false\n  return true\n}\n\n/**\n * Returns `true` if no elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.noneWithPredicate\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.none(predicate: (ULong) -> Boolean): Boolean {\n  for (element in this) if (predicate(element)) return
false\n  return true\n}\n\n/**\n * Returns `true` if no elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.noneWithPredicate\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.none(predicate: (UByte) -> Boolean): Boolean {\n  for (element in this) if (predicate(element)) return
false\n  return true\n}\n\n/**\n * Returns `true` if no elements match the given [predicate].\n * \n * @sample
samples.collections.Collections.Aggregates.noneWithPredicate\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.none(predicate: (UShort) -> Boolean): Boolean {\n  for (element in this) if (predicate(element))
return false\n  return true\n}\n\n/**\n * Performs the given [action] on each element and returns the array itself
afterwards.\n * \n *\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun UIntArray.onEach(action: (UInt) -> Unit): UIntArray {\n  return apply { for (element in this)

```

```

action(element) }\n}\n\n/**\n * Performs the given [action] on each element and returns the array itself
afterwards.\n */>\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun ULongArray.onEach(action: (ULong) -> Unit): ULongArray {\n    return apply { for (element in this)
action(element) }\n}\n}\n\n/**\n * Performs the given [action] on each element and returns the array itself
afterwards.\n */>\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun UByteArray.onEach(action: (UByte) -> Unit): UByteArray {\n    return apply { for (element in this)
action(element) }\n}\n}\n\n/**\n * Performs the given [action] on each element and returns the array itself
afterwards.\n */>\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic
inline fun UShortArray.onEach(action: (UShort) -> Unit): UShortArray {\n    return apply { for (element in this)
action(element) }\n}\n}\n\n/**\n * Performs the given [action] on each element, providing sequential index with the
element,\n * and returns the array itself afterwards.\n * @param [action] function that takes the index of an element
and the element itself\n * and performs the action on the element.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.onEachIndexed(action: (index: Int, UInt) -> Unit): UIntArray {\n    return apply {
forEachIndexed(action) }\n}\n}\n\n/**\n * Performs the given [action] on each element, providing sequential index
with the element,\n * and returns the array itself afterwards.\n * @param [action] function that takes the index of an
element and the element itself\n * and performs the action on the element.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.onEachIndexed(action: (index: Int, ULong) -> Unit): ULongArray {\n    return apply {
forEachIndexed(action) }\n}\n}\n\n/**\n * Performs the given [action] on each element, providing sequential index
with the element,\n * and returns the array itself afterwards.\n * @param [action] function that takes the index of an
element and the element itself\n * and performs the action on the element.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.onEachIndexed(action: (index: Int, UByte) -> Unit): UByteArray {\n    return apply {
forEachIndexed(action) }\n}\n}\n\n/**\n * Performs the given [action] on each element, providing sequential index
with the element,\n * and returns the array itself afterwards.\n * @param [action] function that takes the index of an
element and the element itself\n * and performs the action on the element.\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.onEachIndexed(action: (index: Int, UShort) -> Unit): UShortArray {\n    return apply {
forEachIndexed(action) }\n}\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation]
from left to right\n * to current accumulator value and each element.\n * \n * Throws an exception if this array is
empty. If the array can be empty in an expected way,\n * please use [reduceOrNull] instead. It returns `null` when its
receiver is empty.\n * \n * @param [operation] function that takes current accumulator value and an element,\n *
and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduce\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.reduce(operation: (acc: UInt, UInt) -> UInt): UInt {\n    if (isEmpty())\n        throw
UnsupportedOperationException("Empty array can't be reduced.")\n    var accumulator = this[0]\n    for (index in
1..lastIndex) {\n        accumulator = operation(accumulator, this[index])\n    }\n    return accumulator\n}\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation] from left to right\n * to current
accumulator value and each element.\n * \n * Throws an exception if this array is empty. If the array can be empty
in an expected way,\n * please use [reduceOrNull] instead. It returns `null` when its receiver is empty.\n * \n *
@param [operation] function that takes current accumulator value and an element,\n * and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduce\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.reduce(operation: (acc: ULong, ULong) -> ULong): ULong {\n    if (isEmpty())\n        throw
UnsupportedOperationException("Empty array can't be reduced.")\n    var accumulator = this[0]\n    for (index in
1..lastIndex) {\n        accumulator = operation(accumulator, this[index])\n    }\n    return accumulator\n}\n}\n\n/**\n * Accumulates value starting with the first element and applying [operation] from left to right\n * to current

```

accumulator value and each element.
 * Throws an exception if this array is empty. If the array can be empty in an expected way, please use [reduceOrNull] instead. It returns `null` when its receiver is empty.
 * @param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.
 * @sample samples.collections.Collections.Aggregates.reduce

```

*\/n@SinceKotlin("1.3")n@ExperimentalUnsignedTypesn@kotlin.internal.InlineOnlynpublic inline fun
UByteArray.reduce(operation: (acc: UByte, UByte) -> UByte): UByte {n if (isEmpty())n throw
UnsupportedOperationException("Empty array can't be reduced.")n var accumulator = this[0]n for (index in
1..lastIndex) {n accumulator = operation(accumulator, this[index])n }n return accumulatorn}n/n/**n
Accumulates value starting with the first element and applying [operation] from left to rightn
to current accumulator value and each element.n
* Throws an exception if this array is empty. If the array can be empty in an expected way,
please use [reduceOrNull] instead. It returns `null` when its receiver is empty.n
* @param [operation] function that takes current accumulator value and an element, and calculates the next
accumulator value.n
* @sample samples.collections.Collections.Aggregates.reduce
*\/n@SinceKotlin("1.3")n@ExperimentalUnsignedTypesn@kotlin.internal.InlineOnlynpublic inline fun
UShortArray.reduce(operation: (acc: UShort, UShort) -> UShort): UShort {n if (isEmpty())n throw
UnsupportedOperationException("Empty array can't be reduced.")n var accumulator = this[0]n for (index in
1..lastIndex) {n accumulator = operation(accumulator, this[index])n }n return accumulatorn}n/n/**n
Accumulates value starting with the first element and applying [operation] from left to rightn
to current accumulator value and each element with its index in the original array.n
* Throws an exception if this array is empty. If the array can be empty in an expected way,
please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.n
* @param [operation] function that takes the index of an element, current accumulator value and the element itself,
and calculates the next accumulator value.n
* @sample samples.collections.Collections.Aggregates.reduce
*\/n@SinceKotlin("1.3")n@ExperimentalUnsignedTypesn@kotlin.internal.InlineOnlynpublic inline fun
UIntArray.reduceIndexed(operation: (index: Int, acc: UInt, UInt) -> UInt): UInt {n if (isEmpty())n throw
UnsupportedOperationException("Empty array can't be reduced.")n var accumulator = this[0]n for (index in
1..lastIndex) {n accumulator = operation(index, accumulator, this[index])n }n return
accumulatorn}n/n/**n
Accumulates value starting with the first element and applying [operation] from left to
rightn
to current accumulator value and each element with its index in the original array.n
* Throws an
exception if this array is empty. If the array can be empty in an expected way, please use [reduceIndexedOrNull]
instead. It returns `null` when its receiver is empty.n
* @param [operation] function that takes the index of an element, current accumulator value and the element itself,
and calculates the next accumulator value.n
* @sample samples.collections.Collections.Aggregates.reduce
*\/n@SinceKotlin("1.3")n@ExperimentalUnsignedTypesn@kotlin.internal.InlineOnlynpublic inline fun
ULongArray.reduceIndexed(operation: (index: Int, acc: ULong, ULong) -> ULong): ULong {n if (isEmpty())n
throw UnsupportedOperationException("Empty array can't be reduced.")n var accumulator = this[0]n for
(index in 1..lastIndex) {n accumulator = operation(index, accumulator, this[index])n }n return
accumulatorn}n/n/**n
Accumulates value starting with the first element and applying [operation] from left to
rightn
to current accumulator value and each element with its index in the original array.n
* Throws an
exception if this array is empty. If the array can be empty in an expected way, please use [reduceIndexedOrNull]
instead. It returns `null` when its receiver is empty.n
* @param [operation] function that takes the index of an element, current accumulator value and the element itself,
and calculates the next accumulator value.n
* @sample samples.collections.Collections.Aggregates.reduce
*\/n@SinceKotlin("1.3")n@ExperimentalUnsignedTypesn@kotlin.internal.InlineOnlynpublic inline fun
UByteArray.reduceIndexed(operation: (index: Int, acc: UByte, UByte) -> UByte): UByte {n if (isEmpty())n
throw UnsupportedOperationException("Empty array can't be reduced.")n var accumulator = this[0]n for
(index in 1..lastIndex) {n accumulator = operation(index, accumulator, this[index])n }n return
accumulatorn}n/n/**n
Accumulates value starting with the first element and applying [operation] from left to

```

right\n * to current accumulator value and each element with its index in the original array.\n * \n * Throws an exception if this array is empty. If the array can be empty in an expected way,\n * please use [reduceIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value and the element itself,\n * and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduce\n *\n * @SinceKotlin("1.3")\n * @ExperimentalUnsignedTypes\n * @kotlin.internal.InlineOnly\n * public inline fun UShortArray.reduceIndexed(operation: (index: Int, acc: UShort, UShort) -> UShort): UShort {\n * if (isEmpty())\n * throw UnsupportedOperationException("Empty array can't be reduced.")\n * var accumulator = this[0]\n * for (index in 1..lastIndex) {\n * accumulator = operation(index, accumulator, this[index])\n * }\n * return accumulator\n * }\n * \n * Accumulates value starting with the first element and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value and the element itself,\n * and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceOrNull\n *\n * @SinceKotlin("1.4")\n * @ExperimentalUnsignedTypes\n * @kotlin.internal.InlineOnly\n * public inline fun UIntArray.reduceIndexedOrNull(operation: (index: Int, acc: UInt, UInt) -> UInt): UInt? {\n * if (isEmpty())\n * return null\n * var accumulator = this[0]\n * for (index in 1..lastIndex) {\n * accumulator = operation(index, accumulator, this[index])\n * }\n * return accumulator\n * }\n * \n * Accumulates value starting with the first element and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value and the element itself,\n * and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceOrNull\n *\n * @SinceKotlin("1.4")\n * @ExperimentalUnsignedTypes\n * @kotlin.internal.InlineOnly\n * public inline fun ULongArray.reduceIndexedOrNull(operation: (index: Int, acc: ULong, ULong) -> ULong): ULong? {\n * if (isEmpty())\n * return null\n * var accumulator = this[0]\n * for (index in 1..lastIndex) {\n * accumulator = operation(index, accumulator, this[index])\n * }\n * return accumulator\n * }\n * \n * Accumulates value starting with the first element and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value and the element itself,\n * and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceOrNull\n *\n * @SinceKotlin("1.4")\n * @ExperimentalUnsignedTypes\n * @kotlin.internal.InlineOnly\n * public inline fun UByteArray.reduceIndexedOrNull(operation: (index: Int, acc: UByte, UByte) -> UByte): UByte? {\n * if (isEmpty())\n * return null\n * var accumulator = this[0]\n * for (index in 1..lastIndex) {\n * accumulator = operation(index, accumulator, this[index])\n * }\n * return accumulator\n * }\n * \n * Accumulates value starting with the first element and applying [operation] from left to right\n * to current accumulator value and each element with its index in the original array.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes the index of an element, current accumulator value and the element itself,\n * and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceOrNull\n *\n * @SinceKotlin("1.4")\n * @ExperimentalUnsignedTypes\n * @kotlin.internal.InlineOnly\n * public inline fun UShortArray.reduceIndexedOrNull(operation: (index: Int, acc: UShort, UShort) -> UShort): UShort? {\n * if (isEmpty())\n * return null\n * var accumulator = this[0]\n * for (index in 1..lastIndex) {\n * accumulator = operation(index, accumulator, this[index])\n * }\n * return accumulator\n * }\n * \n * Accumulates value starting with the first element and applying [operation] from left to right\n * to current accumulator value and each element.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes current accumulator value and an element,\n * and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceOrNull\n *\n * @SinceKotlin("1.4")\n * @ExperimentalUnsignedTypes\n * @WasExperimental(ExperimentalStdlibApi::class)\n * @kotlin.internal.InlineOnly\n * public inline fun UIntArray.reduceOrNull(operation: (acc: UInt, UInt) -> UInt): UInt?


```

{\n  if (isEmpty())\n    return null\n  var accumulator = this[0]\n  for (index in 1..lastIndex) {\n
accumulator = operation(accumulator, this[index])\n  }\n  return accumulator\n}\n\n/**\n * Accumulates value
starting with the first element and applying [operation] from left to right\n * to current accumulator value and each
element.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes current
accumulator value and an element,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceOrNull\n
*/\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun ULongArray.reduceOrNull(operation: (acc: ULong, ULong) ->
ULong): ULong? {\n  if (isEmpty())\n    return null\n  var accumulator = this[0]\n  for (index in 1..lastIndex)
{\n    accumulator = operation(accumulator, this[index])\n  }\n  return accumulator\n}\n\n/**\n * Accumulates
value starting with the first element and applying [operation] from left to right\n * to current accumulator value and
each element.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes current
accumulator value and an element,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceOrNull\n
*/\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun UByteArray.reduceOrNull(operation: (acc: UByte, UByte) ->
UByte): UByte? {\n  if (isEmpty())\n    return null\n  var accumulator = this[0]\n  for (index in 1..lastIndex)
{\n    accumulator = operation(accumulator, this[index])\n  }\n  return accumulator\n}\n\n/**\n * Accumulates
value starting with the first element and applying [operation] from left to right\n * to current accumulator value and
each element.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes current
accumulator value and an element,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceOrNull\n
*/\n\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun UShortArray.reduceOrNull(operation: (acc: UShort, UShort) ->
UShort): UShort? {\n  if (isEmpty())\n    return null\n  var accumulator = this[0]\n  for (index in 1..lastIndex)
{\n    accumulator = operation(accumulator, this[index])\n  }\n  return accumulator\n}\n\n/**\n * Accumulates
value starting with the last element and applying [operation] from right to left\n * to each element and current
accumulator value.\n * \n * Throws an exception if this array is empty. If the array can be empty in an expected
way,\n * please use [reduceRightOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param
[operation] function that takes an element and current accumulator value,\n * and calculates the next accumulator
value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceRight\n
*/\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.reduceRight(operation: (UInt, acc: UInt) -> UInt): UInt {\n  var index = lastIndex\n  if (index < 0)
throw UnsupportedOperationException("Empty array can't be reduced.")\n  var accumulator = get(index--)\n  while (index >= 0) {\n    accumulator = operation(get(index--), accumulator)\n  }\n  return
accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation] from right to
left\n * to each element and current accumulator value.\n * \n * Throws an exception if this array is empty. If the
array can be empty in an expected way,\n * please use [reduceRightOrNull] instead. It returns `null` when its
receiver is empty.\n * \n * @param [operation] function that takes an element and current accumulator value,\n *
and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRight\n
*/\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.reduceRight(operation: (ULong, acc: ULong) -> ULong): ULong {\n  var index = lastIndex\n  if (index < 0)
throw UnsupportedOperationException("Empty array can't be reduced.")\n  var accumulator =
get(index--)\n  while (index >= 0) {\n    accumulator = operation(get(index--), accumulator)\n  }\n  return
accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation] from right to
left\n * to each element and current accumulator value.\n * \n * Throws an exception if this array is empty. If the
array can be empty in an expected way,\n * please use [reduceRightOrNull] instead. It returns `null` when its

```

```

receiver is empty.\n * \n * @param [operation] function that takes an element and current accumulator value,\n *
and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRight\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.reduceRight(operation: (UByte, acc: UByte) -> UByte): UByte {\n  var index = lastIndex\n  if (index
< 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n  var accumulator = get(index--)\n
while (index >= 0) {\n    accumulator = operation(get(index--), accumulator)\n  }\n  return
accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation] from right to
left\n * to each element and current accumulator value.\n * \n * Throws an exception if this array is empty. If the
array can be empty in an expected way,\n * please use [reduceRightOrNull] instead. It returns `null` when its
receiver is empty.\n * \n * @param [operation] function that takes an element and current accumulator value,\n *
and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRight\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.reduceRight(operation: (UShort, acc: UShort) -> UShort): UShort {\n  var index = lastIndex\n  if
(index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n  var accumulator =
get(index--)\n  while (index >= 0) {\n    accumulator = operation(get(index--), accumulator)\n  }\n  return
accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation] from right to
left\n * to each element with its index in the original array and current accumulator value.\n * \n * Throws an
exception if this array is empty. If the array can be empty in an expected way,\n * please use
[reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param [operation]
function that takes the index of an element, the element itself and current accumulator value,\n * and calculates the
next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceRight\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.reduceRightIndexed(operation: (index: Int, UInt, acc: UInt) -> UInt): UInt {\n  var index = lastIndex\n
if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n  var accumulator =
get(index--)\n  while (index >= 0) {\n    accumulator = operation(index, get(index), accumulator)\n    --index\n
}\n  return accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation]
from right to left\n * to each element with its index in the original array and current accumulator value.\n * \n *
Throws an exception if this array is empty. If the array can be empty in an expected way,\n * please use
[reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n * @param [operation]
function that takes the index of an element, the element itself and current accumulator value,\n * and calculates the
next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceRight\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.reduceRightIndexed(operation: (index: Int, ULong, acc: ULong) -> ULong): ULong {\n  var index =
lastIndex\n  if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n  var
accumulator = get(index--)\n  while (index >= 0) {\n    accumulator = operation(index, get(index),
accumulator)\n    --index\n  }\n  return accumulator\n}\n\n/**\n * Accumulates value starting with the last
element and applying [operation] from right to left\n * to each element with its index in the original array and
current accumulator value.\n * \n * Throws an exception if this array is empty. If the array can be empty in an
expected way,\n * please use [reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.\n *
\n * @param [operation] function that takes the index of an element, the element itself and current accumulator
value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRight\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.reduceRightIndexed(operation: (index: Int, UByte, acc: UByte) -> UByte): UByte {\n  var index =
lastIndex\n  if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n  var
accumulator = get(index--)\n  while (index >= 0) {\n    accumulator = operation(index, get(index),

```

```

accumulator)\n    --index\n    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with the last
element and applying [operation] from right to left\n * to each element with its index in the original array and
current accumulator value.\n * \n * Throws an exception if this array is empty. If the array can be empty in an
expected way,\n * please use [reduceRightIndexedOrNull] instead. It returns `null` when its receiver is empty.\n * \n *
@param [operation] function that takes the index of an element, the element itself and current accumulator
value,\n * and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRight\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.reduceRightIndexed(operation: (index: Int, UShort, acc: UShort) -> UShort): UShort {\n    var index =
lastIndex\n    if (index < 0) throw UnsupportedOperationException("Empty array can't be reduced.")\n    var
accumulator = get(index--)\n    while (index >= 0) {\n        accumulator = operation(index, get(index),
accumulator)\n        --index\n    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with the last
element and applying [operation] from right to left\n * to each element with its index in the original array and
current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that
takes the index of an element, the element itself and current accumulator value,\n * and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceRightOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.reduceRightIndexedOrNull(operation: (index: Int, UInt, acc: UInt) -> UInt): UInt? {\n    var index =
lastIndex\n    if (index < 0) return null\n    var accumulator = get(index--)\n    while (index >= 0) {\n
accumulator = operation(index, get(index), accumulator)\n        --index\n    }\n    return accumulator\n}\n\n/**\n *
Accumulates value starting with the last element and applying [operation] from right to left\n * to each element with
its index in the original array and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n *
@param [operation] function that takes the index of an element, the element itself and current accumulator value,\n
* and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRightOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.reduceRightIndexedOrNull(operation: (index: Int, ULong, acc: ULong) -> ULong): ULong? {\n    var
index = lastIndex\n    if (index < 0) return null\n    var accumulator = get(index--)\n    while (index >= 0) {\n
accumulator = operation(index, get(index), accumulator)\n        --index\n    }\n    return accumulator\n}\n\n/**\n *
Accumulates value starting with the last element and applying [operation] from right to left\n * to each element with
its index in the original array and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n *
@param [operation] function that takes the index of an element, the element itself and current accumulator value,\n
* and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRightOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.reduceRightIndexedOrNull(operation: (index: Int, UByte, acc: UByte) -> UByte): UByte? {\n    var
index = lastIndex\n    if (index < 0) return null\n    var accumulator = get(index--)\n    while (index >= 0) {\n
accumulator = operation(index, get(index), accumulator)\n        --index\n    }\n    return accumulator\n}\n\n/**\n *
Accumulates value starting with the last element and applying [operation] from right to left\n * to each element with
its index in the original array and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n *
@param [operation] function that takes the index of an element, the element itself and current accumulator value,\n
* and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.reduceRightOrNull\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.reduceRightIndexedOrNull(operation: (index: Int, UShort, acc: UShort) -> UShort): UShort? {\n    var
index = lastIndex\n    if (index < 0) return null\n    var accumulator = get(index--)\n    while (index >= 0) {\n
accumulator = operation(index, get(index), accumulator)\n        --index\n    }\n    return accumulator\n}\n\n/**\n *
Accumulates value starting with the last element and applying [operation] from right to left\n * to each element and

```

current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes an element and current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceRightOrNull\n

```

*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun UIntArray.reduceRightOrNull(operation: (UInt, acc: UInt) -> UInt): UInt? {\n    var index = lastIndex\n    if (index < 0) return null\n    var accumulator = get(index--)\n    while (index >= 0) {\n        accumulator = operation(get(index--), accumulator)\n    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation] from right to left\n * to each element and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes an element and current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceRightOrNull\n
```

```

*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun ULongArray.reduceRightOrNull(operation: (ULong, acc: ULong) -> ULong): ULong? {\n    var index = lastIndex\n    if (index < 0) return null\n    var accumulator = get(index--)\n    while (index >= 0) {\n        accumulator = operation(get(index--), accumulator)\n    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation] from right to left\n * to each element and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes an element and current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceRightOrNull\n
```

```

*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun UByteArray.reduceRightOrNull(operation: (UByte, acc: UByte) -> UByte): UByte? {\n    var index = lastIndex\n    if (index < 0) return null\n    var accumulator = get(index--)\n    while (index >= 0) {\n        accumulator = operation(get(index--), accumulator)\n    }\n    return accumulator\n}\n\n/**\n * Accumulates value starting with the last element and applying [operation] from right to left\n * to each element and current accumulator value.\n * \n * Returns `null` if the array is empty.\n * \n * @param [operation] function that takes an element and current accumulator value,\n * and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.reduceRightOrNull\n
```

```

*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun UShortArray.reduceRightOrNull(operation: (UShort, acc: UShort) -> UShort): UShort? {\n    var index = lastIndex\n    if (index < 0) return null\n    var accumulator = get(index--)\n    while (index >= 0) {\n        accumulator = operation(get(index--), accumulator)\n    }\n    return accumulator\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n
```

```

*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R> UIntArray.runningFold(initial: R, operation: (acc: R, UInt) -> R): List<R> {\n    if (isEmpty()) return listOf(initial)\n    val result = ArrayList<R>(size + 1).apply { add(initial) }\n    var accumulator = initial\n    for (element in this) {\n        accumulator = operation(accumulator, element)\n        result.add(accumulator)\n    }\n    return result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying [operation] from left to right\n * to each element and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningFold\n
```

```

*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R>

```

```

ULongArray.runningFold(initial: R, operation: (acc: R, ULong) -> R): List<R> {
    if (isEmpty()) return listOf(initial)
    val result = ArrayList<R>(size + 1).apply { add(initial) }
    var accumulator = initial
    for (element in this) {
        accumulator = operation(accumulator, element)
        result.add(accumulator)
    }
    return result
}

/**
 * Returns a list containing successive accumulation values generated by applying
 [operation] from left to right to each element and current accumulator value that starts with [initial] value.
 * Note that `acc` value passed to [operation] function should not be mutated; otherwise it would affect the
 previous value in resulting list.
 * @param [operation] function that takes current accumulator value and an
 element, and calculates the next accumulator value.
 * @sample
 samples.collections.Collections.Aggregates.runningFold
 */
@SinceKotlin("1.4")
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun <R>
UByteArray.runningFold(initial: R, operation: (acc: R, UByte) -> R): List<R> {
    if (isEmpty()) return listOf(initial)
    val result = ArrayList<R>(size + 1).apply { add(initial) }
    var accumulator = initial
    for (element in this) {
        accumulator = operation(accumulator, element)
        result.add(accumulator)
    }
    return result
}

/**
 * Returns a list containing successive accumulation values generated by applying
 [operation] from left to right to each element and current accumulator value that starts with [initial] value.
 * Note that `acc` value passed to [operation] function should not be mutated; otherwise it would affect the
 previous value in resulting list.
 * @param [operation] function that takes current accumulator value and an
 element, and calculates the next accumulator value.
 * @sample
 samples.collections.Collections.Aggregates.runningFold
 */
@SinceKotlin("1.4")
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun <R>
UShortArray.runningFold(initial: R, operation: (acc: R, UShort) -> R): List<R> {
    if (isEmpty()) return listOf(initial)
    val result = ArrayList<R>(size + 1).apply { add(initial) }
    var accumulator = initial
    for (element in this) {
        accumulator = operation(accumulator, element)
        result.add(accumulator)
    }
    return result
}

/**
 * Returns a list containing successive accumulation values generated by applying
 [operation] from left to right to each element, its index in the original array and current accumulator value that
 starts with [initial] value.
 * Note that `acc` value passed to [operation] function should not be mutated; otherwise it would affect the previous
 value in resulting list.
 * @param [operation] function that takes the
 index of an element, current accumulator value and the element itself, and calculates the next accumulator
 value.
 * @sample
 samples.collections.Collections.Aggregates.runningFold
 */
@SinceKotlin("1.4")
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun <R>
UIntArray.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, UInt) -> R): List<R> {
    if (isEmpty()) return listOf(initial)
    val result = ArrayList<R>(size + 1).apply { add(initial) }
    var accumulator = initial
    for (index in indices) {
        accumulator = operation(index, accumulator, this[index])
        result.add(accumulator)
    }
    return result
}

/**
 * Returns a list containing successive accumulation
 values generated by applying [operation] from left to right to each element, its index in the original array and
 current accumulator value that starts with [initial] value.
 * Note that `acc` value passed to [operation] function
 should not be mutated; otherwise it would affect the previous value in resulting list.
 * @param [operation]
 function that takes the index of an element, current accumulator value and the element itself, and calculates the
 next accumulator value.
 * @sample
 samples.collections.Collections.Aggregates.runningFold
 */
@SinceKotlin("1.4")
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun <R>
ULongArray.runningFoldIndexed(initial: R, operation: (index: Int, acc: R, ULong) -> R): List<R> {
    if (isEmpty()) return listOf(initial)
    val result = ArrayList<R>(size + 1).apply { add(initial) }
    var accumulator = initial
    for (index in indices) {
        accumulator = operation(index, accumulator, this[index])
        result.add(accumulator)
    }
    return result
}

/**
 * Returns a list containing successive accumulation
 values generated by applying [operation] from left to right to each element, its index in the original array and
 current accumulator value that starts with [initial] value.
 * Note that `acc` value passed to [operation] function
 should not be mutated; otherwise it would affect the previous value in resulting list.
 * @param [operation]
 function that takes the index of an element, current accumulator value and the element itself, and calculates the
 */

```


affect the previous value in resulting list.\n * \n * @param [operation] function that takes current accumulator value and an element, and calculates the next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningReduce\n

```

*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.runningReduce(operation: (acc: UShort, UShort) -> UShort): List<UShort> {\n  if (isEmpty()) return
emptyList()\n  var accumulator = this[0]\n  val result = ArrayList<UShort>(size).apply { add(accumulator) }\n  for (index in 1 until size) {\n    accumulator = operation(accumulator, this[index])\n    result.add(accumulator)\n  }\n  return result\n}\n\n/**\n * Returns a list containing successive accumulation values generated by applying
[operation] from left to right\n * to each element, its index in the original array and current accumulator value that
starts with the first element of this array.\n * \n * Note that `acc` value passed to [operation] function should not be
mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that
takes the index of an element, current accumulator value\n * and the element itself, and calculates the next
accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.runningReduce\n

```

*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.runningReduceIndexed(operation: (index: Int, acc: UInt, UInt) -> UInt): List<UInt> {\n if (isEmpty())
return emptyList()\n var accumulator = this[0]\n val result = ArrayList<UInt>(size).apply { add(accumulator)
}\n for (index in 1 until size) {\n accumulator = operation(index, accumulator, this[index])\n result.add(accumulator)\n }\n return result\n}\n\n/**\n * Returns a list containing successive accumulation
values generated by applying [operation] from left to right\n * to each element, its index in the original array and
current accumulator value that starts with the first element of this array.\n * \n * Note that `acc` value passed to
[operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n *
@param [operation] function that takes the index of an element, current accumulator value\n * and the element
itself, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.runningReduce\n

```

*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.runningReduceIndexed(operation: (index: Int, acc: ULong, ULong) -> ULong): List<ULong> {\n  if
(isEmpty()) return emptyList()\n  var accumulator = this[0]\n  val result = ArrayList<ULong>(size).apply {
add(accumulator) }\n  for (index in 1 until size) {\n    accumulator = operation(index, accumulator, this[index])\n
    result.add(accumulator)\n  }\n  return result\n}\n\n/**\n * Returns a list containing successive accumulation
values generated by applying [operation] from left to right\n * to each element, its index in the original array and
current accumulator value that starts with the first element of this array.\n * \n * Note that `acc` value passed to
[operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n *
@param [operation] function that takes the index of an element, current accumulator value\n * and the element
itself, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.runningReduce\n

```

```

*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.runningReduceIndexed(operation: (index: Int, acc: UByte, UByte) -> UByte): List<UByte> {\n  if
(isEmpty()) return emptyList()\n  var accumulator = this[0]\n  val result = ArrayList<UByte>(size).apply {
add(accumulator) }\n  for (index in 1 until size) {\n    accumulator = operation(index, accumulator, this[index])\n
    result.add(accumulator)\n  }\n  return result\n}\n\n/**\n * Returns a list containing successive accumulation
values generated by applying [operation] from left to right\n * to each element, its index in the original array and
current accumulator value that starts with the first element of this array.\n * \n * Note that `acc` value passed to
[operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n *
@param [operation] function that takes the index of an element, current accumulator value\n * and the element
itself, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.runningReduce\n

```

```

*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.runningReduceIndexed(operation: (index: Int, acc: UShort, UShort) -> UShort): List<UShort> {\n  if

```

```

(isEmpty()) return emptyList()\n    var accumulator = this[0]\n    val result = ArrayList<UShort>(size).apply {
add(accumulator) }\n    for (index in 1 until size) {\n        accumulator = operation(index, accumulator, this[index])\n        result.add(accumulator)\n    }\n    return result\n}\n\n/**\n * Returns a list containing successive accumulation
values generated by applying [operation] from left to right\n * to each element and current accumulator value that
starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n *
otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes current
accumulator value and an element, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.scan\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun <R> UIntArray.scan(initial: R, operation: (acc: R, UInt) -> R):
List<R> {\n    return runningFold(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation
values generated by applying [operation] from left to right\n * to each element and current accumulator value that
starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n *
otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes current
accumulator value and an element, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.scan\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun <R> ULongArray.scan(initial: R, operation: (acc: R, ULong) -> R):
List<R> {\n    return runningFold(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation
values generated by applying [operation] from left to right\n * to each element and current accumulator value that
starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n *
otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes current
accumulator value and an element, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.scan\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun <R> UByteArray.scan(initial: R, operation: (acc: R, UByte) -> R):
List<R> {\n    return runningFold(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation
values generated by applying [operation] from left to right\n * to each element and current accumulator value that
starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function should not be mutated;\n *
otherwise it would affect the previous value in resulting list.\n * \n * @param [operation] function that takes current
accumulator value and an element, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.scan\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun <R> UShortArray.scan(initial: R, operation: (acc: R, UShort) -> R):
List<R> {\n    return runningFold(initial, operation)\n}\n\n/**\n * Returns a list containing successive accumulation
values generated by applying [operation] from left to right\n * to each element, its index in the original array and
current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed to [operation] function
should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n * \n * @param [operation]
function that takes the index of an element, current accumulator value\n * and the element itself, and calculates the
next accumulator value.\n * \n * @sample samples.collections.Collections.Aggregates.scan\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun <R> UIntArray.scanIndexed(initial: R, operation: (index: Int, acc: R,
UInt) -> R): List<R> {\n    return runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns a list containing
successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in
the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed
to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n *
\n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element
itself, and calculates the next accumulator value.\n * \n * @sample

```



```

samples.collections.Collections.Aggregates.scan\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun <R> ULongArray.scanIndexed(initial: R, operation: (index: Int, acc:
R, ULong) -> R): List<R> {\n    return runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns a list
containing successive accumulation values generated by applying [operation] from left to right\n * to each element,
its index in the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc`
value passed to [operation] function should not be mutated;\n * otherwise it would affect the previous value in
resulting list.\n * \n * @param [operation] function that takes the index of an element, current accumulator value\n *
and the element itself, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.scan\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun <R> UByteArray.scanIndexed(initial: R, operation: (index: Int, acc:
R, UByte) -> R): List<R> {\n    return runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns a list containing
successive accumulation values generated by applying [operation] from left to right\n * to each element, its index in
the original array and current accumulator value that starts with [initial] value.\n * \n * Note that `acc` value passed
to [operation] function should not be mutated;\n * otherwise it would affect the previous value in resulting list.\n *
\n * @param [operation] function that takes the index of an element, current accumulator value\n * and the element
itself, and calculates the next accumulator value.\n * \n * @sample
samples.collections.Collections.Aggregates.scan\n
*\n@SinceKotlin("1.4")\n@ExperimentalUnsignedTypes\n@WasExperimental(ExperimentalStdlibApi::class)\n
@kotlin.internal.InlineOnly\npublic inline fun <R> UShortArray.scanIndexed(initial: R, operation: (index: Int, acc:
R, UShort) -> R): List<R> {\n    return runningFoldIndexed(initial, operation)\n}\n\n/**\n * Returns the sum of all
values produced by [selector] function applied to each element in the array.\n * \n * @Deprecated("Use sumOf
instead.")\n * ReplaceWith("this.sumOf(selector)")\n * @DeprecatedSinceKotlin(warningSince =
"1.5")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.sumBy(selector: (UInt) -> UInt): UInt {\n    var sum: UInt = 0u\n    for (element in this) {\n        sum +=
selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n * \n * @Deprecated("Use sumOf instead.")\n * ReplaceWith("this.sumOf(selector)")\n *
@DeprecatedSinceKotlin(warningSince =
"1.5")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.sumBy(selector: (ULong) -> UInt): UInt {\n    var sum: UInt = 0u\n    for (element in this) {\n        sum
+= selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector]
function applied to each element in the array.\n * \n * @Deprecated("Use sumOf instead.")\n * ReplaceWith("this.sumOf(selector)")\n *
@DeprecatedSinceKotlin(warningSince =
"1.5")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.sumBy(selector: (UByte) -> UInt): UInt {\n    var sum: UInt = 0u\n    for (element in this) {\n        sum
+= selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector]
function applied to each element in the array.\n * \n * @Deprecated("Use sumOf instead.")\n * ReplaceWith("this.sumOf(selector)")\n *
@DeprecatedSinceKotlin(warningSince =
"1.5")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.sumBy(selector: (UShort) -> UInt): UInt {\n    var sum: UInt = 0u\n    for (element in this) {\n        sum
+= selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector]
function applied to each element in the array.\n * \n * @Deprecated("Use sumOf instead.")\n * ReplaceWith("this.sumOf(selector)")\n *
@DeprecatedSinceKotlin(warningSince =
"1.5")\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.sumByDouble(selector: (UInt) -> Double): Double {\n    var sum: Double = 0.0\n    for (element in this)
{\n        sum += selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each element in the array.\n * \n * @Deprecated("Use sumOf instead.")\n

```

```

ReplaceWith("this.sumOf(selector)")\n@DeprecatedSinceKotlin(warningSince =
\'1.5\')\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.sumByDouble(selector: (ULong) -> Double): Double {\n    var sum: Double = 0.0\n    for (element in
this) {\n        sum += selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each element in the array.\n */\n@Deprecated("Use sumOf instead.",
ReplaceWith("this.sumOf(selector)")\n@DeprecatedSinceKotlin(warningSince =
\'1.5\')\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UByteArray.sumByDouble(selector: (UByte) -> Double): Double {\n    var sum: Double = 0.0\n    for (element in
this) {\n        sum += selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each element in the array.\n */\n@Deprecated("Use sumOf instead.",
ReplaceWith("this.sumOf(selector)")\n@DeprecatedSinceKotlin(warningSince =
\'1.5\')\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.sumByDouble(selector: (UShort) -> Double): Double {\n    var sum: Double = 0.0\n    for (element in
this) {\n        sum += selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by
[selector] function applied to each element in the array.\n */\n\n*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfDouble")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun UIntArray.sumOf(selector:
(UInt) -> Double): Double {\n    var sum: Double = 0.toDouble()\n    for (element in this) {\n        sum +=
selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n */\n\n*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfDouble")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun ULongArray.sumOf(selector:
(ULong) -> Double): Double {\n    var sum: Double = 0.toDouble()\n    for (element in this) {\n        sum +=
selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n */\n\n*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfDouble")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun UByteArray.sumOf(selector:
(UByte) -> Double): Double {\n    var sum: Double = 0.toDouble()\n    for (element in this) {\n        sum +=
selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n */\n\n*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfDouble")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun UShortArray.sumOf(selector:
(UShort) -> Double): Double {\n    var sum: Double = 0.toDouble()\n    for (element in this) {\n        sum +=
selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function
applied to each element in the array.\n */\n\n*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfInt")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun UIntArray.sumOf(selector: (UInt) -
> Int): Int {\n    var sum: Int = 0.toInt()\n    for (element in this) {\n        sum += selector(element)\n    }\n    return
sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the
array.\n */\n\n*\n@SinceKotlin("1.4")\n@OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n@OverloadResolution
ByLambdaReturnType\n@Suppress("INAPPLICABLE_JVM_NAME")\n@kotlin.jvm.JvmName("sumOfInt")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun ULongArray.sumOf(selector:

```

```

(ULong) -> Int): Int {
    var sum: Int = 0.toInt()
    for (element in this) {
        sum += selector(element)
    }
    return sum
}

```

* Returns the sum of all values produced by [selector] function applied to each element in the array.

```

* Since Kotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@Suppress("INAPPLICABLE_JVM_NAME")
@kotlin.jvm.JvmName("sumOfInt")
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun UByteArray.sumOf(selector:
(UByte) -> Int): Int {
    var sum: Int = 0.toInt()
    for (element in this) {
        sum += selector(element)
    }
    return sum
}

```

* Returns the sum of all values produced by [selector] function applied to each element in the array.

```

* Since Kotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@Suppress("INAPPLICABLE_JVM_NAME")
@kotlin.jvm.JvmName("sumOfInt")
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun UShortArray.sumOf(selector:
(UShort) -> Int): Int {
    var sum: Int = 0.toInt()
    for (element in this) {
        sum += selector(element)
    }
    return sum
}

```

* Returns the sum of all values produced by [selector] function applied to each element in the array.

```

* Since Kotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@Suppress("INAPPLICABLE_JVM_NAME")
@kotlin.jvm.JvmName("sumOfLong")
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun UIntArray.sumOf(selector: (UInt)
-> Long): Long {
    var sum: Long = 0.toLong()
    for (element in this) {
        sum += selector(element)
    }
    return sum
}

```

* Returns the sum of all values produced by [selector] function applied to each element in the array.

```

* Since Kotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@Suppress("INAPPLICABLE_JVM_NAME")
@kotlin.jvm.JvmName("sumOfLong")
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun ULongArray.sumOf(selector:
(ULong) -> Long): Long {
    var sum: Long = 0.toLong()
    for (element in this) {
        sum +=
selector(element)
    }
    return sum
}

```

* Returns the sum of all values produced by [selector] function applied to each element in the array.

```

* Since Kotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@Suppress("INAPPLICABLE_JVM_NAME")
@kotlin.jvm.JvmName("sumOfLong")
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun UByteArray.sumOf(selector:
(UByte) -> Long): Long {
    var sum: Long = 0.toLong()
    for (element in this) {
        sum +=
selector(element)
    }
    return sum
}

```

* Returns the sum of all values produced by [selector] function applied to each element in the array.

```

* Since Kotlin("1.4")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@Suppress("INAPPLICABLE_JVM_NAME")
@kotlin.jvm.JvmName("sumOfLong")
@ExperimentalUnsignedTypes
@kotlin.internal.InlineOnly
public inline fun UShortArray.sumOf(selector:
(UShort) -> Long): Long {
    var sum: Long = 0.toLong()
    for (element in this) {
        sum +=
selector(element)
    }
    return sum
}

```

* Returns the sum of all values produced by [selector] function applied to each element in the array.

```

* Since Kotlin("1.5")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@Suppress("INAPPLICABLE_JVM_NAME")
@kotlin.jvm.JvmName("sumOfUInt")
@ExperimentalUnsignedTypes
@WasExperimental(ExperimentalUnsignedTypes::class)
@kotlin.internal.InlineOnly
public inline fun UIntArray.sumOf(selector: (UInt) -> UInt): UInt {
    var sum: UInt = 0.toUInt()
    for
(element in this) {
        sum += selector(element)
    }
    return sum
}

```

* Returns the sum of all values produced by [selector] function applied to each element in the array.

```

* Since Kotlin("1.5")
@OptIn(kotlin.experimental.ExperimentalTypeInference::class)
@OverloadResolutionByLambdaReturnType
@Suppress("INAPPLICABLE_JVM_NAME")
@kotlin.jvm.JvmName("sumOfUInt")
@ExperimentalUnsignedTypes
@WasExperimental(ExperimentalUnsignedTypes::class)
@kotlin.internal.Inline

```

```

Only\npublic inline fun ULongArray.sumOf(selector: (ULong) -> UInt): UInt {\n    var sum: UInt = 0.toUInt()\n    for (element in this) {\n        sum += selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the array.\n *\n * @SinceKotlin("1.5")\n * @OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n * @OverloadResolutionByLambdaReturnType\n * @Suppress("INAPPLICABLE_JVM_NAME")\n * @kotlin.jvm.JvmName("sumOfUInt")\n * @ExperimentalUnsignedTypes\n * @WasExperimental(ExperimentalUnsignedTypes::class)\n * @kotlin.internal.InlineOnly\n\npublic inline fun UByteArray.sumOf(selector: (UByte) -> UInt): UInt {\n    var sum: UInt = 0.toUInt()\n    for (element in this) {\n        sum += selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the array.\n *\n * @SinceKotlin("1.5")\n * @OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n * @OverloadResolutionByLambdaReturnType\n * @Suppress("INAPPLICABLE_JVM_NAME")\n * @kotlin.jvm.JvmName("sumOfUInt")\n * @ExperimentalUnsignedTypes\n * @WasExperimental(ExperimentalUnsignedTypes::class)\n * @kotlin.internal.InlineOnly\n\npublic inline fun UShortArray.sumOf(selector: (UShort) -> UInt): UInt {\n    var sum: UInt = 0.toUInt()\n    for (element in this) {\n        sum += selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the array.\n *\n * @SinceKotlin("1.5")\n * @OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n * @OverloadResolutionByLambdaReturnType\n * @Suppress("INAPPLICABLE_JVM_NAME")\n * @kotlin.jvm.JvmName("sumOfULong")\n * @ExperimentalUnsignedTypes\n * @WasExperimental(ExperimentalUnsignedTypes::class)\n * @kotlin.internal.InlineOnly\n\npublic inline fun UIntArray.sumOf(selector: (UInt) -> ULong): ULong {\n    var sum: ULong = 0.toULong()\n    for (element in this) {\n        sum += selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the array.\n *\n * @SinceKotlin("1.5")\n * @OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n * @OverloadResolutionByLambdaReturnType\n * @Suppress("INAPPLICABLE_JVM_NAME")\n * @kotlin.jvm.JvmName("sumOfULong")\n * @ExperimentalUnsignedTypes\n * @WasExperimental(ExperimentalUnsignedTypes::class)\n * @kotlin.internal.InlineOnly\n\npublic inline fun ULongArray.sumOf(selector: (ULong) -> ULong): ULong {\n    var sum: ULong = 0.toULong()\n    for (element in this) {\n        sum += selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the array.\n *\n * @SinceKotlin("1.5")\n * @OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n * @OverloadResolutionByLambdaReturnType\n * @Suppress("INAPPLICABLE_JVM_NAME")\n * @kotlin.jvm.JvmName("sumOfULong")\n * @ExperimentalUnsignedTypes\n * @WasExperimental(ExperimentalUnsignedTypes::class)\n * @kotlin.internal.InlineOnly\n\npublic inline fun UByteArray.sumOf(selector: (UByte) -> ULong): ULong {\n    var sum: ULong = 0.toULong()\n    for (element in this) {\n        sum += selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all values produced by [selector] function applied to each element in the array.\n *\n * @SinceKotlin("1.5")\n * @OptIn(kotlin.experimental.ExperimentalTypeInference::class)\n * @OverloadResolutionByLambdaReturnType\n * @Suppress("INAPPLICABLE_JVM_NAME")\n * @kotlin.jvm.JvmName("sumOfULong")\n * @ExperimentalUnsignedTypes\n * @WasExperimental(ExperimentalUnsignedTypes::class)\n * @kotlin.internal.InlineOnly\n\npublic inline fun UShortArray.sumOf(selector: (UShort) -> ULong): ULong {\n    var sum: ULong = 0.toULong()\n    for (element in this) {\n        sum += selector(element)\n    }\n    return sum\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.\n * The returned list has length of the shortest collection.\n * @sample samples.collections.Iterables.Operations.zipIterable\n *\n * @SinceKotlin("1.3")\n * @ExperimentalUnsignedTypes\n\npublic infix fun <R> UIntArray.zip(other: Array<out R>): List<Pair<UInt, R>> {\n    return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.\n * The returned list has length of the shortest collection.\n * @sample samples.collections.Iterables.Operations.zipIterable\n *\n * @SinceKotlin("1.3")\n * @ExperimentalUnsignedTypes\n\npublic infix fun <R> ULongArray.zip(other: Array<out R>): List<Pair<ULong, R>> {\n    return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.\n * The returned list has length of the shortest collection.\n * @sample samples.collections.Iterables.Operations.zipIterable\n
```

```

*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic infix fun <R> UByteArray.zip(other: Array<out R>): List<Pair<UByte, R>> {\n    return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.\n * The returned list has length of the shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic infix fun <R> UShortArray.zip(other: Array<out R>): List<Pair<UShort, R>> {\n    return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned list has length of the shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, V> UIntArray.zip(other: Array<out R>, transform: (a: UInt, b: R) -> V): List<V> {\n    val size = minOf(size, other.size)\n    val list = ArrayList<V>(size)\n    for (i in 0 until size) {\n        list.add(transform(this[i], other[i]))\n    }\n    return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned list has length of the shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, V> ULongArray.zip(other: Array<out R>, transform: (a: ULong, b: R) -> V): List<V> {\n    val size = minOf(size, other.size)\n    val list = ArrayList<V>(size)\n    for (i in 0 until size) {\n        list.add(transform(this[i], other[i]))\n    }\n    return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned list has length of the shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, V> UByteArray.zip(other: Array<out R>, transform: (a: UByte, b: R) -> V): List<V> {\n    val size = minOf(size, other.size)\n    val list = ArrayList<V>(size)\n    for (i in 0 until size) {\n        list.add(transform(this[i], other[i]))\n    }\n    return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned list has length of the shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, V> UShortArray.zip(other: Array<out R>, transform: (a: UShort, b: R) -> V): List<V> {\n    val size = minOf(size, other.size)\n    val list = ArrayList<V>(size)\n    for (i in 0 until size) {\n        list.add(transform(this[i], other[i]))\n    }\n    return list\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` collection and [other] array with the same index.\n * The returned list has length of the shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic infix fun <R> UIntArray.zip(other: Iterable<R>): List<Pair<UInt, R>> {\n    return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` collection and [other] array with the same index.\n * The returned list has length of the shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic infix fun <R> ULongArray.zip(other: Iterable<R>): List<Pair<ULong, R>> {\n    return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` collection and [other] array with the same index.\n * The returned list has length of the shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic infix fun <R> UByteArray.zip(other: Iterable<R>): List<Pair<UByte, R>> {\n    return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from the elements of `this` collection and [other] array with the same index.\n * The returned list has length of the shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n

```

```

*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic infix fun <R> UShortArray.zip(other:
Iterable<R>): List<Pair<UShort, R>> {\n    return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of
values built from the elements of `this` array and the [other] collection with the same index\n * using the provided
[transform] function applied to each pair of elements.\n * The returned list has length of the shortest collection.\n *
\n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, V>
UIntArray.zip(other: Iterable<R>, transform: (a: UInt, b: R) -> V): List<V> {\n    val arraySize = size\n    val list =
ArrayList<V>(minOf(other.collectionSizeOrDefault(10), arraySize))\n    var i = 0\n    for (element in other) {\n
if (i >= arraySize) break\n        list.add(transform(this[i++], element))\n    }\n    return list\n}\n\n/**\n * Returns a
list of values built from the elements of `this` array and the [other] collection with the same index\n * using the
provided [transform] function applied to each pair of elements.\n * The returned list has length of the shortest
collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, V>
ULongArray.zip(other: Iterable<R>, transform: (a: ULong, b: R) -> V): List<V> {\n    val arraySize = size\n    val
list = ArrayList<V>(minOf(other.collectionSizeOrDefault(10), arraySize))\n    var i = 0\n    for (element in other)
{\n        if (i >= arraySize) break\n        list.add(transform(this[i++], element))\n    }\n    return list\n}\n\n/**\n *
Returns a list of values built from the elements of `this` array and the [other] collection with the same index\n *
using the provided [transform] function applied to each pair of elements.\n * The returned list has length of the
shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, V>
UByteArray.zip(other: Iterable<R>, transform: (a: UByte, b: R) -> V): List<V> {\n    val arraySize = size\n    val list
= ArrayList<V>(minOf(other.collectionSizeOrDefault(10), arraySize))\n    var i = 0\n    for (element in other) {\n
if (i >= arraySize) break\n        list.add(transform(this[i++], element))\n    }\n    return list\n}\n\n/**\n * Returns a
list of values built from the elements of `this` array and the [other] collection with the same index\n * using the
provided [transform] function applied to each pair of elements.\n * The returned list has length of the shortest
collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <R, V>
UShortArray.zip(other: Iterable<R>, transform: (a: UShort, b: R) -> V): List<V> {\n    val arraySize = size\n    val
list = ArrayList<V>(minOf(other.collectionSizeOrDefault(10), arraySize))\n    var i = 0\n    for (element in other)
{\n        if (i >= arraySize) break\n        list.add(transform(this[i++], element))\n    }\n    return list\n}\n\n/**\n *
Returns a list of pairs built from the elements of `this` array and the [other] array with the same index.\n * The
returned list has length of the shortest collection.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterable\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic infix fun UIntArray.zip(other: UIntArray):
List<Pair<UInt, UInt>> {\n    return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built from
the elements of `this` array and the [other] array with the same index.\n * The returned list has length of the shortest
collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic infix fun ULongArray.zip(other: ULongArray):
List<Pair<ULong, ULong>> {\n    return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built
from the elements of `this` array and the [other] array with the same index.\n * The returned list has length of the
shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic infix fun UByteArray.zip(other: UByteArray):
List<Pair<UByte, UByte>> {\n    return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of pairs built
from the elements of `this` array and the [other] array with the same index.\n * The returned list has length of the
shortest collection.\n * \n * @sample samples.collections.Iterables.Operations.zipIterable\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic infix fun UShortArray.zip(other: UShortArray):
List<Pair<UShort, UShort>> {\n    return zip(other) { t1, t2 -> t1 to t2 }\n}\n\n/**\n * Returns a list of values built
from the elements of `this` array and the [other] array with the same index\n * using the provided [transform]

```

```

function applied to each pair of elements.\n * The returned list has length of the shortest array.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V>
UIntArray.zip(other: UIntArray, transform: (a: UInt, b: UInt) -> V): List<V> {\n    val size = minOf(size,
other.size)\n    val list = ArrayList<V>(size)\n    for (i in 0 until size) {\n        list.add(transform(this[i], other[i]))\n    }\n    return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array
with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned
list has length of the shortest array.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V>
ULongArray.zip(other: ULongArray, transform: (a: ULong, b: ULong) -> V): List<V> {\n    val size = minOf(size,
other.size)\n    val list = ArrayList<V>(size)\n    for (i in 0 until size) {\n        list.add(transform(this[i], other[i]))\n    }\n    return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array
with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned
list has length of the shortest array.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V>
UByteArray.zip(other: UByteArray, transform: (a: UByte, b: UByte) -> V): List<V> {\n    val size = minOf(size,
other.size)\n    val list = ArrayList<V>(size)\n    for (i in 0 until size) {\n        list.add(transform(this[i], other[i]))\n    }\n    return list\n}\n\n/**\n * Returns a list of values built from the elements of `this` array and the [other] array
with the same index\n * using the provided [transform] function applied to each pair of elements.\n * The returned
list has length of the shortest array.\n * \n * @sample
samples.collections.Iterables.Operations.zipIterableWithTransform\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun <V>
UShortArray.zip(other: UShortArray, transform: (a: UShort, b: UShort) -> V): List<V> {\n    val size = minOf(size,
other.size)\n    val list = ArrayList<V>(size)\n    for (i in 0 until size) {\n        list.add(transform(this[i], other[i]))\n    }\n    return list\n}\n\n/**\n * Returns the sum of all elements in the array.\n
*\n@kotlin.jvm.JvmName("sumOfUInt")\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedT
ypes::class)\npublic fun Array<out UInt>.sum(): UInt {\n    var sum: UInt = 0u\n    for (element in this) {\n        sum
+= element\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all elements in the array.\n
*\n@kotlin.jvm.JvmName("sumOfULong")\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsigned
Types::class)\npublic fun Array<out ULong>.sum(): ULong {\n    var sum: ULong = 0uL\n    for (element in this)
{\n        sum += element\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all elements in the array.\n
*\n@kotlin.jvm.JvmName("sumOfUByte")\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsigned
Types::class)\npublic fun Array<out UByte>.sum(): UInt {\n    var sum: UInt = 0u\n    for (element in this) {\n
sum += element\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all elements in the array.\n
*\n@kotlin.jvm.JvmName("sumOfUShort")\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsigned
Types::class)\npublic fun Array<out UShort>.sum(): UInt {\n    var sum: UInt = 0u\n    for (element in this) {\n
sum += element\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all elements in the array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UIntArray.sum(): UInt {\n    return storage.sum().toUInt()\n}\n\n/**\n * Returns the sum of all elements in the
array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
ULongArray.sum(): ULong {\n    return storage.sum().toULong()\n}\n\n/**\n * Returns the sum of all elements in
the array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline
fun UByteArray.sum(): UInt {\n    return sumOf { it.toUInt() }\n}\n\n/**\n * Returns the sum of all elements in the
array.\n
*\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\n@kotlin.internal.InlineOnly\npublic inline fun
UShortArray.sum(): UInt {\n    return sumOf { it.toUInt() }\n}\n\n"/\n * Copyright 2010-2021 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that

```

can be found in the license/LICENSE.txt file.\n

```
*\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName(\"UCollectionsKt\")\n\npackage\nkotlin.collections\n\n/\n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt\n// See:\nhttps://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\nimport kotlin.random.*\nimport\nkotlin.ranges.contains\nimport kotlin.ranges.reversed\n\n/**\n * Returns an array of UByte containing all of the\n elements of this collection.\n */\n@SinceKotlin(\"1.3\")\n@ExperimentalUnsignedTypes\npublic fun\nCollection<UByte>.toUByteArray(): UByteArray {\n    val result = UByteArray(size)\n    var index = 0\n    for\n(element in this)\n        result[index++] = element\n    return result\n}\n\n/**\n * Returns an array of UInt containing\n all of the elements of this collection.\n */\n@SinceKotlin(\"1.3\")\n@ExperimentalUnsignedTypes\npublic fun\nCollection<UInt>.toUIntArray(): UIntArray {\n    val result = UIntArray(size)\n    var index = 0\n    for (element in\nthis)\n        result[index++] = element\n    return result\n}\n\n/**\n * Returns an array of ULong containing all of the\n elements of this collection.\n */\n@SinceKotlin(\"1.3\")\n@ExperimentalUnsignedTypes\npublic fun\nCollection<ULong>.toULongArray(): ULongArray {\n    val result = ULongArray(size)\n    var index = 0\n    for\n(element in this)\n        result[index++] = element\n    return result\n}\n\n/**\n * Returns an array of UShort\n containing all of the elements of this collection.\n */\n@SinceKotlin(\"1.3\")\n@ExperimentalUnsignedTypes\npublic fun Collection<UShort>.toUShortArray():\nUShortArray {\n    val result = UShortArray(size)\n    var index = 0\n    for (element in this)\n        result[index++] =\n        element\n    return result\n}\n\n/**\n * Returns the sum of all elements in the collection.\n */\n@kotlin.jvm.JvmName(\"sumOfUInt\")\n@SinceKotlin(\"1.5\")\n@WasExperimental(ExperimentalUnsignedT\nypes::class)\npublic fun Iterable<UInt>.sum(): UInt {\n    var sum: UInt = 0\n    for (element in this) {\n        sum\n        += element\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all elements in the collection.\n */\n@kotlin.jvm.JvmName(\"sumOfULong\")\n@SinceKotlin(\"1.5\")\n@WasExperimental(ExperimentalUnsigned\nTypes::class)\npublic fun Iterable<ULong>.sum(): ULong {\n    var sum: ULong = 0\n    for (element in this) {\n        sum\n        += element\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all elements in the collection.\n */\n@kotlin.jvm.JvmName(\"sumOfUByte\")\n@SinceKotlin(\"1.5\")\n@WasExperimental(ExperimentalUnsigned\nTypes::class)\npublic fun Iterable<UByte>.sum(): UInt {\n    var sum: UInt = 0\n    for (element in this) {\n        sum\n        += element\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all elements in the collection.\n */\n@kotlin.jvm.JvmName(\"sumOfUShort\")\n@SinceKotlin(\"1.5\")\n@WasExperimental(ExperimentalUnsigned\nTypes::class)\npublic fun Iterable<UShort>.sum(): UInt {\n    var sum: UInt = 0\n    for (element in this) {\n        sum\n        += element\n    }\n    return sum\n}\n\n\"/>\n\n/* Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming\nLanguage contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the\n license/LICENSE.txt file.\n */\n\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName(\"UComparisonsKt\")\n\npackage\nkotlin.comparisons\n\n/\n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt\n// See:\nhttps://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\nimport kotlin.random.*\n\n/**\n * Returns the\n greater of two values.\n */\n@SinceKotlin(\"1.5\")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun maxOf(a: UInt, b:\nUInt): UInt {\n    return if (a >= b) a else b\n}\n\n/**\n * Returns the greater of two values.\n */\n@SinceKotlin(\"1.5\")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun maxOf(a: ULong,\nb: ULong): ULong {\n    return if (a >= b) a else b\n}\n\n/**\n * Returns the greater of two values.\n */\n@SinceKotlin(\"1.5\")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun maxOf(a: UByte,\nb: UByte): UByte {\n    return if (a >= b) a else b\n}\n\n/**\n * Returns the greater of three values.\n */\n@SinceKotlin(\"1.5\")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun maxOf(a: UShort,\nb: UShort): UShort {\n    return if (a >= b) a else b\n}\n\n/**\n * Returns the greater of three values.\n */\n@SinceKotlin(\"1.5\")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\npublic inline fun maxOf(a: UInt, b: UInt, c: UInt): UInt {\n    return maxOf(a, maxOf(b, c))\n}\n\n/**\n * Returns the greater of three values.\n */\n@SinceKotlin(\"1.5\")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\n
```



```

public inline fun maxOf(a: ULong, b: ULong, c: ULong): ULong {
    return maxOf(a, maxOf(b, c))
}
Returns the greater of three values.

@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
@kotlin.internal.InlineOnly
public inline fun maxOf(a: UByte, b: UByte, c: UByte): UByte {
    return maxOf(a, maxOf(b, c))
}
Returns the greater of three values.

@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
@kotlin.internal.InlineOnly
public inline fun maxOf(a: UShort, b: UShort, c: UShort): UShort {
    return maxOf(a, maxOf(b, c))
}
Returns the greater of the given values.

@SinceKotlin("1.4")
@ExperimentalUnsignedTypes
public fun
maxOf(a: UInt, vararg other: UInt): UInt {
    var max = a
    for (e in other) max = maxOf(max, e)
    return
    max
}
Returns the greater of the given values.

@SinceKotlin("1.4")
@ExperimentalUnsignedTypes
public fun maxOf(a: ULong, vararg other: ULong):
    ULong {
    var max = a
    for (e in other) max = maxOf(max, e)
    return max
}
Returns the greater
of the given values.

@SinceKotlin("1.4")
@ExperimentalUnsignedTypes
public fun maxOf(a: UByte,
    vararg other: UByte): UByte {
    var max = a
    for (e in other) max = maxOf(max, e)
    return max
}
Returns the greater of the given values.

@SinceKotlin("1.4")
@ExperimentalUnsignedTypes
public fun
maxOf(a: UShort, vararg other: UShort): UShort {
    var max = a
    for (e in other) max = maxOf(max, e)
    return
    max
}
Returns the smaller of two values.

@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
public fun minOf(a: UInt, b:
    UInt): UInt {
    return if (a <= b) a else b
}
Returns the smaller of two values.

@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
public fun minOf(a: ULong,
    b: ULong): ULong {
    return if (a <= b) a else b
}
Returns the smaller of two values.

@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
public fun minOf(a: UByte,
    b: UByte): UByte {
    return if (a <= b) a else b
}
Returns the smaller of two values.

@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
public fun minOf(a: UShort,
    b: UShort): UShort {
    return if (a <= b) a else b
}
Returns the smaller of three values.

@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
@kotlin.internal.InlineOnly
public inline fun minOf(a: UInt, b: UInt, c: UInt): UInt {
    return minOf(a, minOf(b, c))
}
Returns
the smaller of three values.

@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
@kotlin.internal.InlineOnly
public inline fun minOf(a: ULong, b: ULong, c: ULong): ULong {
    return minOf(a, minOf(b, c))
}
Returns the smaller of three values.

@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
@kotlin.internal.InlineOnly
public inline fun minOf(a: UByte, b: UByte, c: UByte): UByte {
    return minOf(a, minOf(b, c))
}
Returns the smaller of three values.

@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
@kotlin.internal.InlineOnly
public inline fun minOf(a: UShort, b: UShort, c: UShort): UShort {
    return minOf(a, minOf(b, c))
}
Returns the smaller of the given values.

@SinceKotlin("1.4")
@ExperimentalUnsignedTypes
public fun
minOf(a: UInt, vararg other: UInt): UInt {
    var min = a
    for (e in other) min = minOf(min, e)
    return
    min
}
Returns the smaller of the given values.

@SinceKotlin("1.4")
@ExperimentalUnsignedTypes
public fun minOf(a: ULong, vararg other: ULong):
    ULong {
    var min = a
    for (e in other) min = minOf(min, e)
    return min
}
Returns the smaller
of the given values.

@SinceKotlin("1.4")
@ExperimentalUnsignedTypes
public fun minOf(a: UByte,
    vararg other: UByte): UByte {
    var min = a
    for (e in other) min = minOf(min, e)
    return min
}
Returns the smaller of the given values.

@SinceKotlin("1.4")
@ExperimentalUnsignedTypes
public fun
minOf(a: UShort, vararg other: UShort): UShort {
    var min = a
    for (e in other) min = minOf(min, e)
    return
    min
}
Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.
Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.

@file:kotlin.jvm.JvmMultifileClass
@file:kotlin.jvm.JvmName("URangesKt")
package

```

```

kotlin.ranges\n\n/\n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\nimport kotlin.random.*\n\n/**\n * Returns a
random element from this range.\n * \n * @throws IllegalArgumentException if this range is empty.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\n
npublic inline fun UIntRange.random(): UInt {\n    return random(Random)\n}\n\n/**\n * Returns a random element
from this range.\n * \n * @throws IllegalArgumentException if this range is empty.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\n
npublic inline fun ULongRange.random(): ULong {\n    return random(Random)\n}\n\n/**\n * Returns a random
element from this range using the specified source of randomness.\n * \n * @throws IllegalArgumentException if
this range is empty.\n * \n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic
fun UIntRange.random(random: Random): UInt {\n    try {\n        return random.nextUInt(this)\n    } catch(e:
IllegalArgumentException) {\n        throw NoSuchElementException(e.message)\n    }\n}\n\n/**\n * Returns a
random element from this range using the specified source of randomness.\n * \n * @throws
IllegalArgument\nException if this range is empty.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
ULongRange.random(random: Random): ULong {\n    try {\n        return random.nextULong(this)\n    } catch(e:
IllegalArgumentException) {\n        throw NoSuchElementException(e.message)\n    }\n}\n\n/**\n * Returns a
random element from this range, or `null` if this range is empty.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class,
ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\npublic inline fun UIntRange.randomOrNull():
UInt? {\n    return randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this range, or `null` if this
range is empty.\n * \n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class,
ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\npublic inline fun ULongRange.randomOrNull():
ULong? {\n    return randomOrNull(Random)\n}\n\n/**\n * Returns a random element from this range using the
specified source of randomness, or `null` if this range is empty.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class,
ExperimentalUnsignedTypes::class)\npublic fun UIntRange.randomOrNull(random: Random): UInt? {\n    if
(isEmpty())\n        return null\n    return random.nextUInt(this)\n}\n\n/**\n * Returns a random element from this
range using the specified source of randomness, or `null` if this range is empty.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalStdlibApi::class,
ExperimentalUnsignedTypes::class)\npublic fun ULongRange.randomOrNull(random: Random): ULong? {\n    if
(isEmpty())\n        return null\n    return random.nextULong(this)\n}\n\n/**\n * Returns `true` if this range contains
the specified [element].\n * \n * Always returns `false` if the [element] is `null`.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\n
npublic inline operator fun UIntRange.contains(element: UInt?): Boolean {\n    return element != null &&
contains(element)\n}\n\n/**\n * Returns `true` if this range contains the specified [element].\n * \n * Always returns
`false` if the [element] is `null`.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\n
npublic inline operator fun ULongRange.contains(element: ULong?): Boolean {\n    return element != null &&
contains(element)\n}\n\n/**\n * Checks if the specified [value] belongs to this range.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic operator fun
UIntRange.contains(value: UByte): Boolean {\n    return contains(value.toUInt())\n}\n\n/**\n * Checks if the
specified [value] belongs to this range.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic operator fun
ULongRange.contains(value: UByte): Boolean {\n    return contains(value.toULong())\n}\n\n/**\n * Checks if the
specified [value] belongs to this range.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic operator fun
ULongRange.contains(value: UInt): Boolean {\n    return contains(value.toULong())\n}\n\n/**\n * Checks if the

```

specified [value] belongs to this range.\n

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic operator fun\nUIntRange.contains(value: ULong): Boolean {\n    return (value shr UInt.SIZE_BITS) == 0uL &&\n    contains(value.toInt())\n}\n\n/**\n * Checks if the specified [value] belongs to this range.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic operator fun\nUIntRange.contains(value: UShort): Boolean {\n    return contains(value.toInt())\n}\n\n/**\n * Checks if the\n specified [value] belongs to this range.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic operator fun\nULongRange.contains(value: UShort): Boolean {\n    return contains(value.toULong())\n}\n\n/**\n * Returns a\n progression from this value down to the specified [to] value with the step -1.\n * \n * The [to] value should be less\n than or equal to `this` value.\n * If the [to] value is greater than `this` value the returned progression is empty.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic infix fun\nUByte.downTo(to: UByte): UIntProgression {\n    return UIntProgression.fromClosedRange(this.toInt(),\n    to.toInt(), -1)\n}\n\n/**\n * Returns a progression from this value down to the specified [to] value with the step -\n 1.\n * \n * The [to] value should be less than or equal to `this` value.\n * If the [to] value is greater than `this` value\n the returned progression is empty.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic infix fun\nUInt.downTo(to: UInt): UIntProgression {\n    return UIntProgression.fromClosedRange(this, to, -1)\n}\n\n/**\n * Returns a progression from this value down to the specified [to] value with the step -1.\n * \n * The [to] value should\n be less than or equal to `this` value.\n * If the [to] value is greater than `this` value the returned progression is\n empty.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic infix fun\nULong.downTo(to: ULong): ULongProgression {\n    return ULongProgression.fromClosedRange(this, to, -\n    1L)\n}\n\n/**\n * Returns a progression from this value down to the specified [to] value with the step -1.\n * \n * The [to] value should\n be less than or equal to `this` value.\n * If the [to] value is greater than `this` value the\n returned progression is empty.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic infix fun\nUShort.downTo(to: UShort): UIntProgression {\n    return UIntProgression.fromClosedRange(this.toInt(),\n    to.toInt(), -1)\n}\n\n/**\n * Returns a progression that goes over the same range in the opposite direction with the\n same step.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun\nUIntProgression.reversed(): UIntProgression {\n    return UIntProgression.fromClosedRange(last, first, -\n    step)\n}\n\n/**\n * Returns a progression that goes over the same range in the opposite direction with the same\n step.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun\nULongProgression.reversed(): ULongProgression {\n    return ULongProgression.fromClosedRange(last, first, -\n    step)\n}\n\n/**\n * Returns a progression that goes over the same range with the given step.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic infix fun\nUIntProgression.step(step: Int): UIntProgression {\n    checkStepIsPositive(step > 0, step)\n    return\n    UIntProgression.fromClosedRange(first, last, if (this.step > 0) step else -step)\n}\n\n/**\n * Returns a progression\n that goes over the same range with the given step.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic infix fun\nUByte.until(to: UByte): UIntRange {\n    if (to <= UByte.MIN_VALUE) return UIntRange.EMPTY\n    return\n    this.toInt() .. (to - 1u).toInt()\n}\n\n/**\n * Returns a range from this value up to but excluding the specified [to]\n value.\n * \n * If the [to] value is less than or equal to `this` value, then the returned range is empty.\n
```

```
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic infix fun UInt.until(to:
```

```

UInt): UIntRange {
    if (to <= UInt.MIN_VALUE) return UIntRange.EMPTY
    return this .. (to - 1u).toUInt()
}

/**
 * Returns a range from this value up to but excluding the specified [to] value.
 * If the [to] value is less than or equal to `this` value, then the returned range is empty.
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
public infix fun
ULong.until(to: ULong): ULongRange {
    if (to <= ULong.MIN_VALUE) return ULongRange.EMPTY
    return this .. (to - 1u).toULong()
}

/**
 * Returns a range from this value up to but excluding the specified [to]
 * value.
 * If the [to] value is less than or equal to `this` value, then the returned range is empty.
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
public infix fun
UShort.until(to: UShort): UIntRange {
    if (to <= UShort.MIN_VALUE) return UIntRange.EMPTY
    return this.toUInt() .. (to - 1u).toUInt()
}

/**
 * Ensures that this value is not less than the specified
 * [minimumValue].
 * @return this value if it's greater than or equal to the [minimumValue] or the
 * [minimumValue] otherwise.
 * @sample samples.comparisons.ComparableOps.coerceAtLeastUnsigned
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
public fun
UInt.coerceAtLeast(minimumValue: UInt): UInt {
    return if (this < minimumValue) minimumValue else
    this
}

/**
 * Ensures that this value is not less than the specified [minimumValue].
 * @return this value
 * if it's greater than or equal to the [minimumValue] or the [minimumValue] otherwise.
 * @sample
 * samples.comparisons.ComparableOps.coerceAtLeastUnsigned
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
public fun
ULong.coerceAtLeast(minimumValue: ULong): ULong {
    return if (this < minimumValue) minimumValue else
    this
}

/**
 * Ensures that this value is not less than the specified [minimumValue].
 * @return this value
 * if it's greater than or equal to the [minimumValue] or the [minimumValue] otherwise.
 * @sample
 * samples.comparisons.ComparableOps.coerceAtLeastUnsigned
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
public fun
UByte.coerceAtLeast(minimumValue: UByte): UByte {
    return if (this < minimumValue) minimumValue else
    this
}

/**
 * Ensures that this value is not less than the specified [minimumValue].
 * @return this value
 * if it's greater than or equal to the [minimumValue] or the [minimumValue] otherwise.
 * @sample
 * samples.comparisons.ComparableOps.coerceAtLeastUnsigned
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
public fun
UShort.coerceAtLeast(minimumValue: UShort): UShort {
    return if (this < minimumValue) minimumValue else
    this
}

/**
 * Ensures that this value is not greater than the specified [maximumValue].
 * @return this
 * value if it's less than or equal to the [maximumValue] or the [maximumValue] otherwise.
 * @sample
 * samples.comparisons.ComparableOps.coerceAtMostUnsigned
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
public fun
UInt.coerceAtMost(maximumValue: UInt): UInt {
    return if (this > maximumValue) maximumValue else
    this
}

/**
 * Ensures that this value is not greater than the specified [maximumValue].
 * @return this
 * value if it's less than or equal to the [maximumValue] or the [maximumValue] otherwise.
 * @sample
 * samples.comparisons.ComparableOps.coerceAtMostUnsigned
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
public fun
ULong.coerceAtMost(maximumValue: ULong): ULong {
    return if (this > maximumValue) maximumValue else
    this
}

/**
 * Ensures that this value is not greater than the specified [maximumValue].
 * @return this
 * value if it's less than or equal to the [maximumValue] or the [maximumValue] otherwise.
 * @sample
 * samples.comparisons.ComparableOps.coerceAtMostUnsigned
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
public fun
UByte.coerceAtMost(maximumValue: UByte): UByte {
    return if (this > maximumValue) maximumValue else
    this
}

/**
 * Ensures that this value is not greater than the specified [maximumValue].
 * @return this
 * value if it's less than or equal to the [maximumValue] or the [maximumValue] otherwise.
 * @sample
 * samples.comparisons.ComparableOps.coerceAtMostUnsigned
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
public fun

```

```

UShort.coerceAtMost(maximumValue: UShort): UShort { \n  return if (this > maximumValue) maximumValue
else this\n}\n\n/**\n * Ensures that this value lies in the specified range [minimumValue]..[maximumValue].\n * \n
* @return this value if it's in the range, or [minimumValue] if this value is less than [minimumValue], or
[maximumValue] if this value is greater than [maximumValue].\n * \n * @sample
samples.comparisons.ComparableOps.coerceInUnsigned\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
UInt.coerceIn(minimumValue: UInt, maximumValue: UInt): UInt { \n  if (minimumValue > maximumValue)
throw IllegalArgumentException("Cannot coerce value to an empty range: maximum $maximumValue is less than
minimum $minimumValue.")\n  if (this < minimumValue) return minimumValue\n  if (this > maximumValue)
return maximumValue\n  return this\n}\n\n/**\n * Ensures that this value lies in the specified range
[minimumValue]..[maximumValue].\n * \n * @return this value if it's in the range, or [minimumValue] if this value
is less than [minimumValue], or [maximumValue] if this value is greater than [maximumValue].\n * \n * @sample
samples.comparisons.ComparableOps.coerceInUnsigned\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
ULong.coerceIn(minimumValue: ULong, maximumValue: ULong): ULong { \n  if (minimumValue >
maximumValue) throw IllegalArgumentException("Cannot coerce value to an empty range: maximum
$maximumValue is less than minimum $minimumValue.")\n  if (this < minimumValue) return minimumValue\n
if (this > maximumValue) return maximumValue\n  return this\n}\n\n/**\n * Ensures that this value lies in the
specified range [minimumValue]..[maximumValue].\n * \n * @return this value if it's in the range, or
[minimumValue] if this value is less than [minimumValue], or [maximumValue] if this value is greater than
[maximumValue].\n * \n * @sample samples.comparisons.ComparableOps.coerceInUnsigned\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
UByte.coerceIn(minimumValue: UByte, maximumValue: UByte): UByte { \n  if (minimumValue >
maximumValue) throw IllegalArgumentException("Cannot coerce value to an empty range: maximum
$maximumValue is less than minimum $minimumValue.")\n  if (this < minimumValue) return minimumValue\n
if (this > maximumValue) return maximumValue\n  return this\n}\n\n/**\n * Ensures that this value lies in the
specified range [minimumValue]..[maximumValue].\n * \n * @return this value if it's in the range, or
[minimumValue] if this value is less than [minimumValue], or [maximumValue] if this value is greater than
[maximumValue].\n * \n * @sample samples.comparisons.ComparableOps.coerceInUnsigned\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
UShort.coerceIn(minimumValue: UShort, maximumValue: UShort): UShort { \n  if (minimumValue >
maximumValue) throw IllegalArgumentException("Cannot coerce value to an empty range: maximum
$maximumValue is less than minimum $minimumValue.")\n  if (this < minimumValue) return minimumValue\n
if (this > maximumValue) return maximumValue\n  return this\n}\n\n/**\n * Ensures that this value lies in the
specified [range].\n * \n * @return this value if it's in the [range], or `range.start` if this value is less than
`range.start`, or `range.endInclusive` if this value is greater than `range.endInclusive`.\n * \n * @sample
samples.comparisons.ComparableOps.coerceInUnsigned\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
UInt.coerceIn(range: ClosedRange<UInt>): UInt { \n  if (range is ClosedFloatingPointRange) {\n    return
this.coerceIn<UInt>(range)\n  }\n  if (range.isEmpty()) throw IllegalArgumentException("Cannot coerce value to
an empty range: $range.")\n  return when {\n    this < range.start -> range.start\n    this > range.endInclusive -
-> range.endInclusive\n    else -> this\n  }\n}\n\n/**\n * Ensures that this value lies in the specified [range].\n * \n
* @return this value if it's in the [range], or `range.start` if this value is less than `range.start`, or
`range.endInclusive` if this value is greater than `range.endInclusive`.\n * \n * @sample
samples.comparisons.ComparableOps.coerceInUnsigned\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic fun
ULong.coerceIn(range: ClosedRange<ULong>): ULong { \n  if (range is ClosedFloatingPointRange) {\n    return
this.coerceIn<ULong>(range)\n  }\n  if (range.isEmpty()) throw IllegalArgumentException("Cannot coerce value

```

```

to an empty range: $range.)\n    return when {\n        this < range.start -> range.start\n        this >
range.endInclusive -> range.endInclusive\n        else -> this\n    }\n}\n\n",/*\n * Copyright 2010-2021 JetBrains
s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0
license that can be found in the license/LICENSE.txt file.\n
*\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("USequencesKt")\n\npackage
kotlin.sequences\n\n/\n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\nimport kotlin.random.*\n\n/**\n * Returns the
sum of all elements in the sequence.\n * \n * The operation is _terminal_.\n
*\n\n@kotlin.jvm.JvmName("sumOfUInt")\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedT
ypes::class)\npublic fun Sequence<UInt>.sum(): UInt {\n    var sum: UInt = 0u\n    for (element in this) {\n        sum
+= element\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all elements in the sequence.\n * \n * The
operation is _terminal_.\n
*\n\n@kotlin.jvm.JvmName("sumOfULong")\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsigned
Types::class)\npublic fun Sequence<ULong>.sum(): ULong {\n    var sum: ULong = 0uL\n    for (element in this)
{\n        sum += element\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all elements in the sequence.\n * \n *
The operation is _terminal_.\n
*\n\n@kotlin.jvm.JvmName("sumOfUByte")\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsigned
Types::class)\npublic fun Sequence<UByte>.sum(): UInt {\n    var sum: UInt = 0u\n    for (element in this) {\n
sum += element\n    }\n    return sum\n}\n\n/**\n * Returns the sum of all elements in the sequence.\n * \n * The
operation is _terminal_.\n
*\n\n@kotlin.jvm.JvmName("sumOfUShort")\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsigned
Types::class)\npublic fun Sequence<UShort>.sum(): UInt {\n    var sum: UInt = 0u\n    for (element in this) {\n
sum += element\n    }\n    return sum\n}\n\n",/*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n *\n\npackage kotlin\n\npublic expect open class Error : Throwable {\n
    constructor()\n    constructor(message: String?)\n    constructor(message: String?, cause: Throwable?)\n
    constructor(cause: Throwable?)\n}\n\npublic expect open class Exception : Throwable {\n    constructor()\n
    constructor(message: String?)\n    constructor(message: String?, cause: Throwable?)\n    constructor(cause:
Throwable?)\n}\n\npublic expect open class RuntimeException : Exception {\n    constructor()\n    constructor(message:
String?)\n    constructor(message: String?, cause: Throwable?)\n    constructor(cause: Throwable?)\n}\n\npublic
expect open class IllegalArgumentException : RuntimeException {\n    constructor()\n    constructor(message: String?)\n
    constructor(message: String?, cause: Throwable?)\n    constructor(cause: Throwable?)\n}\n\npublic expect open
class IllegalStateException : RuntimeException {\n    constructor()\n    constructor(message: String?)\n    constructor(message:
String?, cause: Throwable?)\n    constructor(cause: Throwable?)\n}\n\npublic expect open class IndexOutOfBoundsException
: RuntimeException {\n    constructor()\n    constructor(message: String?)\n}\n\npublic expect open class ConcurrentModificationException
: RuntimeException {\n    constructor()\n    constructor(message: String?)\n    @Deprecated("The constructor is not
supported on all platforms and will be removed from kotlin-stdlib-common soon.", level =
DeprecationLevel.ERROR)\n    constructor(message: String?, cause: Throwable?)\n    @Deprecated("The
constructor is not supported on all platforms and will be removed from kotlin-stdlib-common soon.", level =
DeprecationLevel.ERROR)\n    constructor(cause: Throwable?)\n}\n\npublic expect open class
UnsupportedOperationException : RuntimeException {\n    constructor()\n    constructor(message: String?)\n
    constructor(message: String?, cause: Throwable?)\n    constructor(cause: Throwable?)\n}\n\npublic expect open
class NumberFormatException : IllegalArgumentException {\n    constructor()\n    constructor(message:
String?)\n}\n\npublic expect open class NullPointerException : RuntimeException {\n    constructor()\n
    constructor(message: String?)\n}\n\npublic expect open class ClassCastException : RuntimeException {\n
    constructor()\n    constructor(message: String?)\n}\n\npublic expect open class AssertionError : Error {\n
    constructor()\n    constructor(message: Any?)\n}\n\npublic expect open class NoSuchElementException :

```

```

RuntimeException {\n  constructor()\n  constructor(message: String?)\n}\n\n@SinceKotlin("1.3")\npublic expect open class ArithmeticException : RuntimeException {\n  constructor()\n  constructor(message: String?)\n}\n\n@Deprecated("This exception type is not supposed to be thrown or caught in common code and will be removed from kotlin-stdlib-common soon.")\nlevel = DeprecationLevel.ERROR)\npublic expect open class NoWhenBranchMatchedException : RuntimeException {\n  constructor()\n  constructor(message: String?)\n  constructor(message: String?, cause: Throwable?)\n  constructor(cause: Throwable?)\n}\n\n@Deprecated("This exception type is not supposed to be thrown or caught in common code and will be removed from kotlin-stdlib-common soon.")\nlevel = DeprecationLevel.ERROR)\npublic expect class UninitializedPropertyAccessException : RuntimeException {\n  constructor()\n  constructor(message: String?)\n  constructor(message: String?, cause: Throwable?)\n  constructor(cause: Throwable?)\n}\n\n/**\n * Thrown after invocation of a function or property that was expected to return `Nothing`, but returned something instead.\n */\n\n@SinceKotlin("1.4")\n@PublishedApi\ninternal class KotlinNothingValueException : RuntimeException {\n  constructor() : super()\n  constructor(message: String?) : super(message)\n  constructor(message: String?, cause: Throwable?) : super(message, cause)\n  constructor(cause: Throwable?) : super(cause)\n}\n\n/**\n * Returns the detailed description of this throwable with its stack trace.\n * * The detailed description includes:\n * * - the short description (see [Throwable.toString]) of this throwable;\n * * - the complete stack trace;\n * * - detailed descriptions of the exceptions that were [suppressed][suppressedExceptions] in order to deliver this exception;\n * * - the detailed description of each throwable in the [Throwable.cause] chain.\n */\n\n@SinceKotlin("1.4")\npublic expect fun Throwable.stackTraceToString(): String\n\n/**\n * Prints the [detailed description][Throwable.stackTraceToString] of this throwable to the standard output or standard error output.\n */\n\n@SinceKotlin("1.4")\n@Suppress("EXTENSION_SHADOWED_BY_MEMBER")\npublic expect fun Throwable.printStackTrace(): Unit\n\n/**\n * When supported by the platform, adds the specified exception to the list of exceptions that were\n * suppressed in order to deliver this exception.\n */\n\n@SinceKotlin("1.4")\n@Suppress("EXTENSION_SHADOWED_BY_MEMBER")\npublic expect fun Throwable.addSuppressed(exception: Throwable)\n\n/**\n * Returns a list of all exceptions that were suppressed in order to deliver this exception.\n * * The list can be empty;\n * * - if no exceptions were suppressed;\n * * - if the platform doesn't support suppressed exceptions;\n * * - if this [Throwable] instance has disabled the suppression.\n */\n\n@SinceKotlin("1.4")\npublic expect val Throwable.suppressedExceptions: List<Throwable>\n\n"/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.js\n\nimport kotlin.annotation.AnnotationTarget.*\n\n/**\n * Gives a declaration (a function, a property or a class) specific name in JavaScript.\n */\n\n@Target(CLASS, FUNCTION, PROPERTY, CONSTRUCTOR, PROPERTY_GETTER, PROPERTY_SETTER)\n@OptionalExpectation\npublic expect annotation class JsName(val name: String)\n\n/**\n * Marks experimental JS export annotations.\n * * Note that behavior of these annotations will likely be changed in the future.\n * * Usages of such annotations will be reported as warnings unless an explicit opt-in with\n * the [OptIn] annotation, e.g. `@OptIn(ExperimentalJsExport::class)`,\n * or with the `-Xopt-in=kotlin.js.ExperimentalJsExport` compiler option is given.\n */\n\n@Suppress("DEPRECATION")\n@Experimental(level = Experimental.Level.WARNING)\n@RequiresOptIn(level = RequiresOptIn.Level.WARNING)\n@MustBeDocumented\n@Retention(AnnotationRetention.BINARY)\n@SinceKotlin("1.4")\npublic annotation class ExperimentalJsExport\n\n/**\n * Exports top-level declaration on JS platform.\n * * Compiled module exposes declarations that are marked with this annotation without name mangling.\n * * This annotation can be applied to either files or top-level declarations.\n * * It is currently prohibited to export the following kinds of declarations:\n * * * `expect` declarations\n * * * inline functions with reified type parameters\n * * * suspend functions\n * * * secondary constructors without `@JsName`\n * * * extension properties\n * * * enum classes\n * * * annotation classes\n * * * Signatures of exported declarations must only contain "exportable" types:\n * * * `dynamic`, `Any`, `String`, `Boolean`, `Byte`, `Short`, `Int`, `Float`, `Double`\n * * * `BooleanArray`, `ByteArray`, `ShortArray`, `IntArray`, `FloatArray`, `DoubleArray`\n * *

```

```

`Array<exportable-type>` \n * * Function types with exportable parameters and return types \n * * `external` or
`@JsExport` classes and interfaces \n * * Nullable counterparts of types above \n * * Unit return type. Must not be
nullable \n * \n * This annotation is experimental, meaning that restrictions mentioned above are subject to change. \n
* \n * @ExperimentalJsExport \n * @Retention(AnnotationRetention.BINARY) \n * @Target(CLASS, PROPERTY,
FUNCTION, FILE) \n * @SinceKotlin("1.4") \n * @OptionalExpectation \n * public expect annotation class
JsExport() { \n * \n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors. \n * Use
of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file. \n
* \n * \n * package kotlin.io \n * \n * Prints the line separator to the standard output stream. \n * \n * public expect fun
println() \n * \n * Prints the given [message] and the line separator to the standard output stream. \n * \n * public expect fun
println(message: Any?) \n * \n * Prints the given [message] to the standard output stream. \n * \n * public expect fun
print(message: Any?) \n * \n * Reads a line of input from the standard input stream and returns it, \n * or throws a
[RuntimeException] if EOF has already been reached when [readln] is called. \n * \n * LF or CRLF is treated as the
line terminator. Line terminator is not included in the returned string. \n * \n * Currently this function is not supported
in Kotlin/JS and throws [UnsupportedOperationException]. \n * \n * @SinceKotlin("1.6") \n * \n * public expect fun
readln(): String \n * \n * Reads a line of input from the standard input stream and returns it, \n * or return `null` if
EOF has already been reached when [readlnOrNull] is called. \n * \n * LF or CRLF is treated as the line terminator.
Line terminator is not included in the returned string. \n * \n * Currently this function is not supported in Kotlin/JS
and throws [UnsupportedOperationException]. \n * \n * @SinceKotlin("1.6") \n * \n * public expect fun readlnOrNull():
String? \n * \n * internal class ReadAfterEOFException(message: String?) : RuntimeException(message) \n * \n * internal
expect interface Serializable \n * \n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language
contributors. \n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file. \n * \n * package kotlin.collections \n * \n * import kotlin.internal.PlatformDependent \n * \n * \n * Classes that inherit from this interface can be represented as a sequence of elements that can \n * be iterated over. \n *
@param T the type of element being iterated over. The iterator is covariant in its element type. \n * \n * public interface
Iterable<out T> { \n * \n * Returns an iterator over the elements of this object. \n * \n * public operator fun
iterator(): Iterator<T> \n * \n * \n * Classes that inherit from this interface can be represented as a sequence of
elements that can \n * be iterated over and that supports removing elements during iteration. \n * \n * @param T the type
of element being iterated over. The mutable iterator is invariant in its element type. \n * \n * public interface
MutableIterable<out T> : Iterable<T> { \n * \n * Returns an iterator over the elements of this sequence that
supports removing elements during iteration. \n * \n * override fun iterator(): MutableIterator<T> \n * \n * \n * A
generic collection of elements. Methods in this interface support only read-only access to the collection; \n *
read/write access is supported through the [MutableCollection] interface. \n * \n * @param E the type of elements
contained in the collection. The collection is covariant in its element type. \n * \n * public interface Collection<out E> :
Iterable<E> { \n * \n * // Query Operations \n * \n * Returns the size of the collection. \n * \n * public val size:
Int \n * \n * Returns `true` if the collection is empty (contains no elements), `false` otherwise. \n * \n * public fun
isEmpty(): Boolean \n * \n * Checks if the specified element is contained in this collection. \n * \n * public operator fun
contains(element: @UnsafeVariance E): Boolean \n * \n * override fun iterator():
Iterator<E> \n * \n * // Bulk Operations \n * \n * Checks if all elements in the specified collection are contained in
this collection. \n * \n * public fun containsAll(elements: Collection<@UnsafeVariance E>): Boolean \n * \n * \n * A
generic collection of elements that supports adding and removing elements. \n * \n * @param E the type of
elements contained in the collection. The mutable collection is invariant in its element type. \n * \n * public interface
MutableCollection<E> : Collection<E>, MutableIterable<E> { \n * \n * // Query Operations \n * \n * override fun iterator():
MutableIterator<E> \n * \n * // Modification Operations \n * \n * Adds the specified element to the collection. \n *
\n * \n * @return `true` if the element has been added, `false` if the collection does not support duplicates \n * and
the element is already contained in the collection. \n * \n * public fun add(element: E): Boolean \n * \n * \n * Removes
a single instance of the specified element from this \n * collection, if it is present. \n * \n * @return
`true` if the element has been successfully removed; `false` if it was not present in the collection. \n * \n * public fun
remove(element: E): Boolean \n * \n * // Bulk Modification Operations \n * \n * Adds all of the elements of

```



```

the specified collection to this collection.\n    *\n    * @return `true` if any of the specified elements was added to
the collection, `false` if the collection was not modified.\n    */\n    public fun addAll(elements: Collection<E>):
Boolean\n\n    /**\n    * Removes all of this collection's elements that are also contained in the specified
collection.\n    *\n    * @return `true` if any of the specified elements was removed from the collection, `false` if
the collection was not modified.\n    */\n    public fun removeAll(elements: Collection<E>): Boolean\n\n    /**\n    * Retains only the elements in this collection that are contained in the specified collection.\n    *\n    * @return
`true` if any element was removed from the collection, `false` if the collection was not modified.\n    */\n    public
fun retainAll(elements: Collection<E>): Boolean\n\n    /**\n    * Removes all elements from this collection.\n
*\n    */\n    public fun clear(): Unit\n\n    /**\n    * A generic ordered collection of elements. Methods in this interface
support only read-only access to the list;\n    * read/write access is supported through the [MutableList] interface.\n
*\n    * @param E the type of elements contained in the list. The list is covariant in its element type.\n    */\n    public interface
List<out E> : Collection<E> {\n    // Query Operations\n\n    override val size: Int\n    override fun isEmpty():
Boolean\n    override fun contains(element: @UnsafeVariance E): Boolean\n    override fun iterator():
Iterator<E>\n\n    // Bulk Operations\n    override fun containsAll(elements: Collection<@UnsafeVariance E>):
Boolean\n\n    // Positional Access Operations\n    /**\n    * Returns the element at the specified index in the list.\n
*\n    */\n    public operator fun get(index: Int): E\n\n    // Search Operations\n    /**\n    * Returns the index of the first
occurrence of the specified element in the list, or -1 if the specified\n    * element is not contained in the list.\n
*\n    */\n    public fun indexOf(element: @UnsafeVariance E): Int\n\n    /**\n    * Returns the index of the last
occurrence of the specified element in the list, or -1 if the specified\n    * element is not contained in the list.\n
*\n    */\n    public fun lastIndexOf(element: @UnsafeVariance E): Int\n\n    // List Iterators\n    /**\n    * Returns a list
iterator over the elements in this list (in proper sequence).\n    */\n    public fun listIterator(): ListIterator<E>\n\n
/**\n    * Returns a list iterator over the elements in this list (in proper sequence), starting at the specified [index].\n
*\n    */\n    public fun listIterator(index: Int): ListIterator<E>\n\n    // View\n    /**\n    * Returns a view of the portion
of this list between the specified [fromIndex] (inclusive) and [toIndex] (exclusive).\n    * The returned list is backed
by this list, so non-structural changes in the returned list are reflected in this list, and vice-versa.\n    *\n    *
Structural changes in the base list make the behavior of the view undefined.\n    */\n    public fun
subList(fromIndex: Int, toIndex: Int): List<E>\n\n    /**\n    * A generic ordered collection of elements that supports
adding and removing elements.\n    * @param E the type of elements contained in the list. The mutable list is invariant
in its element type.\n    */\n    public interface MutableList<E> : List<E>, MutableCollection<E> {\n    // Modification
Operations\n    /**\n    * Adds the specified element to the end of this list.\n    *\n    * @return `true` because the
list is always modified as the result of this operation.\n    */\n    override fun add(element: E): Boolean\n\n
override fun remove(element: E): Boolean\n\n    // Bulk Modification Operations\n    /**\n    * Adds all of the
elements of the specified collection to the end of this list.\n    *\n    * The elements are appended in the order they
appear in the [elements] collection.\n    *\n    * @return `true` if the list was changed as the result of the
operation.\n    */\n    override fun addAll(elements: Collection<E>): Boolean\n\n    /**\n    * Inserts all of the
elements of the specified collection [elements] into this list at the specified [index].\n    *\n    * @return `true` if the
list was changed as the result of the operation.\n    */\n    public fun addAll(index: Int, elements: Collection<E>):
Boolean\n\n    override fun removeAll(elements: Collection<E>): Boolean\n    override fun retainAll(elements:
Collection<E>): Boolean\n    override fun clear(): Unit\n\n    // Positional Access Operations\n    /**\n    * Replaces
the element at the specified position in this list with the specified element.\n    *\n    * @return the element
previously at the specified position.\n    */\n    public operator fun set(index: Int, element: E): E\n\n    /**\n    *
Inserts an element into the list at the specified [index].\n    */\n    public fun add(index: Int, element: E): Unit\n\n
/**\n    * Removes an element at the specified [index] from the list.\n    *\n    * @return the element that has been
removed.\n    */\n    public fun removeAt(index: Int): E\n\n    // List Iterators\n    override fun listIterator():
MutableListIterator<E>\n\n    // View\n    override
fun subList(fromIndex: Int, toIndex: Int): MutableList<E>\n\n    /**\n    * A generic unordered collection of elements
that does not support duplicate elements.\n    * Methods in this interface support only read-only access to the set;\n    *
read/write access is supported through the [MutableSet] interface.\n    * @param E the type of elements contained in

```

the set. The set is covariant in its element type.

```

    *^public interface Set<out E> : Collection<E> {
        // Query Operations
        override val size: Int
        override fun isEmpty(): Boolean
        override fun contains(element: @UnsafeVariance E): Boolean
        override fun iterator(): Iterator<E>
        // Bulk Operations
        override fun containsAll(elements: Collection<@UnsafeVariance E>): Boolean
    }
    * A generic unordered collection of elements that does not support duplicate elements, and supports adding and removing elements.
    * @param E the type of elements contained in the set. The mutable set is invariant in its element type.
    *^public interface MutableSet<E> : Set<E>, MutableCollection<E> {
        // Query Operations
        override fun iterator(): MutableIterator<E>
        // Modification Operations
        /**
         * Adds the specified element to the set.
         * @return `true` if the element has been added, `false` if the element is already contained in the set.
         */
        override fun add(element: E): Boolean
        override fun remove(element: E): Boolean
        // Bulk Modification Operations
        override fun addAll(elements: Collection<E>): Boolean
        override fun removeAll(elements: Collection<E>): Boolean
        override fun retainAll(elements: Collection<E>): Boolean
        override fun clear(): Unit
    }
    * A collection that holds pairs of objects (keys and values) and supports efficiently retrieving the value corresponding to each key. Map keys are unique; the map holds only one value for each key.
    * Methods in this interface support only read-only access to the map; read-write access is supported through the [MutableMap] interface.
    * @param K the type of map keys. The map is invariant in its key type, as it can accept key as a parameter (of [containsKey] for example) and return it in [keys] set.
    * @param V the type of map values. The map is covariant in its value type.
    *^public interface Map<K, out V> {
        // Query Operations
        /**
         * Returns the number of key/value pairs in the map.
         */
        public val size: Int
        /**
         * Returns `true` if the map is empty (contains no elements), `false` otherwise.
         */
        public fun isEmpty(): Boolean
        /**
         * Returns `true` if the map contains the specified [key].
         */
        public fun containsKey(key: K): Boolean
        /**
         * Returns `true` if the map maps one or more keys to the specified [value].
         */
        public fun containsValue(value: @UnsafeVariance V): Boolean
        /**
         * Returns the value corresponding to the given [key], or `null` if such a key is not present in the map.
         */
        public operator fun get(key: K): V?
        /**
         * Returns the value corresponding to the given [key], or [defaultValue] if such a key is not present in the map.
         * @since JDK 1.8
         * @SinceKotlin("1.1")
         * @PlatformDependent
         */
        public fun getOrDefault(key: K, defaultValue: @UnsafeVariance V): V {
            // See default implementation in JDK sources
            throw NotImplementedError()
        }
        // Views
        /**
         * Returns a read-only [Set] of all keys in this map.
         */
        public val keys: Set<K>
        /**
         * Returns a read-only [Collection] of all values in this map. Note that this collection may contain duplicate values.
         */
        public val values: Collection<V>
        /**
         * Returns a read-only [Set] of all key/value pairs in this map.
         */
        public val entries: Set<Map.Entry<K, V>>
    }
    * Represents a key/value pair held by a [Map].
    *^public interface Entry<out K, out V> {
        /**
         * Returns the key of this key/value pair.
         */
        public val key: K
        /**
         * Returns the value of this key/value pair.
         */
        public val value: V
    }
    * A modifiable collection that holds pairs of objects (keys and values) and supports efficiently retrieving the value corresponding to each key. Map keys are unique; the map holds only one value for each key.
    * @param K the type of map keys. The map is invariant in its key type.
    * @param V the type of map values. The mutable map is invariant in its value type.
    *^public interface MutableMap<K, V> : Map<K, V> {
        // Modification Operations
        /**
         * Associates the specified [value] with the specified [key] in the map.
         * @return the previous value associated with the key, or `null` if the key was not present in the map.
         */
        public fun put(key: K, value: V): V?
        /**
         * Removes the specified key and its corresponding value from this map.
         * @return the previous value associated with the key, or `null` if the key was not present in the map.
         */
        public fun remove(key: K): V?
        /**
         * Removes the entry for the specified key only if it is mapped to the specified value.
         * @return true if entry was removed
         * @SinceKotlin("1.1")
         * @PlatformDependent
         */
        public fun remove(key: K, value: V): Boolean {
            // See default implementation in JDK sources
            return true
        }
        // Bulk Modification Operations
        /**
         * Updates this map with key/value pairs from the specified map [from].
         */
        public fun putAll(from: Map<out K, V>): Unit
        /**
         * Removes all elements from this map.
         */
        public fun clear(): Unit
        // Views
        /**
         * Returns a

```

```

[MutableSet] of all keys in this map.\n    * override val keys: MutableSet<K>\n\n    /**\n     * Returns a [MutableCollection] of all values in this map. Note that this collection may contain duplicate values.\n     *\n     * override val values: MutableCollection<V>\n\n     /**\n     * Returns a [MutableSet] of all key/value pairs in this map.\n     *\n     * override val entries: MutableSet<MutableMap.MutableEntry<K, V>>\n\n     /**\n     * Represents a key/value pair held by a [MutableMap].\n     *\n     * public interface MutableEntry<K, V> : Map.Entry<K, V> {\n     *\n     *     * Changes the value associated with the key of this entry.\n     *     *\n     *     * @return the previous value corresponding to the key.\n     *     *\n     *     * public fun setValue(newValue: V): V\n     *     * }\n     * }\n     *"/\n     * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n     * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n     *\n     *// Auto-generated file. DO NOT EDIT!\n     *\n     * package kotlin.collections\n     *\n     ** An iterator over a sequence of values of type `Byte`. *\n     *\n     * public abstract class ByteIterator : Iterator<Byte> {\n     *\n     *     * override final fun next() = nextByte()\n     *\n     *     /** Returns the next value in the sequence without boxing. *\n     *\n     *     * public abstract fun nextByte(): Byte\n     *\n     *\n     ** An iterator over a sequence of values of type `Char`. *\n     *\n     * public abstract class CharIterator : Iterator<Char> {\n     *\n     *     * override final fun next() = nextChar()\n     *\n     *     /** Returns the next value in the sequence without boxing. *\n     *\n     *     * public abstract fun nextChar(): Char\n     *\n     *\n     ** An iterator over a sequence of values of type `Short`. *\n     *\n     * public abstract class ShortIterator : Iterator<Short> {\n     *\n     *     * override final fun next() = nextShort()\n     *\n     *     /** Returns the next value in the sequence without boxing. *\n     *\n     *     * public abstract fun nextShort(): Short\n     *\n     *\n     ** An iterator over a sequence of values of type `Int`. *\n     *\n     * public abstract class IntIterator : Iterator<Int> {\n     *\n     *     * override final fun next() = nextInt()\n     *\n     *     /** Returns the next value in the sequence without boxing. *\n     *\n     *     * public abstract fun nextInt(): Int\n     *\n     *\n     ** An iterator over a sequence of values of type `Long`. *\n     *\n     * public abstract class LongIterator : Iterator<Long> {\n     *\n     *     * override final fun next() = nextLong()\n     *\n     *     /** Returns the next value in the sequence without boxing. *\n     *\n     *     * public abstract fun nextLong(): Long\n     *\n     *\n     ** An iterator over a sequence of values of type `Float`. *\n     *\n     * public abstract class FloatIterator : Iterator<Float> {\n     *\n     *     * override final fun next() = nextFloat()\n     *\n     *     /** Returns the next value in the sequence without boxing. *\n     *\n     *     * public abstract fun nextFloat(): Float\n     *\n     *\n     ** An iterator over a sequence of values of type `Double`. *\n     *\n     * public abstract class DoubleIterator : Iterator<Double> {\n     *\n     *     * override final fun next() = nextDouble()\n     *\n     *     /** Returns the next value in the sequence without boxing. *\n     *\n     *     * public abstract fun nextDouble(): Double\n     *\n     *\n     ** An iterator over a sequence of values of type `Boolean`. *\n     *\n     * public abstract class BooleanIterator : Iterator<Boolean> {\n     *\n     *     * override final fun next() = nextBoolean()\n     *\n     *     /** Returns the next value in the sequence without boxing. *\n     *\n     *     * public abstract fun nextBoolean(): Boolean\n     *\n     * }\n     *"/\n     * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n     * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n     *\n     *// Auto-generated file. DO NOT EDIT!\n     *\n     * package kotlin.ranges\n     *\n     ** An iterator over a progression of values of type `Char`. *\n     *\n     * @property step the number by which the value is incremented on each step.\n     *\n     * internal class CharProgressionIterator(first: Char, last: Char, val step: Int) : CharIterator() {\n     *\n     *     private val finalElement: Int = last.code\n     *\n     *     private var hasNext: Boolean = if (step > 0) first <= last else first >= last\n     *\n     *     private var next: Int = if (hasNext) first.code else finalElement\n     *\n     *     override fun hasNext(): Boolean = hasNext\n     *\n     *     override fun nextChar(): Char {\n     *\n     *         val value = next\n     *\n     *         if (value == finalElement) {\n     *\n     *             if (!hasNext) throw kotlin.NoSuchElementException\n     *\n     *             hasNext = false\n     *\n     *         }\n     *\n     *         else {\n     *\n     *             next += step\n     *\n     *         }\n     *\n     *         return value.toChar()\n     *     }\n     * }\n     *"/\n     ** An iterator over a progression of values of type `Int`. *\n     *\n     * @property step the number by which the value is incremented on each step.\n     *\n     * internal class IntProgressionIterator(first: Int, last: Int, val step: Int) : IntIterator() {\n     *\n     *     private val finalElement: Int = last\n     *\n     *     private var hasNext: Boolean = if (step > 0) first <= last else first >= last\n     *\n     *     private var next: Int = if (hasNext) first else finalElement\n     *\n     *     override fun hasNext(): Boolean = hasNext\n     *\n     *     override fun nextInt(): Int {\n     *\n     *         val value = next\n     *\n     *         if (value == finalElement) {\n     *\n     *             if (!hasNext) throw kotlin.NoSuchElementException\n     *\n     *             hasNext = false\n     *\n     *         }\n     *\n     *         else {\n     *\n     *             next += step\n     *\n     *         }\n     *\n     *         return value\n     *     }\n     * }\n     *"/\n     ** An iterator over a progression of values of type `Long`. *\n     *\n     * @property step the number by which the value is incremented on each step.\n     *\n     * internal class LongProgressionIterator(first: Long, last: Long, val step: Long) : LongIterator() {\n     *\n     *     private val finalElement: Long = last\n     *\n     *     private var hasNext: Boolean = if (step > 0) first <= last else first >= last\n     *\n     *     private var next: Long = if

```

```

(hasNext) first else finalElement\n\n override fun hasNext(): Boolean = hasNext\n\n override fun nextLong():
Long {\n val value = next\n if (value == finalElement) {\n if (!hasNext) throw
kotlin.NoSuchElementException()\n hasNext = false\n }\n else {\n next += step\n }\n
return value\n }\n}\n\n",/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\n// Auto-generated file. DO NOT EDIT!\n\npackage kotlin.ranges\n\nimport
kotlin.internal.getProgressionLastElement\n\n/**\n * A progression of values of type `Char`.\n */\n\npublic open class
CharProgression\n internal constructor\n (\n start: Char,\n endInclusive: Char,\n step: Int\n
): Iterable<Char> {\n init {\n if (step == 0) throw kotlin.IllegalArgumentException("\u201cStep must be non-
zero.\u201c")\n if (step == Int.MIN_VALUE) throw kotlin.IllegalArgumentException("\u201cStep must be greater than
Int.MIN_VALUE to avoid overflow on negation.\u201c")\n }\n\n /**\n * The first element in the progression.\n
*/\n\n public val first: Char = start\n\n /**\n * The last element in the progression.\n
*/\n\n public val last:
Char = getProgressionLastElement(start.code, endInclusive.code, step).toChar()\n\n /**\n * The step of the
progression.\n
*/\n\n public val step: Int = step\n\n override fun iterator(): CharIterator =
CharProgressionIterator(first, last, step)\n\n /**\n * Checks if the progression is empty.\n
*/\n\n * Progression
with a positive step is empty if its first element is greater than the last element.\n
* Progression with a negative
step is empty if its first element is less than the last element.\n
*/\n\n public open fun isEmpty(): Boolean = if
(step > 0) first > last else first < last\n\n override fun equals(other: Any?): Boolean =\n other is
CharProgression && (isEmpty() && other.isEmpty()) ||\n first == other.first && last == other.last && step ==
other.step)\n\n override fun hashCode(): Int =\n if (isEmpty()) -1 else (31 * (31 * first.code + last.code) +
step)\n\n override fun toString(): String = if (step > 0) "\u201c$first..$last step $step\u201c" else "\u201c$first
downTo $last step ${-
step}\u201c"\n\n companion object {\n /**\n * Creates CharProgression within the specified bounds of a
closed range.\n
*/\n\n * The progression starts with the [rangeStart] value and goes toward the [rangeEnd]
value not excluding it, with the specified [step].\n
*/\n\n * In order to go backwards the [step] must be negative.\n
*/\n\n * [step] must be greater than `Int.MIN_VALUE` and not equal to zero.\n
*/\n\n public fun
fromClosedRange(rangeStart: Char, rangeEnd: Char, step: Int): CharProgression = CharProgression(rangeStart,
rangeEnd, step)\n }\n}\n\n/**\n * A progression of values of type `Int`.\n
*/\n\npublic open class IntProgression\n internal constructor\n (\n start: Int,\n endInclusive: Int,\n
step: Int\n ): Iterable<Int> {\n init {\n if (step == 0) throw kotlin.IllegalArgumentException("\u201cStep must be non-zero.\u201c")\n
if (step ==
Int.MIN_VALUE) throw kotlin.IllegalArgumentException("\u201cStep must be greater than Int.MIN_VALUE to avoid
overflow on negation.\u201c")\n }\n\n /**\n * The first element in the progression.\n
*/\n\n public val first: Int =
start\n\n /**\n * The last element in the progression.\n
*/\n\n public val last: Int =
getProgressionLastElement(start, endInclusive, step)\n\n /**\n * The step of the progression.\n
*/\n\n public
val step: Int = step\n\n override fun iterator(): IntIterator = IntProgressionIterator(first, last, step)\n\n
/**\n * Checks if the progression is empty.\n
*/\n\n * Progression with a positive step is empty if its first element is
greater than the last element.\n
* Progression with a negative step is empty if its first element is less than the last
element.\n
*/\n\n public open fun isEmpty(): Boolean = if (step > 0) first > last else first < last\n\n override fun
equals(other: Any?): Boolean =\n other is IntProgression && (isEmpty() && other.isEmpty()) ||\n first ==
other.first && last == other.last && step == other.step)\n\n override fun hashCode(): Int =\n if (isEmpty()) -1
else (31 * (31 * first + last) + step)\n\n override fun toString(): String = if (step > 0) "\u201c$first..$last
step $step\u201c" else
"\u201c$first downTo $last step ${-step}\u201c"\n\n companion object {\n /**\n * Creates IntProgression within the
specified bounds of a closed range.\n
*/\n\n * The progression starts with the [rangeStart] value and goes
toward the [rangeEnd] value not excluding it, with the specified [step].\n
*/\n\n * In order to go backwards the [step]
must be negative.\n
*/\n\n * [step] must be greater than `Int.MIN_VALUE` and not equal to zero.\n
*/\n\n public fun
fromClosedRange(rangeStart: Int, rangeEnd: Int, step: Int): IntProgression =
IntProgression(rangeStart, rangeEnd, step)\n }\n}\n\n/**\n * A progression of values of type `Long`.\n
*/\n\npublic open class LongProgression\n internal constructor\n (\n start: Long,\n endInclusive: Long,\n
step: Long\n ): Iterable<Long> {\n init {\n if (step == 0L) throw kotlin.IllegalArgumentException("\u201cStep

```

```

must be non-zero.))\n    if (step == Long.MIN_VALUE) throw kotlin.IllegalArgumentException("Step must be
greater than Long.MIN_VALUE to avoid overflow on negation.))\n    }\n\n    /**\n     * The first element in the
progression.\n     *\n     * public val first: Long = start\n     *\n     * The last element in the progression.\n     *\n     *
public val last: Long = getProgressionLastElement(start, endInclusive, step)\n     *\n     * The step of the
progression.\n     *\n     * public val step: Long = step\n     *\n     * override fun iterator(): LongIterator =
LongProgressionIterator(first, last, step)\n     *\n     * Checks if the progression is empty.\n     *\n     *
Progression with a positive step is empty if its first element is greater than the last element.\n     * Progression with a
negative step is empty if its first element is less than the last element.\n     *\n     * public open fun isEmpty(): Boolean
= if (step > 0) first > last else first < last\n     *\n     * override fun equals(other: Any?): Boolean =\n     * other is
LongProgression && (isEmpty() && other.isEmpty()) ||\n     * first == other.first && last == other.last && step ==
other.step)\n     *\n     * override fun hashCode(): Int =\n     * if (isEmpty()) -1 else (31 * (31 * (first xor (first ushr 32)) +
(last xor (last ushr 32))) + (step xor (step ushr 32))).toInt()\n     *\n     * override fun toString(): String = if (step > 0)
\"$first..$last step $step\" else \"$first downTo $last step ${-step}\"
\n     *\n     * companion object {\n     *\n     * Creates LongProgression within the specified bounds of a closed range.\n     *\n     * The progression starts
with the [rangeStart] value and goes toward the [rangeEnd] value not excluding it, with the specified [step].\n     *\n     *
In order to go backwards the [step] must be negative.\n     *\n     * [step] must be greater than
`Long.MIN_VALUE` and not equal to zero.\n     *\n     * public fun fromClosedRange(rangeStart: Long,
rangeEnd: Long, step: Long): LongProgression = LongProgression(rangeStart, rangeEnd, step)\n     * }\n\n    "/**\n     *
Copyright 2010-2019 JetBrains s.r.o. and Kotlin Programming Language contributors.\n     * Use of this source code is
governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n     */\n\n    \npackage
kotlin.ranges\n\n    /**\n     * Represents a range of values (for example, numbers or characters).\n     * See the [Kotlin
language documentation](https://kotlinlang.org/docs/reference/ranges.html) for more information.\n     */\n\n    public
interface ClosedRange<T>: Comparable<T> {\n     *\n     * The minimum value in the range.\n     *\n     * public val
start: T\n     *\n     * The maximum value in the range (inclusive).\n     *\n     * public val endInclusive: T\n     *\n     *
Checks whether the specified [value] belongs to the range.\n     *\n     * public operator fun contains(value:
T): Boolean = value >= start && value <= endInclusive\n     *\n     * Checks whether the range is empty.\n     *\n     *
The range is empty if its start value is greater than the end value.\n     *\n     * public fun isEmpty(): Boolean = start
> endInclusive\n     * }\n\n    "/**\n     * Copyright 2010-2015 JetBrains s.r.o.\n     * Licensed under the Apache License,
Version 2.0 (the "License");\n     * you may not use this file except in compliance with the License.\n     * You may
obtain a copy of the License at\n     * http://www.apache.org/licenses/LICENSE-2.0\n     * Unless required by
applicable law or agreed to in writing, software\n     * distributed under the License is distributed on an "AS IS"\n     *
BASIS,\n     * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.\n     * See the
License for the specific language governing permissions and\n     * limitations under the License.\n     */\n\n    \npackage
kotlin\n\n    /**\n     * The type with only one value: the `Unit` object. This type corresponds to the `void` type in Java.\n     *
\n     */\n\n    public object Unit {\n     *\n     * override fun toString() = "kotlin.Unit{\n     * }\n     * "\n     *
\n     */\n\n    "/**\n     * Copyright 2010-2015 JetBrains s.r.o.\n     * Licensed under the Apache License, Version 2.0 (the "License");\n     *
you may not use this file except in compliance with the License.\n     * You may obtain a copy of the License at\n     *
http://www.apache.org/licenses/LICENSE-2.0\n     * Unless required by applicable law or agreed to in writing,
software\n     * distributed under the License is distributed on an "AS IS" BASIS,\n     * WITHOUT WARRANTIES
OR CONDITIONS OF ANY KIND, either express or implied.\n     * See the License for the specific language
governing permissions and\n     * limitations under the License.\n     */\n\n    \npackage kotlin.annotation\n\n    import
kotlin.annotation.AnnotationTarget.\n\n    /**\n     * Contains the list of code elements which are the possible annotation
targets\n     */\n\n    public enum class AnnotationTarget {\n     *\n     * Class, interface or object, annotation class is also
included\n     *\n     * CLASS,\n     *\n     * Annotation class only\n     *\n     * ANNOTATION_CLASS,\n     *\n     * Generic type
parameter\n     *\n     * TYPE_PARAMETER,\n     *\n     * Property\n     *\n     * PROPERTY,\n     *\n     * Field, including property's
backing field\n     *\n     * FIELD,\n     *\n     * Local variable\n     *\n     * LOCAL_VARIABLE,\n     *\n     * Value parameter of a
function or a constructor\n     *\n     * VALUE_PARAMETER,\n     *\n     * Constructor only (primary or secondary)\n     *\n     *
CONSTRUCTOR,\n     *\n     * Function (constructors are not included)\n     *\n     * FUNCTION,\n     *\n     * Property getter only

```

```

*\n PROPERTY_GETTER,\n /** Property setter only *\n PROPERTY_SETTER,\n /** Type usage *\n
TYPE,\n /** Any expression *\n EXPRESSION,\n /** File *\n FILE,\n /** Type alias *\n
@SinceKotlin("1.1")\n TYPEALIAS\n}\n}\n**\n * Contains the list of possible annotation's retentions.\n *\n *
Determines how an annotation is stored in binary output.\n *\npublic enum class AnnotationRetention {\n /**
Annotation isn't stored in binary output *\n SOURCE,\n /** Annotation is stored in binary output, but invisible
for reflection *\n BINARY,\n /** Annotation is stored in binary output and visible for reflection (default
retention) *\n RUNTIME\n}\n}\n**\n * This meta-annotation indicates the kinds of code elements which are
possible targets of an annotation.\n *\n * If the target meta-annotation is not present on an annotation declaration,
the annotation is applicable to the following elements:\n * [CLASS], [PROPERTY], [FIELD],
[LOCAL_VARIABLE], [VALUE_PARAMETER], [CONSTRUCTOR], [FUNCTION], [PROPERTY_GETTER],
[PROPERTY_SETTER].\n *\n * @property allowedTargets list of allowed annotation targets\n
*\n@Target(AnnotationTarget.ANNOTATION_CLASS)\n@MustBeDocumented\npublic annotation class
Target(vararg val allowedTargets: AnnotationTarget)\n\n**\n * This meta-annotation determines whether an
annotation is stored in binary output and visible for reflection. By default, both are true.\n *\n * @property value
necessary annotation retention (RUNTIME, BINARY or SOURCE)\n
*\n@Target(AnnotationTarget.ANNOTATION_CLASS)\npublic annotation class Retention(val value:
AnnotationRetention = AnnotationRetention.RUNTIME)\n\n**\n * This meta-annotation determines that an
annotation is applicable twice or more on a single code element\n
*\n@Target(AnnotationTarget.ANNOTATION_CLASS)\npublic annotation class Repeatable\n\n**\n * This
meta-annotation determines that an annotation is a part of public API and therefore should be included in the
generated\n * documentation for the element to which the annotation is applied.\n
*\n@Target(AnnotationTarget.ANNOTATION_CLASS)\npublic annotation class MustBeDocumented\n,"/*\n *
Copyright 2010-2016 JetBrains s.r.o.\n *\n * Licensed under the Apache License, Version 2.0 (the "License");\n *
you may not use this file except in compliance with the License.\n * You may obtain a copy of the License at\n *\n *
http://www.apache.org/licenses/LICENSE-2.0\n *\n * Unless required by applicable law or agreed to in writing,
software\n * distributed under the License is distributed on an "AS IS" BASIS,\n * WITHOUT WARRANTIES
OR CONDITIONS OF ANY KIND, either express or implied.\n * See the License for the specific language
governing permissions and\n * limitations under the License.\n *\n@\npackage kotlin.internal\n\n**\n * Specifies
that the corresponding type parameter is not used for unsafe operations such as casts or 'is' checks\n * That means
it's completely safe to use generic types as argument for such parameter.\n
*\n@Target(AnnotationTarget.TYPE_PARAMETER)\n@Retention(AnnotationRetention.BINARY)\ninternal
annotation class PureReifiable\n\n**\n * Specifies that the corresponding built-in method exists depending on
platform.\n * Current implementation for JVM looks whether method with same JVM descriptor exists in the
module JDK.\n * For example MutableMap.remove(K, V) available only if corresponding\n * method
'java/util/Map.remove(Ljava/lang/Object;Ljava/lang/Object;)Z' is defined in JDK (i.e. for major versions >= 8)\n
*\n@Target(AnnotationTarget.FUNCTION)\n@Retention(AnnotationRetention.BINARY)\ninternal annotation
class PlatformDependent\n,"/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n *\n@\npackage kotlin.internal\n\n// a mod b (in arithmetical sense)\nprivate fun mod(a:
Int, b: Int): Int {\n val mod = a % b\n return if (mod >= 0) mod else mod + b\n}\n\nprivate fun mod(a: Long, b:
Long): Long {\n val mod = a % b\n return if (mod >= 0) mod else mod + b\n}\n\n// (a - b) mod c\nprivate fun
differenceModulo(a: Int, b: Int, c: Int): Int {\n return mod(mod(a, c) - mod(b, c), c)\n}\n\nprivate fun
differenceModulo(a: Long, b: Long, c: Long): Long {\n return mod(mod(a, c) - mod(b, c), c)\n}\n\n**\n *
Calculates the final element of a bounded arithmetic progression, i.e. the last element of the progression which is in
the range\n * from [start] to [end] in case of a positive [step], or from [end] to [start] in case of a negative\n *
[step].\n *\n * No validation on passed parameters is performed. The given parameters should satisfy the
condition:\n *\n * - either `step > 0` and `start <= end`,\n * - or `step < 0` and `start >= end`.\n *\n * @param start
first element of the progression\n * @param end ending bound for the progression\n * @param step increment, or

```

```

difference of successive elements in the progression\n * @return the final element of the progression\n *
@suppress\n */\n@PublishedApi\ninternal fun getProgressionLastElement(start: Int, end: Int, step: Int): Int = when
{\n  step > 0 -> if (start >= end) end else end - differenceModulo(end, start, step)\n  step < 0 -> if (start <= end)
end else end + differenceModulo(start, end, -step)\n  else -> throw kotlin.IllegalArgumentException("Step is
zero.\")\n}\n\n/*\n * Calculates the final element of a bounded arithmetic progression, i.e. the last element of the
progression which is in the range\n * from [start] to [end] in case of a positive [step], or from [end] to [start] in case
of a negative\n * [step].\n * No validation on passed parameters is performed. The given parameters should
satisfy the condition:\n * - either `step > 0` and `start <= end`,\n * - or `step < 0` and `start >= end`.\n *\n *
@param start first element of the progression\n * @param end ending bound for the progression\n * @param step
increment, or difference of successive elements in the progression\n * @return the final element of the progression\n
* @suppress\n */\n@PublishedApi\ninternal fun getProgressionLastElement(start: Long, end: Long, step: Long):
Long = when {\n  step > 0 -> if (start >= end) end else end - differenceModulo(end, start, step)\n  step < 0 -> if
(start <= end) end else end + differenceModulo(start, end, -step)\n  else -> throw
kotlin.IllegalArgumentException("Step is zero.\")\n}\n\n"/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n */\n\n@JsName("arrayIterator")\ninternal fun arrayIterator(array:
dynamic, type: String?) = when (type) {\n  null -> {\n    val arr: Array<dynamic> = array\n    object :
Iterator<dynamic> {\n      var index = 0\n      override fun hasNext() = index < arr.size\n      override fun
next() = if (index < arr.size) arr[index++] else throw NoSuchElementException("$index")\n    }\n  }\n  "BooleanArray" -> booleanArrayIterator(array)\n  "ByteArray" -> byteArrayIterator(array)\n  "ShortArray" -
> shortArrayIterator(array)\n  "CharArray" -> charArrayIterator(array)\n  "IntArray" ->
intArrayIterator(array)\n  "LongArray" -> longArrayIterator(array)\n  "FloatArray" ->
floatArrayIterator(array)\n  "DoubleArray" -> doubleArrayIterator(array)\n  else -> throw
IllegalStateException("Unsupported type argument for arrayIterator:
$type")\n}\n\n@JsName("booleanArrayIterator")\ninternal fun booleanArrayIterator(array: BooleanArray) =
object : BooleanIterator() {\n  var index = 0\n  override fun hasNext() = index < array.size\n  override fun
nextBoolean() = if (index < array.size) array[index++] else throw
NoSuchElementException("$index")\n}\n\n@JsName("byteArrayIterator")\ninternal fun byteArrayIterator(array:
ByteArray) = object : ByteIterator() {\n  var index = 0\n  override fun hasNext() = index < array.size\n  override
fun nextByte() = if (index < array.size) array[index++] else throw
NoSuchElementException("$index")\n}\n\n@JsName("shortArrayIterator")\ninternal fun
shortArrayIterator(array: ShortArray) = object : ShortIterator() {\n  var index = 0\n  override fun hasNext() =
index < array.size\n  override fun nextShort() = if (index < array.size) array[index++] else throw
NoSuchElementException("$index")\n}\n\n@JsName("charArrayIterator")\ninternal fun charArrayIterator(array:
CharArray) = object : CharIterator() {\n  var index = 0\n  override fun hasNext() = index < array.size\n  override
fun nextChar() = if (index < array.size) array[index++] else throw
NoSuchElementException("$index")\n}\n\n@JsName("intArrayIterator")\ninternal fun intArrayIterator(array:
IntArray) = object : IntIterator() {\n  var index = 0\n  override fun hasNext() = index < array.size\n  override fun
nextInt() = if (index < array.size) array[index++] else throw
NoSuchElementException("$index")\n}\n\n@JsName("floatArrayIterator")\ninternal fun
floatArrayIterator(array: FloatArray) = object : FloatIterator() {\n  var index = 0\n  override fun hasNext() = index
< array.size\n  override fun nextFloat() = if (index < array.size) array[index++] else throw
NoSuchElementException("$index")\n}\n\n@JsName("doubleArrayIterator")\ninternal fun
doubleArrayIterator(array: DoubleArray) = object : DoubleIterator() {\n  var index = 0\n  override fun hasNext()
= index < array.size\n  override fun nextDouble() = if (index < array.size) array[index++] else throw
NoSuchElementException("$index")\n}\n\n@JsName("longArrayIterator")\ninternal fun longArrayIterator(array:
LongArray) = object : LongIterator() {\n  var index = 0\n  override fun hasNext() = index < array.size\n
override fun nextLong() = if (index < array.size) array[index++] else throw

```

```

NoSuchElementException("$index")\n}\n\n@JsName("PropertyMetadata")\ninternal class
PropertyMetadata(@JsName("callableName") val name:
String)\n\n@JsName("noWhenBranchMatched")\ninternal fun noWhenBranchMatched(): Nothing = throw
NoWhenBranchMatchedException()\n\n@JsName("subSequence")\ninternal fun subSequence(c: CharSequence,
startIndex: Int, endIndex: Int): CharSequence {\n    if (c is String) {\n        return c.substring(startIndex, endIndex)\n
    } else {\n        return c.asDynamic().`subSequence_vux9f0` (startIndex, endIndex)\n
    }\n}\n\n@JsName("captureStack")\ninternal fun captureStack(@Suppress("UNUSED_PARAMETER")
baseClass: JsClass<in Throwable>, instance: Throwable) {\n    if (js("Error").captureStackTrace) {\n        // Using
uncropped stack traces due to KT-37563.\n        // Precise stack traces are implemented in JS IR compiler and
stdlib\n        js("Error").captureStackTrace(instance);\n    } else {\n        instance.asDynamic().stack = js("new
Error()").stack;\n    }\n}\n\n@JsName("newThrowable")\ninternal fun newThrowable(message: String?, cause:
Throwable?): Throwable {\n    val throwable = js("new Error()")\n    throwable.message = if (jsTypeOf(message)
== "undefined") {\n        if (cause != null) cause.toString() else null\n    } else {\n        message\n    }\n
throwable.cause = cause\n    throwable.name = "Throwable"\n    return
throwable\n}\n\n@JsName("BoxedChar")\ninternal class BoxedChar(val c: Int) : Comparable<Int> {\n    override
fun equals(other: Any?): Boolean {\n        return other is BoxedChar && c == other.c\n    }\n\n    override fun
hashCode(): Int {\n        return c\n    }\n\n    override fun toString(): String {\n        return
js("this.c").unsafeCast<Char>().toString()\n    }\n\n    override fun compareTo(other: Int): Int {\n        return
js("this.c - other").unsafeCast<Int>()\n    }\n\n    @JsName("valueOf")\n    public fun valueOf(): Int {\n
return c\n    }\n}\n\n@kotlin.internal.InlineOnly\ninternal inline fun <T> concat(args: Array<T>): T {\n    val typed
= js("Array")(args.size)\n    for (i in args.indices) {\n        val arr = args[i]\n        if (arr !is Array<*>) {\n
typed[i] = js("[]").slice.call(arr)\n        } else {\n            typed[i] = arr\n        }\n    }\n    return
js("[]").concat.apply(js("[]", typed);\n}\n\n/** Concat regular Array's and TypedArray's into an Array.\n
*/\n\n@PublishedApi\n@JsName("arrayConcat")\n@Suppress("UNUSED_PARAMETER")\ninternal fun <T>
arrayConcat(a: T, b: T): T {\n    return concat(js("arguments"))\n}\n\n/** Concat primitive arrays. Main use:
prepare vararg arguments.\n
* For compatibility with 1.1.0 the arguments may be a mixture of Array's and
TypedArray's.\n
* If the first argument is TypedArray (Byte-, Short-, Char-, Int-, Float-, and DoubleArray)
returns a TypedArray, otherwise an Array.\n
* If the first argument has the $type$ property (Boolean-, Char-, and
LongArray) copy its value to result.$type$.\n
* If the first argument is a regular Array without the $type$ property
default to arrayConcat.\n
*/\n\n@PublishedApi\n@JsName("primitiveArrayConcat")\n@Suppress("UNUSED_PARAMETER")\ninternal
fun <T> primitiveArrayConcat(a: T, b: T): T {\n    val args: Array<T> = js("arguments")\n    if (a is Array<*> &&
a.asDynamic().`$type$` === undefined) {\n        return concat(args)\n    } else {\n        var size = 0\n        for (i in
args.indices) {\n            size += args[i].asDynamic().length as Int\n        }\n        val result = js("new
a.constructor(size)")\n        kotlin.copyArrayType(a, result)\n        size = 0\n        for (i in args.indices) {\n            val
arr = args[i].asDynamic()\n            for (j in 0 until arr.length) {\n                result[size++] = arr[j]\n            }\n
        }\n        return result\n    }\n}\n\n@JsName("booleanArrayOf")\ninternal fun booleanArrayOf() =
withType("BooleanArray", js("[].slice.call(arguments)"))\n\n@JsName("charArrayOf") // The arguments have
to be slice'd here because of Rhino (see KT-16974)\ninternal fun charArrayOf() = withType("CharArray", js("new
Uint16Array([].slice.call(arguments)")))\n\n@JsName("longArrayOf")\ninternal fun longArrayOf() =
withType("LongArray",
js("[].slice.call(arguments)"))\n\n@JsName("withType")\n@kotlin.internal.InlineOnly\ninternal inline fun
withType(type: String, array: dynamic): dynamic {\n    array.`$type$` = type\n    return array\n}"/*\n
* Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n
* Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*/\n\npackage kotlin.js\n\n/**\n
* Function corresponding to JavaScript's `typeof` operator\n
*/\n\n@kotlin.internal.InlineOnly\n@Suppress("UNUSED_PARAMETER")\npublic inline fun jsTypeOf(a: Any?):
String = js("typeof a")\n}"/*\n
* Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language

```



```

contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\n@file:Suppress(\"UNUSED_PARAMETER\",
\"NOTHING_TO_INLINE\")\n\npackage kotlin\n\n/**\n * Returns an empty array of the specified type [T].\n */\n\npublic inline fun <T> emptyArray(): Array<T> = js(\"[]\")\n\n@library\n\npublic fun <T> arrayOf(vararg
elements: T): Array<T> = definedExternally\n\n@library\n\npublic fun doubleArrayOf(vararg elements: Double):
DoubleArray = definedExternally\n\n@library\n\npublic fun floatArrayOf(vararg elements: Float): FloatArray =
definedExternally\n\n@library\n\npublic fun longArrayOf(vararg elements: Long): LongArray =
definedExternally\n\n@library\n\npublic fun intArrayOf(vararg elements: Int): IntArray =
definedExternally\n\n@library\n\npublic fun charArrayOf(vararg elements: Char): CharArray =
definedExternally\n\n@library\n\npublic fun shortArrayOf(vararg elements: Short): ShortArray =
definedExternally\n\n@library\n\npublic fun byteArrayOf(vararg elements: Byte): ByteArray =
definedExternally\n\n@library\n\npublic fun booleanArrayOf(vararg elements: Boolean): BooleanArray =
definedExternally\n\n/**\n * Creates a new instance of the [Lazy] that uses the specified initialization function
[initializer].\n */\n\npublic actual fun <T> lazy(initializer: () -> T): Lazy<T> = UnsafeLazyImpl(initializer)\n\n/**\n * Creates a new instance of the [Lazy] that uses the specified initialization function [initializer].\n */\n\n * The [mode]
parameter is ignored. *\n\npublic actual fun <T> lazy(mode: LazyThreadSafetyMode, initializer: () -> T): Lazy<T> =
UnsafeLazyImpl(initializer)\n\n/**\n * Creates a new instance of the [Lazy] that uses the specified initialization
function [initializer].\n */\n\n * The [lock] parameter is ignored.\n */\n\npublic actual fun <T> lazy(lock: Any?,
initializer: () -> T): Lazy<T> = UnsafeLazyImpl(initializer)\n\n\ninternal fun fillFrom(src: dynamic, dst: dynamic):
dynamic {\n    val srcLen: Int = src.length\n    val dstLen: Int = dst.length\n    var index: Int = 0\n    while (index <
srcLen && index < dstLen) dst[index] = src[index++]\n    return dst\n}\n\n\ninternal fun arrayCopyResize(source:
dynamic, newSize: Int, defaultValue: Any?): dynamic {\n    val result = source.slice(0, newSize)\n\n    copyArrayType(source, result)\n    var index: Int = source.length\n    if (newSize > index) {\n        result.length =
newSize\n        while (index < newSize) result[index++] = defaultValue\n    }\n    return result\n}\n\n\ninternal fun
<T> arrayPlusCollection(array: dynamic, collection: Collection<T>): dynamic {\n    val result = array.slice()\n    result.length += collection.size\n    copyArrayType(array, result)\n    var index: Int = array.length\n    for (element in
collection) result[index++] = element\n    return result\n}\n\n\ninternal fun <T> fillFromCollection(dst: dynamic,
startIndex: Int, collection: Collection<T>): dynamic {\n    var index = startIndex\n    for (element in collection)
dst[index++] = element\n    return dst\n}\n\n\ninternal inline fun copyArrayType(from: dynamic, to: dynamic) {\n    if
(from.`$type$` != undefined) {\n        to.`$type$` = from.`$type$`\n    }\n}\n\n\ninternal inline fun jsIsType(obj:
dynamic, jsClass: dynamic) = js(\"Kotlin\").isType(obj, jsClass), \"/*\n * Copyright 2010-2021 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin\n\n/**\n * Creates a Char with the specified
[code].\n */\n\n * @sample samples.text.Chars.charFromCode\n */\n\n@SinceKotlin(\"1.5\")\n\n@WasExperimental(ExperimentalStdlibApi::class)\n\n@kotlin.internal.InlineOnly\n\npublic
actual inline fun Char(code: UShort): Char {\n    return code.toInt().toChar()\n}\n\n\", \"/*\n * Copyright 2010-2018
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.coroutines\n\nimport
kotlin.coroutines.intrinsics.COROUTINE_SUSPENDED\n\n@SinceKotlin(\"1.3\")\n\n@JsName(\"CoroutineImpl\")\n\ninternal
abstract class CoroutineImpl(private val resultContinuation: Continuation<Any?>) : Continuation<Any?> {\n    protected
var state = 0\n    protected var exceptionState = 0\n    protected var result: Any? = null\n    protected
var exception: Throwable? = null\n    protected var finallyPath: Array<Int>? = null\n\n    public override val context:
CoroutineContext = resultContinuation.context\n\n    private var intercepted_: Continuation<Any?>? = null\n\n    public
fun intercepted(): Continuation<Any?> =\n        intercepted_\n        ?:\n        (context[ContinuationInterceptor]?.interceptContinuation(this) ?: this)\n        .also { intercepted_ = it }\n\n    override fun resumeWith(result: Result<Any?>) {\n        var current = this\n        var currentResult: Any? =
result.getOrNull()\n        var currentException: Throwable? = result.exceptionOrNull()\n        // This loop unrolls
recursion in current.resumeWith(param) to make saner and shorter stack traces on resume\n        while (true) {\n

```

```

        with(current) { \n            val completion = resultContinuation\n\n                // Set result and exception fields in
the current continuation\n                if (currentException == null) {\n                    this.result = currentResult\n                } else {\n                    state = exceptionState\n                    exception = currentException\n                }\n            }
try {\n                val outcome = doResume()\n                if (outcome === COROUTINE_SUSPENDED)
return\n                currentResult = outcome\n                currentException = null\n            } catch (exception:
dynamic) { // Catch all exceptions\n                currentResult = null\n                currentException =
exception.unsafeCast<Throwable>()\n            }\n            releaseIntercepted() // this state machine instance is
terminating\n\n            if (completion is CoroutineImpl) {\n                // unrolling recursion via loop\n                current = completion\n            } else {\n                // top-level completion reached -- invoke and return\n                currentException?.let {\n                    completion.resumeWithException(it)\n                } ?:
completion.resume(currentResult)\n                return\n            }\n        }\n    }\n\n    private fun
releaseIntercepted() {\n        val intercepted = intercepted_\n        if (intercepted != null && intercepted !== this) {\n            context[ContinuationInterceptor]!!.releaseInterceptedContinuation(intercepted)\n        }\n        this.intercepted_
= CompletedContinuation // just in case\n    }\n\n    protected abstract fun doResume(): Any?()\n\n    internal object
CompletedContinuation : Continuation<Any?> {\n        override val context: CoroutineContext\n        get() =
error("This continuation is already complete")\n\n        override fun resumeWith(result: Result<Any?>) {\n            error("This continuation is already complete")\n        }\n\n        override fun toString(): String = "This continuation is
already complete"\n    }\n\n    /*\n     * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n     * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n     */\n\n    @file:Suppress("UNCHECKED_CAST",
"RedundantVisibilityModifier")\n\n    package kotlin\n\n    import kotlin.contracts.*\n    import
kotlin.internal.InlineOnly\n    import kotlin.jvm.JvmField\n    import kotlin.jvm.JvmInline\n    import
kotlin.jvm.JvmName\n\n    /**\n     * A discriminated union that encapsulates a successful outcome with a value of type
[T]\n     * or a failure with an arbitrary [Throwable] exception.\n     */\n\n    @SinceKotlin("1.3")\n    @JvmInline\n    public
value class Result<out T> @PublishedApi internal constructor(\n        @PublishedApi\n        internal val value: Any?()\n    ) :
Serializable {\n        // discovery\n\n        /**\n         * Returns `true` if this instance represents a successful outcome.\n         *
In this case [isFailure] returns `false`.\n         */\n        public val isSuccess: Boolean\n        get() = value !is Failure\n\n        /**\n         * Returns `true` if this instance represents a failed outcome.\n         * In this case [isSuccess] returns `false`.\n         */\n        public val isFailure: Boolean\n        get() = value is Failure\n\n        // value & exception retrieval\n\n        /**\n         * Returns the
encapsulated value if this instance represents [success][Result.isSuccess] or `null`\n         * if it is
[failure][Result.isFailure].\n         */\n        * This function is a shorthand for `getOrNull` (see [getOrNull]) or\n
* `fold(onSuccess = { it }, onFailure = { null })` (see [fold]).\n        */\n        @InlineOnly\n        public inline fun
getOrNull(): T? =\n            when {\n                isFailure -> null\n                else -> value as T\n            }\n\n        /**\n         *
Returns the encapsulated [Throwable] exception if this instance represents [failure][isFailure] or `null`\n         * if it is
[success][isSuccess].\n         */\n        * This function is a shorthand for `fold(onSuccess = { null }, onFailure = { it })`
(see [fold]).\n        */\n        public fun exceptionOrNull(): Throwable? =\n            when (value) {\n                is Failure ->
value.exception\n                else -> null\n            }\n\n        /**\n         * Returns a string `Success(v)` if this instance represents
[success][Result.isSuccess]\n         * where `v` is a string representation of the value or a string `Failure(x)` if\n         * it
is [failure][isFailure] where `x` is a string representation of the exception.\n         */\n        public override fun toString():
String =\n            when (value) {\n                is Failure -> value.toString() // "Failure($exception)"\n                else ->
"Success($value)"\n            }\n\n        // companion with constructors\n\n        /**\n         * Companion object for [Result]
class that contains its constructor functions\n         * [success] and [failure].\n         */\n        public companion object {\n
/**\n         * Returns an instance that encapsulates the given [value] as successful value.\n         */\n\n            @Suppress("INAPPLICABLE_JVM_NAME")\n            @InlineOnly\n            @JvmName("success")\n            public
inline fun <T> success(value: T): Result<T> =\n                Result(value)\n\n            /**\n             * Returns an instance that
encapsulates the given [Throwable] [exception] as failure.\n             */\n\n            @Suppress("INAPPLICABLE_JVM_NAME")\n            @InlineOnly\n            @JvmName("failure")\n            public
inline fun <T> failure(exception: Throwable): Result<T> =\n                Result(createFailure(exception))\n        }\n    }\n

```

```

internal class Failure(@JvmField val exception: Throwable): Serializable {
    override fun equals(other: Any?): Boolean = other is Failure && exception == other.exception
    override fun hashCode(): Int = exception.hashCode()
    override fun toString(): String = "Failure($exception)"
}

Creates an instance of internal marker [Result.Failure] class
* make sure that this class is not exposed in ABI.

@PublishedApi@SinceKotlin("1.3")
internal fun createFailure(exception: Throwable): Any =
    Result.Failure(exception)

* Throws exception if the result is failure. This internal function minimizes
    inlined bytecode for [getOrThrow] and makes sure that in the future we can
    add some exception-augmenting logic here (if needed).

@PublishedApi@SinceKotlin("1.3")
internal fun Result<T>.throwOnFailure() {
    if (value is Result.Failure) throw value.exception
}

* Calls the specified function [block] and returns its encapsulated result if invocation was successful,
    catching any [Throwable] exception that was thrown from the [block] function execution
    and encapsulating it as a failure.

@InlineOnly@SinceKotlin("1.3")
public inline fun <R> runCatching(block: () -> R): Result<R> {
    return try {
        Result.success(block())
    } catch (e: Throwable) {
        Result.failure(e)
    }
}

* Calls the specified function [block] with `this` value as its receiver and returns its encapsulated result if invocation was successful,
    catching any [Throwable] exception that was thrown from the [block] function execution
    and encapsulating it as a failure.

@InlineOnly@SinceKotlin("1.3")
public inline fun <T, R> T.runCatching(block: T() -> R): Result<R> {
    return try {
        Result.success(block())
    } catch (e: Throwable) {
        Result.failure(e)
    }
}

-- extensions --
* Returns the encapsulated value if this instance represents [success][Result.isSuccess] or
    throws the encapsulated [Throwable] exception if it is [failure][Result.isFailure].
* This function is a shorthand for `getOrNull { throw it }` (see [getOrNull]).

@InlineOnly@SinceKotlin("1.3")
public inline fun <T> Result<T>.getOrThrow(): T {
    throwOnFailure()
    return value as T
}

* Returns the encapsulated value if this instance represents [success][Result.isSuccess] or the
    result of [onFailure] function for the encapsulated [Throwable] exception if it is [failure][Result.isFailure].
* Note, that this function rethrows any [Throwable] exception thrown by [onFailure] function.
* This function is a shorthand for `fold(onSuccess = { it }, onFailure = onFailure)` (see [fold]).

@InlineOnly@SinceKotlin("1.3")
public inline fun <R, T : R> Result<T>.getOrNull(onFailure: (exception: Throwable) -> R): R {
    contract {
        callsInPlace(onFailure, InvocationKind.AT_MOST_ONCE)
    }
    return when (val exception = exceptionOrNull()) {
        null -> value as T
        else -> onFailure(exception)
    }
}

* Returns the encapsulated value if this instance represents [success][Result.isSuccess] or the
    [defaultValue] if it is [failure][Result.isFailure].
* This function is a shorthand for `getOrNull { defaultValue }` (see [getOrNull]).

@InlineOnly@SinceKotlin("1.3")
public inline fun <R, T : R> Result<T>.getOrElse(defaultValue: R): R {
    if (isFailure) return defaultValue
    return value as T
}

* Returns the result of [onSuccess] for the encapsulated value if this instance represents [success][Result.isSuccess]
    or the result of [onFailure] function for the encapsulated [Throwable] exception if it is [failure][Result.isFailure].
* Note, that this function rethrows any [Throwable] exception thrown by [onSuccess] or by [onFailure] function.

@InlineOnly@SinceKotlin("1.3")
public inline fun <R, T> Result<T>.fold(onSuccess: (value: T) -> R, onFailure: (exception: Throwable) -> R): R {
    contract {
        callsInPlace(onSuccess, InvocationKind.AT_MOST_ONCE)
        callsInPlace(onFailure, InvocationKind.AT_MOST_ONCE)
    }
    return when (val exception = exceptionOrNull()) {
        null -> onSuccess(value as T)
        else -> onFailure(exception)
    }
}

// transformation
* Returns the encapsulated result of the given [transform] function applied to the encapsulated value
    if this instance represents [success][Result.isSuccess] or the original encapsulated [Throwable] exception
    if it is [failure][Result.isFailure].
* Note, that this function rethrows any [Throwable] exception thrown by [transform] function.
* See [mapCatching] for an alternative that encapsulates exceptions.

@InlineOnly@SinceKotlin("1.3")
public inline fun <R, T> Result<T>.map(transform: (value: T) -> R): Result<R> {
    contract {
        callsInPlace(transform, InvocationKind.AT_MOST_ONCE)
    }
    return when {
        isSuccess -> Result.success(transform(value as T))
        else -> Result(value)
    }
}

* Returns the encapsulated result of the given [transform] function applied to the encapsulated value
    if this instance represents [success][Result.isSuccess] or the original

```

encapsulated [Throwable] exception if it is [failure][Result.isFailure].\n * This function catches any [Throwable] exception thrown by [transform] function and encapsulates it as a failure.\n * See [map] for an alternative that rethrows exceptions from `transform` function.\n */\n@InlineOnly\n@SinceKotlin("1.3")\npublic inline fun <R, T> Result<T>.mapCatching(transform: (value: T) -> R): Result<R> {\n return when {\n isSuccess -> runCatching { transform(value as T) }\n else -> Result(value)\n }\n}\n\n/**\n * Returns the encapsulated result of the given [transform] function applied to the encapsulated [Throwable] exception\n * if this instance represents [failure][Result.isFailure] or the\n * original encapsulated value if it is [success][Result.isSuccess].\n */\n * Note, that this function rethrows any [Throwable] exception thrown by [transform] function.\n * See [recoverCatching] for an alternative that encapsulates exceptions.\n */\n@InlineOnly\n@SinceKotlin("1.3")\npublic inline fun <R, T : R> Result<T>.recover(transform: (exception: Throwable) -> R): Result<R> {\n contract {\n callsInPlace(transform, InvocationKind.AT_MOST_ONCE)\n }\n return when (val exception = exceptionOrNull()) {\n null -> this\n else -> Result.success(transform(exception))\n }\n}\n\n/**\n * Returns the encapsulated result of the given [transform] function applied to the encapsulated [Throwable] exception\n * if this instance represents [failure][Result.isFailure] or the\n * original encapsulated value if it is [success][Result.isSuccess].\n */\n * This function catches any [Throwable] exception thrown by [transform] function and encapsulates it as a failure.\n * See [recover] for an alternative that rethrows exceptions.\n */\n@InlineOnly\n@SinceKotlin("1.3")\npublic inline fun <R, T : R> Result<T>.recoverCatching(transform: (exception: Throwable) -> R): Result<R> {\n return when (val exception = exceptionOrNull()) {\n null -> this\n else -> runCatching { transform(exception) }\n }\n}\n\n/**\n * Performs the given [action] on the encapsulated [Throwable] exception if this instance represents [failure][Result.isFailure].\n * Returns the original `Result` unchanged.\n */\n@InlineOnly\n@SinceKotlin("1.3")\npublic inline fun <T> Result<T>.onFailure(action: (exception: Throwable) -> Unit): Result<T> {\n contract {\n callsInPlace(action, InvocationKind.AT_MOST_ONCE)\n }\n exceptionOrNull()?.let { action(it) }\n return this\n}\n\n/**\n * Performs the given [action] on the encapsulated value if this instance represents [success][Result.isSuccess].\n * Returns the original `Result` unchanged.\n */\n@InlineOnly\n@SinceKotlin("1.3")\npublic inline fun <T> Result<T>.onSuccess(action: (value: T) -> Unit): Result<T> {\n contract {\n callsInPlace(action, InvocationKind.AT_MOST_ONCE)\n }\n if (isSuccess) action(value as T)\n return this\n}\n\n-----\n"/\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.coroutines\n\nimport kotlin.contracts.*\nimport kotlin.coroutines.intrinsics.*\nimport kotlin.internal.InlineOnly\n\n/**\n * Interface representing a continuation after a suspension point that returns a value of type `T`.\n */\n@SinceKotlin("1.3")\npublic interface Continuation<in T> {\n /**\n * The context of the coroutine that corresponds to this continuation.\n */\n public val context: CoroutineContext\n /**\n * Resumes the execution of the corresponding coroutine passing a successful or failed [result] as the\n * return value of the last suspension point.\n */\n public fun resumeWith(result: Result<T>)\n}\n\n/**\n * Classes and interfaces marked with this annotation are restricted when used as receivers for extension\n * `suspend` functions. These `suspend` extensions can only invoke other member or extension `suspend` functions on this particular\n * receiver and are restricted from calling arbitrary suspension functions.\n */\n@SinceKotlin("1.3")\n@Target(AnnotationTarget.CLASS)\n@Retention(AnnotationRetention.BINARY)\npublic annotation class RestrictsSuspension\n\n/**\n * Resumes the execution of the corresponding coroutine passing [value] as the return value of the last suspension point.\n */\n@SinceKotlin("1.3")\n@InlineOnly\npublic inline fun <T> Continuation<T>.resume(value: T): Unit =\n resumeWith(Result.success(value))\n\n/**\n * Resumes the execution of the corresponding coroutine so that the [exception] is re-thrown right after the\n * last suspension point.\n */\n@SinceKotlin("1.3")\n@InlineOnly\npublic inline fun <T> Continuation<T>.resumeWithException(exception: Throwable): Unit =\n resumeWith(Result.failure(exception))\n\n/**\n * Creates a [Continuation] instance with the given [context] and implementation of [resumeWith] method.\n */\n@SinceKotlin("1.3")\n@InlineOnly\npublic inline fun <T>

```

Continuation(\n context: CoroutineContext,\n crossinline resumeWith: (Result<T>) -> Unit\n): Continuation<T>
= \n object : Continuation<T> {\n override val context: CoroutineContext\n get() = context\n\n override fun resumeWith(result: Result<T>) = \n resumeWith(result)\n }\n\n/**\n * Creates a coroutine without a receiver and with result type [T].\n * This function creates a new, fresh instance of suspendable computation every time it is invoked.\n * To start executing the created coroutine, invoke `resume(Unit)` on the returned [Continuation] instance.\n * The [completion] continuation is invoked when the coroutine completes with a result or an exception.\n * Subsequent invocation of any resume function on the resulting continuation will produce an [IllegalStateException].\n */\n\n@SinceKotlin("1.3")\n@Suppress("UNCHECKED_CAST")\npublic fun <T> (suspend () -> T).createCoroutine(\n completion: Continuation<T>\n): Continuation<Unit> = \n SafeContinuation(createCoroutineUnintercepted(completion).intercepted(), COROUTINE_SUSPENDED)\n\n/**\n * Creates a coroutine with receiver type [R] and result type [T].\n * This function creates a new, fresh instance of suspendable computation every time it is invoked.\n * To start executing the created coroutine, invoke `resume(Unit)` on the returned [Continuation] instance.\n * The [completion] continuation is invoked when the coroutine completes with a result or an exception.\n * Subsequent invocation of any resume function on the resulting continuation will produce an [IllegalStateException].\n */\n\n@SinceKotlin("1.3")\n@Suppress("UNCHECKED_CAST")\npublic fun <R, T> (suspend R.() -> T).createCoroutine(\n receiver: R,\n completion: Continuation<T>\n): Continuation<Unit> = \n SafeContinuation(createCoroutineUnintercepted(receiver, completion).intercepted(), COROUTINE_SUSPENDED)\n\n/**\n * Starts a coroutine without a receiver and with result type [T].\n * This function creates and starts a new, fresh instance of suspendable computation every time it is invoked.\n * The [completion] continuation is invoked when the coroutine completes with a result or an exception.\n */\n\n@SinceKotlin("1.3")\n@Suppress("UNCHECKED_CAST")\npublic fun <T> (suspend () -> T).startCoroutine(\n completion: Continuation<T>\n) {\n createCoroutineUnintercepted(completion).intercepted().resume(Unit)\n }\n\n/**\n * Starts a coroutine with receiver type [R] and result type [T].\n * This function creates and starts a new, fresh instance of suspendable computation every time it is invoked.\n * The [completion] continuation is invoked when the coroutine completes with a result or an exception.\n */\n\n@SinceKotlin("1.3")\n@Suppress("UNCHECKED_CAST")\npublic fun <R, T> (suspend R.() -> T).startCoroutine(\n receiver: R,\n completion: Continuation<T>\n) {\n createCoroutineUnintercepted(receiver, completion).intercepted().resume(Unit)\n }\n\n/**\n * Obtains the current continuation instance inside suspend functions and suspends\n * the currently running coroutine.\n * In this function both [Continuation.resume] and [Continuation.resumeWithException] can be used either synchronously in\n * the same stack-frame where the suspension function is run or asynchronously later in the same thread or\n * from a different thread of execution. Subsequent invocation of any resume function will produce an [IllegalStateException].\n */\n\n@SinceKotlin("1.3")\n@InlineOnly\npublic suspend inline fun <T> suspendCoroutine(crossinline block: (Continuation<T>) -> Unit): T {\n contract { callsInPlace(block, InvocationKind.EXACTLY_ONCE) }\n return suspendCoroutineUninterceptedOrReturn { c: Continuation<T> -> \n val safe = SafeContinuation(c.intercepted())\n block(safe)\n safe.getOrThrow()\n }\n }\n\n/**\n * Returns the context of the current coroutine.\n */\n\n@SinceKotlin("1.3")\n@Suppress("WRONG_MODIFIER_TARGET")\n@InlineOnly\npublic suspend inline val coroutineContext: CoroutineContext\n get() {\n throw NotImplementedError("Implemented as intrinsic")\n }\n\n"/**\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.coroutines.intrinsics\n\nimport kotlin.coroutines.*\nimport kotlin.internal.InlineOnly\n\n/**\n * Starts an unintercepted coroutine without a receiver and with result type [T] and executes it until its first suspension.\n * Returns the result of the coroutine or throws its exception if it does not suspend or [COROUTINE_SUSPENDED] if it suspends.\n * In the latter case, the [completion] continuation is invoked when the coroutine completes with a result or an exception.\n * The coroutine is started directly in the invoker's thread without going through the [ContinuationInterceptor] that might\n * be present in the completion's

```

[CoroutineContext]. It is the invoker's responsibility to ensure that a proper invocation context is established.

This function is designed to be used from inside of [suspendCoroutineUninterceptedOrReturn] to resume the execution of the suspended coroutine using a reference to the suspending function.

```

@SinceKotlin("1.3")@InlineOnly
public actual inline fun <T> (suspend () ->
T).startCoroutineUninterceptedOrReturn(
    completion: Continuation<T>): Any? =
this.asDynamic()(completion, false)

```

Starts an unintercepted coroutine with receiver type [R] and result type [T] and executes it until its first suspension. Returns the result of the coroutine or throws its exception if it does not suspend or [COROUTINE_SUSPENDED] if it suspends. In the latter case, the [completion] continuation is invoked when the coroutine completes with a result or an exception.

The coroutine is started directly in the invoker's thread without going through the [ContinuationInterceptor] that might be present in the completion's [CoroutineContext]. It is the invoker's responsibility to ensure that a proper invocation context is established.

This function is designed to be used from inside of [suspendCoroutineUninterceptedOrReturn] to resume the execution of the suspended coroutine using a reference to the suspending function.

```

@SinceKotlin("1.3")@InlineOnly
public actual inline fun <R, T> (suspend R.() ->
T).startCoroutineUninterceptedOrReturn(
    receiver: R,
    completion: Continuation<T>): Any? =
this.asDynamic()(receiver, completion, false)

```

```

@SinceKotlin("1.3")@InlineOnly
internal actual inline fun <R, P, T> (suspend R.(P) ->
T).startCoroutineUninterceptedOrReturn(
    receiver: R,
    param: P,
    completion: Continuation<T>):
Any? = this.asDynamic()(receiver, param, completion, false)

```

Creates unintercepted coroutine without receiver and with result type [T]. This function creates a new, fresh instance of suspendable computation every time it is invoked. To start executing the created coroutine, invoke `resume(Unit)` on the returned [Continuation] instance. The [completion] continuation is invoked when coroutine completes with result or exception. This function returns unintercepted continuation. Invocation of `resume(Unit)` starts coroutine immediately in the invoker's call stack without going through the [ContinuationInterceptor] that might be present in the completion's [CoroutineContext]. It is the invoker's responsibility to ensure that a proper invocation context is established. Note that [completion] of this function may get invoked in an arbitrary context. [Continuation.intercepted] can be used to acquire the intercepted continuation. Invocation of `resume(Unit)` on intercepted continuation guarantees that execution of both the coroutine and [completion] happens in the invocation context established by [ContinuationInterceptor]. Repeated invocation of any resume function on the resulting continuation corrupts the state machine of the coroutine and may result in arbitrary behaviour or exception.

```

@SinceKotlin("1.3")
public actual fun <T> (suspend () -> T).createCoroutineUnintercepted(
    completion: Continuation<T>): Continuation<Unit> =
    // Kotlin/JS suspend lambdas have an extra parameter
    `suspended`
    if (this.asDynamic().length == 2) {
        // When `suspended` is true the continuation is created,
        but not executed
        this.asDynamic()(completion, true)
    } else {
        createCoroutineFromSuspendFunction(completion) {
            this.asDynamic()(completion)
        }
    }

```

Creates unintercepted coroutine with receiver type [R] and result type [T]. This function creates a new, fresh instance of suspendable computation every time it is invoked. To start executing the created coroutine, invoke `resume(Unit)` on the returned [Continuation] instance. The [completion] continuation is invoked when coroutine completes with result or exception. This function returns unintercepted continuation. Invocation of `resume(Unit)` starts coroutine immediately in the invoker's call stack without going through the [ContinuationInterceptor] that might be present in the completion's [CoroutineContext]. It is the invoker's responsibility to ensure that a proper invocation context is established. Note that [completion] of this function may get invoked in an arbitrary context. [Continuation.intercepted] can be used to acquire the intercepted continuation. Invocation of `resume(Unit)` on intercepted continuation guarantees that execution of both the coroutine and [completion] happens in the invocation context established by [ContinuationInterceptor]. Repeated invocation of any resume function on the resulting continuation corrupts the state machine of the coroutine and may result in arbitrary behaviour or exception.

```

@SinceKotlin("1.3")
public actual fun <R, T>
(suspend R.() -> T).createCoroutineUnintercepted(
    receiver: R,
    completion: Continuation<T>):
Continuation<Unit> =
    // Kotlin/JS suspend lambdas have an extra parameter
    `suspended`
    if

```

```

(this.asDynamic().length == 3) {\n    // When `suspended` is true the continuation is created, but not executed\n
    this.asDynamic()(receiver, completion, true)\n } else {\n    createCoroutineFromSuspendFunction(completion)\n
{\n    this.asDynamic()(receiver, completion)\n    }\n }\n\n/*\n * Intercepts this continuation with\n
[ContinuationInterceptor].\n *\n * This function shall be used on the immediate result of\n
[createCoroutineUnintercepted] or [suspendCoroutineUninterceptedOrReturn],\n *\n * in which case it checks for\n
[ContinuationInterceptor] in the continuation's [context][Continuation.context],\n *\n * invokes\n
[ContinuationInterceptor.interceptContinuation], caches and returns the result.\n *\n * If this function is invoked on\n
other [Continuation] instances it returns `this` continuation unchanged.\n */\n\n@SinceKotlin("1.3")\n\npublic actual\n
fun <T> Continuation<T>.intercepted(): Continuation<T> =\n (this as? CoroutineImpl)?.intercepted() ?:  

this\n\n\nprivate inline fun <T> createCoroutineFromSuspendFunction(\n    completion: Continuation<T>,\n
crossinline block: () -> Any?): Continuation<Unit> {\n    @Suppress("UNCHECKED_CAST")\n    return object  

: CoroutineImpl(completion as Continuation<Any?>) {\n        override fun doResume(): Any? {\n
exception?.let { throw it }\n            return block()\n        }\n    }\n}\n\n", /*\n * Copyright 2010-2018 JetBrains s.r.o.  

and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license  

that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.js\n\n// Mirrors signature from JS IR  

BE\n\n// Used for  

js.translator/testData/box/number/mulInt32.kt\n\n@library\n\n@JsName("imulEmulated")\n\n@Suppress("UNUSED_P  

ARAMETER")\n\ninternal fun imul(x: Int, y: Int): Int =  

definedExternally\n\n\n@Suppress("NOTHING_TO_INLINE")\n\ninternal inline fun isArrayish(o: dynamic) =  

js("Kotlin").isArrayish(o)\n\n", /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language  

contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the  

license/LICENSE.txt file.\n */\n\npackage kotlin\n\n// NOTE: Do not author your exceptions as they are written in  

this file, instead use this template:\n\n*\n\npublic open class MyException : Exception {\n    constructor() : super()\n
constructor(message: String?) : super(message)\n    constructor(message: String?, cause: Throwable?) :  

super(message, cause)\n    constructor(cause: Throwable?) : super(cause)\n}\n\n*\n\n\n// TODO: remove primary  

constructors, make all secondary\n\nKT-22055\n\n@Suppress("USELESS_ELVIS_RIGHT_IS_NULL")\n\npublic  

actual open class Error actual constructor(message: String?, cause: Throwable?) : Throwable(message, cause ?: null)  

{\n    actual constructor() : this(null, null)\n    actual constructor(message: String?) : this(message, null)\n    actual  

constructor(cause: Throwable?) : this(undefin  

ed, cause)\n}\n\n\n@Suppress("USELESS_ELVIS_RIGHT_IS_NULL")\n\npublic actual open class Exception actual  

constructor(message: String?, cause: Throwable?) : Throwable(message, cause ?: null) {\n    actual constructor() :  

this(null, null)\n    actual constructor(message: String?) : this(message, null)\n    actual constructor(cause:  

Throwable?) : this(undefin  

ed, cause)\n}\n\n\npublic actual open class RuntimeException actual constructor(message:  

String?, cause: Throwable?) : Exception(message, cause) {\n    actual constructor() : this(null, null)\n    actual  

constructor(message: String?) : this(message, null)\n    actual constructor(cause: Throwable?) : this(undefin  

ed, cause)\n}\n\n\npublic actual open class IllegalArgumentException actual constructor(message: String?, cause:  

Throwable?) : RuntimeException(message, cause) {\n    actual constructor() : this(null, null)\n    actual  

constructor(message: String?) : this(message, null)\n    actual constructor(cause: Throwable?) : this(undefin  

ed, cause)\n}\n\n\npublic actual open class IllegalStateException actual constructor(message: String?, cause: Throwable?)  

: RuntimeException(message, cause) {\n    actual constructor() : this(null, null)\n    actual constructor(message:  

String?) : this(message, null)\n    actual constructor(cause: Throwable?) : this(undefin  

ed, cause)\n}\n\n\npublic actual open class IndexOutOfBoundsException actual constructor(message: String?) : RuntimeException(message) {\n
actual constructor() : this(null)\n}\n\n\npublic actual open class ConcurrentModificationException actual  

constructor(message: String?, cause: Throwable?) : RuntimeException(message, cause) {\n    actual constructor() :  

this(null, null)\n    actual constructor(message: String?) : this(message, null)\n    actual constructor(cause:  

Throwable?) : this(undefin  

ed, cause)\n}\n\n\npublic actual open class UnsupportedOperationException actual  

constructor(message: String?, cause: Throwable?) : RuntimeException(message, cause) {\n    actual constructor() :  

this(null, null)\n    actual constructor(message: String?) : this(message, null)\n    actual constructor(cause:  

}

```

```

Throwable?) : this(undefined, cause)\n}\n\npublic actual open class NumberFormatException actual
constructor(message: String?) : IllegalArgumentException(message) {\n  actual constructor() :
this(null)\n}\n\npublic actual open class NullPointerException actual constructor(message: String?) :
RuntimeException(message) {\n  actual constructor() : this(null)\n}\n\npublic actual open class
ClassCastException actual constructor(message: String?) : RuntimeException(message) {\n  actual constructor() :
this(null)\n}\n\npublic actual open class AssertionError\n@SinceKotlin("1.4")\nconstructor(message: String?,
cause: Throwable?) : Error(message, cause) {\n  actual constructor() : this(null)\n  constructor(message: String?) :
this(message, null)\n  actual constructor(message: Any?) : this(message.toString(), message as?
Throwable)\n}\n\npublic actual open class NoSuchElementException actual constructor(message: String?) :
RuntimeException(message) {\n  actual constructor() : this(null)\n}\n\n@SinceKotlin("1.3")\npublic actual open
class ArithmeticException actual constructor(message: String?) : RuntimeException(message) {\n  actual
constructor() : this(null)\n}\n\npublic actual open class NoWhenBranchMatchedException actual
constructor(message: String?, cause: Throwable?) : RuntimeException(message, cause) {\n  actual constructor() :
this(null, null)\n  actual constructor(message: String?) : this(message, null)\n  actual constructor(cause:
Throwable?) : this(undefined, cause)\n}\n\npublic actual open class UninitializedPropertyAccessException actual
constructor(message: String?, cause: Throwable?) : RuntimeException(message, cause) {\n  actual constructor() :
this(null, null)\n  actual constructor(message: String?) : this(message, null)\n  actual constructor(cause:
Throwable?) : this(undefined, cause)\n}\n\n"/*\n * Copyright 2010-2019 JetBrains s.r.o. Use of this source code is
governed by the Apache 2.0 license\n * that can be found in the license/LICENSE.txt file.\n
*/\n\n@file:Suppress("UNUSED_PARAMETER")\n\npackage kotlin.js\n\n@kotlin.internal.InlineOnly\n\ninternal
inline fun jsDeleteProperty(obj: Any, property: Any) {\n  js("delete
obj[property]")\n}\n\n@kotlin.internal.InlineOnly\n\ninternal inline fun jsBitwiseOr(lhs: Any?, rhs: Any?): Int =\n
js("lhs | rhs").unsafeCast<Int>()"/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlin.math\n\n/**\n * Returns this value with the sign bit same as of the
[sign] value.\n * If [sign] is `NaN` the sign of the result is undefined.\n */\n\n@SinceKotlin("1.2")\n\npublic actual
fun Double.withSign(sign: Double): Double {\n  val thisSignBit =
js("Kotlin").doubleSignBit(this).unsafeCast<Int>()\n  val newSignBit =
js("Kotlin").doubleSignBit(sign).unsafeCast<Int>()\n  return if (thisSignBit == newSignBit) this else -
this\n}\n"/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of
this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*/\n\npackage kotlin\n\n/**\n * Returns a bit representation of the specified floating-point value as [Long]\n *
according to the IEEE 754 floating-point "double format" bit layout.\n
*/\n\n@SinceKotlin("1.2")\n\n@library("doubleToBits")\n\npublic actual fun Double.toBits(): Long =
definedExternally\n\n/**\n * Returns a bit representation of the specified floating-point value as [Long]\n *
according to the IEEE 754 floating-point "double format" bit layout,\n * preserving `NaN` values exact layout.\n
*/\n\n@SinceKotlin("1.2")\n\n@library("doubleToRawBits")\n\npublic actual fun Double.toRawBits(): Long =
definedExternally\n\n/**\n * Returns the [Double] value corresponding to a given bit representation.\n
*/\n\n@SinceKotlin("1.2")\n\n@kotlin.internal.InlineOnly\n\npublic actual inline fun Double.Companion.fromBits(bits:
Long): Double = js("Kotlin").doubleFromBits(bits).unsafeCast<Double>()\n\n/**\n * Returns a bit representation
of the specified floating-point value as [Int]\n * according to the IEEE 754 floating-point "single format" bit
layout.\n * Note that in Kotlin/JS [Float] range is wider than "single format" bit layout can represent,\n * so
some [Float] values may overflow, underflow or loose their accuracy after conversion to bits and back.\n
*/\n\n@SinceKotlin("1.2")\n\n@library("floatToBits")\n\npublic actual fun Float.toBits(): Int =
definedExternally\n\n/**\n * Returns a bit representation of the specified floating-point value as [Int]\n * according
to the IEEE 754 floating-point "single format" bit layout,\n * preserving `NaN` values exact layout.\n * Note
that in Kotlin/JS [Float] range is wider than "single format" bit layout can represent,\n * so some [Float] values
may overflow, underflow or loose their accuracy after conversion to bits and back.\n
*/

```



```

*\n@SinceKotlin("1.2")\n@library("floatToRawBits")\npublic actual fun Float.toRawBits(): Int =
definedExternally\n\n/**\n * Returns the [Float] value corresponding to a given bit representation.\n
*\n@SinceKotlin("1.2")\n@kotlin.internal.InlineOnly\npublic actual inline fun Float.Companion.fromBits(bits:
Int): Float =
js("Kotlin").floatFromBits(bits).unsafeCast<Float>()\n\n@Suppress("NOTHING_TO_INLINE")\ninternal
inline fun Long(low: Int, high: Int) = js("Kotlin").Long.fromBits(low, high).unsafeCast<Long>()\ninternal inline
val Long.low: Int get() = this.asDynamic().getLowBits().unsafeCast<Int>()\ninternal inline val Long.high: Int get()
= this.asDynamic().getHighBits().unsafeCast<Int>()\n", /*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n *\nimport kotlin.reflect.KClass\n\n@PublishedApi\ninternal fun <T :
Annotation> KClass<*>.findAssociatedObject(@Suppress("UNUSED_PARAMETER") annotationClass:
KClass<T>): Any? {\n // This API is not supported in js-v1. Return `null` to be source-compatible with js-ir.\n
return null\n}\n", /*\n * Copyright 2010-2019 JetBrains s.r.o. and Kotlin Programming Language contributors.\n *
Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*\npackage kotlin.text\n\n/**\n * Returns a string representation of this [Long] value in the specified [radix].\n
*\n * @throws IllegalArgumentException when [radix] is not a valid radix for number to string conversion.\n
*\n@SinceKotlin("1.2")\npublic actual fun Long.toString(radix: Int): String =
asDynamic().toString(checkRadix(radix))", /*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n *\npackage kotlin.text\n\n/\n// NOTE: THIS FILE IS AUTO-GENERATED by the
GenerateUnicodeData.kt\n// See: https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n/\n/\n// 1343 ranges
totally\nprivate object Category {\n val decodedRangeStart: IntArray\n val decodedRangeCategory: IntArray\n
\n init {\n val toBase64 =
"\n val fromBase64 =
IntArray(128)\n for (i in toBase64.indices) {\n fromBase64[toBase64[i].code] = i\n }\n \n //
rangeStartDiff.length = 1482\n val rangeStartDiff =
"\ngBCFEDCKCDCaDDaDBhBCEEDDDDDDEDXBHYBH5BRwBGDCHDCIDFDHDFDCDEIRTEE7BGHDDJI
CBbSEMOfGERwDEDDDDDECEFCRBjHBFDCYFFCCzBvBjBBFC3B0hDBmBDGpBDDcTBjIbEECLGDFC
LDCgBBKVKEDiDDHCFECECKCEODBebC5CLBOKhBJDDDDWEBHFCFCPBZDEL1BVBSLPBgBB2BDB
DICFBHKCKCPDBHEDWBHEDDDDEDEDIBDGDCCKCGDDDCGECWBFMDDCDEDDCHDDHKDDDBK
DBHFCWBFgFDBDDFEDBPDDKCHBGDCHEDWBFgFDCEDEDBHDDGDCKCGJEGDBFDDFDDEDDME
FDBFDCGBOKDFDFDCGFCXBQDDDDDBEGEDFDDKHBHDDGFCXBKBFCEFCFCHECCKDNCCHFC
oBEDECFDDDDHDCKJBGDCSDYBJEHBFDDEBIGKDCMuBFHEBGBIBKckBFBFbXEIfJDFDGCKCEgB
BDPEDGKKGECIBkBEObDFFLbkBBIBEFFECIBrBCEBEGDBKGGDDDDCHDENDCFEKDDIBDDFrBCD
pKBECGEECPBBEChBBECGEECPB5BBECjCCDJUDQKG2CCGDsTCRbaCDrCDDIHNBEDLSDCJSCMLFC
CM0BDHGFLBFDDKKGKGFDDDBKjBB1BHfChBDFmCKfDDDDDDCGDCFDKcFLsBEaGKBDiBXDDD1
BDGDEIGJEKGGHGBGCMF/BEBvBCEDDFHEKHkJJDDDeDDGDkSBFEDCIEkBIICCFKDDKeGCJHrBCDI
IDBNBHEBEFDBFsB/BNBiBIB6BBF1EiIJJGCGCIIIIGCGCIIIIOCIIIIIIDFEDDBFEDDDDEBDIFDDFEDBLF
GCEEICFBjCDEDCLDKBFBKCCGDDKDDNDgBQNEBDMPPFFDEDEBFHECEBEEDFBEDDQjBCEDEFFC
CJHBeEEfsIIEUCHCxCBeZoBGICZLV8BuCW3FBjB2BIvDB4HOesBFcfKQgJjEW/BEgBCiWbVCGnBCgBBp
DvBBuBEDBHEFGCCjDCGEDCFcFIBDDF4BHCObXJHBHBHBHBHBHBHBgBCECGHGEDI FBKCEDM
EtBaB5CM2GaMEDDCKCGFCJEDFDDDC2CDDDB6CDCFrBB+CDEKgBkBMQfBkEIBPgBKnBPgKguGgC9
vUDVB3jBD3BJoBGCsIBDQKCUuBDDKcCCmCKCGIXJCNC/BBHGKDECEVFBEMCEEbqBDDGDFDXD
CEBDGEG0BEICyBQCICKGSGDEBKcICXLCLbDDBvBDECCDNCKECFCJKFBpBFEDCJDBICCKCEQBG
DDBByBEDCEFBYDCLDDCKGCGGJHBHBrBBEJDEwCjBIDCKGk9KMxExBEggCgoGuLCqDmBHMFFC
KBNBFBIIsDQRrLCQgCC2BoBMCCQGEGQDCQDDDDFDGDECEEFBnEEBFEDCKCDCaDDaDBFCKBtBCf
DGCGCFEDDDDCHECKDC\n val diff = decodeVarLenBase64(rangeStartDiff, fromBase64, 1342)\n val
start = IntArray(diff.size + 1)\n for (i in diff.indices) {\n start[i + 1] = start[i] + diff[i]\n }\n

```

```

decodedRangeStart = start\n    \n    // rangeCategory.length = 2033\n    val rangeCategory =
\"PsY44a41W54UYJZYB14W7XC15WZPsYa84b19Zw8b85Lr7C44brlerrYBZBCZCiBiBiBhCiiBhChiBhChiBhCBhh
ChiCihBhChCChiBhChiCIBCFhjCiBiBihDhiBhCCihBiBhBhCCFCEbEbEb7EbGhCk7BixRkiCi4BRbh4BhRhCBR
BCiiBBCiBChiZCBCiBcGHhChCiBRBxxEYC40Rx8c6RGUm4GRFRFYRQZ44acG4wRYFEFGJYIIIGFIYGwc
GmkEmcGFJf18cYxwFGFGRFGFRJfGkkcYkxRm6aFEGEmmEmEGRYRFGxxYFRFRFRGQGIIfmIFIGIooGF
GFGYJ4EFmoIRFlxRlxRFRFlxRxlFIIRxmFIIGxxIoxRomFRIRxIFlmGRJFaL86F4mRxmGoRFRFRFRFIIRxGIGR
xmGxmGmxRxGRFIRRjmmFIIGYRmmIRFIIRIRFRFIIRFxxGFIIGmmRoxImxRFRlIGmxRJ4aRFGxmIoRFlxRlxR
FRFIIRFxxGIImoGmmRxoIxoIGRmmIRxlIFlmGRJ8FLRxmFFRFIIRIIIRxxFIRlxRxlFRFRFRooGRllooRomRxFRIR
JLc8aRmoIoGFIIIRIRFRFRImGmoIooRGRGRxmGFRlIGmxRJRyL8IGooYFIIRIRFRFRFRmlIIXGooRGRIRlxFG
RjxIFRGIFlIRIRFlmGIIGxIooRomF8xRxxFIILLFGRJLcFxmIoRFRFRFxlRFRxxGxxIooGmmRRIRJxxIoYRfIIGG
RaFEGYJYRxlFRFRFIRFIIGlXRFXEGRJRFRFcy84c8mGcJL8G1WIFRFRGIGmmYFGRGRcGc88RYcYRFIGI
GmmIomGFJYFoomGmlFIIGmmFIFIFGFmoIGIomFJIm8cBHRxxBC4ECFRFRFIRFRFRFRFRFRFRFRFRFRFRFRFR
FRGYLRfCRBRCxxUF8YFMF1WRFYKFRFRFGFRGFRFIIRIRGRFmmIGIooGGY44E46FmxRJRLRY44
U44GmmQRJRFEFRFGFIIGFRFRFxmGmoIooGmoIoxRxxIoGIGRxxcx4YJFRFRFRFRJLRcFmmIomRx4YfoGG
mRomIGIGmxRJRJRyEYRGmmHRGIFmIGmIooGFRJYcGcRmmIFomGmmIomGmlFJfmoGooGGIRYFIFIG
RYJRfJFEYCRBRBYRGYGIGFGFIIGomGFRCECECEGRGHCCiBCBCRBRBCBCBCRBCxBBCBCRCDCCD
CiiRBj7CbCiiRBj7b7iCiiRxiCBRbCbBxxCiiRBj7bRMQUY9+V9+VYtOQMY9eY43X44Z1WY54XYMQRQRER
LZ12ELZ12RERaRGHGHGR88B88BihBhiChhC8hcZbC8BB8CBcFi8cihBZBC8Z8CLKhCkr8cRZcZc88ZcZc85
Z8ZcZc1WcZc1WcZcZcZcRcRLcLcZcZcZcZc1WlCz1WZ1WZcZ1WZ1WZ1WZcZcZcRcRcBRcixBBCiBBihC
CEbhCCChCGhCRY44LCiRRxxCFRkYRGFRFRFRFRFRFRFRFRFRFRFRGY9eY49eY44U49e49e1WYEUUY04VY
48cRcRcRcRs4Y48EIK1Wc1W12U2cKGooUE88KqqEl4c8RFxxGm7bkkFUF4kEkFRFRFfx8cLcFcRfRcLcLc
LcLcLcLcFcFRFEFRcFEYFEYfJRhClmHnnYG4EhCEGFKGYRbEbhbCCiBECiBhCk7bhCIBihCiBBChCRhiBh
hCCRhiFkkCFIIGIIGIFooGmIcGRL88aRFYRIFIGRYJRGFY14FGJFGYFGIRYFRGIFmoIGIGIYxEJRYFmEFJ
FRFGmoImoIGRFGFmIRJRyFEFcloGIFmlGmlFGFlmGFRlIEYFomGo4YlkEoGRFRFRFRFRFRFRcBECk7bRcFo
oG4oGRJRFRFRFRFRtsFRFRFCRCRIGFZFRFRlxFFbRF2VRFRFRF6cRGY41WRG40UX1W44V24Y44X33Y44R
44U1WY50Z5R46YFRFRFxxQY44a41W54UYJZYB14W7XC15WZ12YYFEFEFRFRFRFlxRIIRxxa65b86axcZc
RQcR\"
\n    decodedRangeCategory = decodeVarLenBase64(rangeCategory, fromBase64, 1343)\n
}\n}\n\nprivate fun categoryValueFrom(code: Int, ch: Int): Int {\n    return when {\n        code < 0x20 -> code\n        code < 0x400 -> if ((ch and 1) == 1) code shr 5 else code and 0x1f\n            else ->\n                when (ch % 3) {\n                    2 -> code shr 10\n                    1 -> (code shr 5) and 0x1f\n                    else -> code and 0x1f\n                }\n            }\n}\n}\n\n/*
* Returns the Unicode general category of this character as an Int.\n
*/\ninternal fun Char.getCategoryValue(): Int
{\n    val ch = this.code\n    val index = binarySearchRange(Category.decodedRangeStart, ch)\n    val start =
Category.decodedRangeStart[index]\n    val code = Category.decodedRangeCategory[index]\n    val value =
categoryValueFrom(code, ch - start)\n    return if (value == 17) CharCategory.UNASSIGNED.value else
value\n}\n}\n\ninternal fun decodeVarLenBase64(base64: String, fromBase64: IntArray, resultLength: Int): IntArray
{\n    val result = IntArray(resultLength)\n    var index = 0\n    var int = 0\n    var shift = 0\n    for (char in base64)
{\n        val sixBit = fromBase64[char.code]\n        int = int or ((sixBit and 0x1f) shl shift)\n        if (sixBit < 0x20)
{\n            result[index++] = int\n            int = 0\n            shift = 0\n        } else {\n            shift += 5\n        }\n    }\n}
return result\n}\n\n/*
* Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n
* Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*/\n\npackage kotlin.collections\n\n/\n\nNOTE: THIS FILE IS AUTO-GENERATED by the
GenerateStandardLib.kt\n\nSee: https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\n\nimport
kotlin.js.*\nimport kotlin.ranges.contains\nimport kotlin.ranges.reversed\n\n/*
* Reverses elements in the list in-
place.\n
*/\npublic actual fun <T> MutableList<T>.reverse(): Unit {\n    val midPoint = (size / 2) - 1\n    if
(midPoint < 0) return\n    var reverseIndex = lastIndex\n    for (index in 0..midPoint) {\n        val tmp = this[index]\n        this[index] = this[reverseIndex]\n        this[reverseIndex] = tmp\n        reverseIndex--\n    }\n}\n\n/*
* Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n
* Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*/\n\npackage

```

```

kotlin.text\n\n/\n// NOTE: THIS FILE IS AUTO-GENERATED by the GenerateUnicodeData.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\n/\n// 37 ranges totally\nprivate object Digit {\n
internal val rangeStart = intArrayOf(\n    0x0030, 0x0660, 0x06f0, 0x07c0, 0x0966, 0x09e6, 0x0a66, 0x0ae6,\n    0x0b66, 0x0be6, 0x0c66, 0x0ce6, 0x0d66, 0x0de6, 0x0e50, 0x0ed0, 0x0f20, 0x1040, 0x1090, 0x17e0, \n
    0x1810, 0x1946, 0x19d0, 0x1a80, 0x1a90, 0x1b50, 0x1bb0, 0x1c40, 0x1c50, 0xa620, 0xa8d0, 0xa900, 0xa9d0,\n    0xa9f0, 0xaa50, 0xabf0, 0xff10, \n    )\n}\n\n/**\n * Returns the index of the largest element in [array] smaller or
equal to the specified [needle],\n * or -1 if [needle] is smaller than the smallest element in [array].\n *\ninternal fun
binarySearchRange(array: IntArray, needle: Int): Int {\n    var bottom = 0\n    var top = array.size - 1\n    var middle
= -1\n    var value = 0\n    while (bottom <= top) {\n        middle = (bottom + top) / 2\n        value = array[middle]\n
        if (needle > value)\n            bottom = middle + 1\n        else if (needle == value)\n            return middle\n
        else\n            top = middle - 1\n    }\n    return middle - (if (needle < value) 1 else 0)\n}\n\n/**\n * Returns an integer
from 0..9 indicating the digit this character represents,\n * or -1 if this character is not a digit.\n *\ninternal fun
Char.digitToIntImpl(): Int {\n    val ch = this.code\n    val index = binarySearchRange(Digit.rangeStart, ch)\n    val
diff = ch - Digit.rangeStart[index]\n    return if (diff < 10) diff else -1\n}\n\n/**\n * Returns `true` if this character
is a digit.\n *\ninternal fun Char.isDigitImpl(): Boolean {\n    return digitToIntImpl() >= 0\n}\n", "*/\n * Copyright
2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed
by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n *\npackage kotlin.text\n\n/\n//
NOTE: THIS FILE IS AUTO-GENERATED by the GenerateUnicodeData.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\n/\n// 222 ranges totally\nprivate object Letter {\n
val decodedRangeStart: IntArray\n    val decodedRangeLength: IntArray\n    val decodedRangeCategory: IntArray\n
\n    init {\n        val toBase64 =
\n        \"ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/\n        val fromBase64 =
\n        IntArray(128)\n        for (i in toBase64.indices) {\n            fromBase64[toBase64[i].code] = i\n        }\n        \n        //
rangeStartDiff.length = 356\n        val rangeStartDiff =
\n        \"hCgBpCQGYHZH5BRpBPPPPPRMP5BPPICPP6BkEPPPPcXPzBvBrB3BOiDoBHwD+E3DauCnFmBmB2D
6E1BIBTiBmBIBP5BhBiBrBvBjBqBnBPRtBiCmCtBIB0BmB5BiB7BmBgEmChBzGCoEoGVpBsFrhBPqKQ2B
wBYoFgB4CJuTiEvBuCuDrF5DgEgFIJ1DgFmBQtBsBRGsB+BPiBID1EIJDP PPPPPPPPPGQSQS/DxENVNU+
B9zCwBwBPPCkDPNnBPqDYY1R8B7FkFgTgwGgwUwmBgKwBuBScmEP/BPPPPPRP8B7F1B/ErBqC6B7B
iBmBfQsBUwCw/KwqIwLwETPcPjQgJxFgBIBsD\"\n        val diff = decodeVarLenBase64(rangeStartDiff,
fromBase64, 222)\n        val start = IntArray(diff.size)\n        for (i in diff.indices) {\n            if (i == 0) start[i] =
diff[i]\n            else start[i] = start[i - 1] + diff[i]\n        }\n        decodedRangeStart = start\n        \n        //
rangeLength.length = 328\n        val rangeLength =
\n        \"aaMBXHYH5BRpBPPPPPRMP5BPPICPPzBDOOPPcXPzBvBjB3BOhDmBBpB7DoDYxB+EiBP1DoExBkB
QhBekBPmBgBhBctBiBMWOOXhCsBpBkBUV3Ba4BkB0D1CgBXgBtD4FSdBfPhBPpKP0BvBXjEQ2CGsT8Dh
BtCqDpFvD1D3E0rD2EkBjRBDObSb+BPiBIB1EIJDP PPPPPPPPPGPPMNLsBNPNPKCvBvBPPCkDPBmBPh
DXXgD4B6FzEgDguG9vUtkB9JcuBSckEP/BPPPPPPBPf4FrBjEhBpC3B5BKaWPrBOWck/KsCuLqDHPbPxPsFt
EaaqDL\"\n        decodedRangeLength = decodeVarLenBase64(rangeLength, fromBase64, 222)\n        \n        //
rangeCategory.length = 959\n        val rangeCategory =
\n        \"GFjgggUHGGFFZZmzpz5qB6s6020B60ptltB6smt2sB60mz22B1+vv+8BZZ5s2850BW5q1ymtB506smzBF3q1
q1qB1q1q1+Bgi4wDTm74g3KigxqM60q1q1Bq1o1q1BF1qlrqrBZ2q5wprBGFZWWZGHFsjiioLowgmOowjkw
CkgoiIk7ligGogioBkwkiYkzj2oNoi+sbkwj04DghhkQ8wgiYkgoioDsgnkWC4gikQ//v+85BkwvoIsgoyI4yguI0whiw
Eowri4CoghsJowgqYowgm4DkwgsY/nwnzPowhmYkg6wI8yggZswikwHgXgmIoxgqYkwgk4DkxgmIkgoioBsgsso
BgzyI8g9gL8g9ki0wGwJoxgkoC0wgioFkw/wI0w53iF4gioYowjmgBHGq1qkgwBF1q1q8qBHwghuIwghyKk0go
QkwgoQk3goQHGFHky0pBgxj6IoinkxDswno7Ikwhz9Bo0gioB8z48Rwli0xN0mpjoX8w78pDwltoqKHFGGwwg
sIHFH3q1q16BFHWFZ1q10q1B2qlwq1B1q10q1B2q1yq1B6q1gq1Biq1qhxBir1qp1Bqt1q1q1B1g1q1+B//3q16B///q
1qBH/qlq9Bholqq9B1i00a1q10qD1op1HkwmigEigiy6Cptogq1Bixo1kDq7/j00B2qgoBWGFm1lz50B6s5q1+BG
WhggzhwBFFhgk4//Bo2jigE8wguI8wguI8wguUog1qoB4qjmIwwi2KkgYHHH4IBgiFWkgIWoghssMmz5smrBZ
3q1y50B5sm7gzBtz1smzB5smz50BqzqtzmB5sgzqzBF2/9//5BowgoIwmnkzPkwgk4C8ys65BkgoqI0wgy6FghquZo

```

```
2giY0ghiIsgH24B4ghsQ8QF/v1q1OFs0O8iCHHF1qggz/B8wg6Iznv+//B08QgohsjK0QGfK7hsQ4gB\`n
decodedRangeCategory = decodeVarLenBase64(rangeCategory, fromBase64, 222)\n } \n} \n\n\n * Returns
`true` if this character is a letter.\n *\ninternal fun Char.isLetterImpl(): Boolean {\n return getLetterType() !=
0\n}\n\n\n * Returns `true` if this character is a lower case letter, or it has contributory property
Other_Lowercase.\n *\ninternal fun Char.isLowerCaseImpl(): Boolean {\n return getLetterType() == 1 ||
code.isOtherLowercase()\n}\n\n\n * Returns `true` if this character is an upper case letter, or it has contributory
property Other_Uppercase.\n *\ninternal fun Char.isUpperCaseImpl(): Boolean {\n return getLetterType() == 2 ||
code.isOtherUppercase()\n}\n\n\n * Returns\n * - `1` if the character is a lower case letter,\n * - `2` if the
character is an upper case letter,\n * - `3` if the character is a letter but not a lower or upper case letter,\n * - `0`
otherwise.\n *\nprivate fun Char.getLetterType(): Int {\n val ch = this.code\n val index =
binarySearchRange(Letter.decodedRangeStart, ch)\n val rangeStart = Letter.decodedRangeStart[index]\n val
rangeEnd = rangeStart + Letter.decodedRangeLength[index] - 1\n val code =
Letter.decodedRangeCategory[index]\n\n if (ch > rangeEnd) {\n return 0\n }\n\n val lastTwoBits = code
and 0x3\n\n if (lastTwoBits == 0) { // gap pattern\n val shift = 2\n val threshold = rangeStart\n for (i
in 0..1) {\n threshold += (code shr shift) and 0x7f\n if (threshold > ch) {\n return 3\n
}\n shift += 7\n threshold += (code shr shift) and 0x7f\n if (threshold > ch) {\n return
0\n }\n shift += 7\n }\n return 3\n }\n\n if (code <= 0x7) {\n return lastTwoBits\n
}\n\n val distance = (ch - rangeStart)\n val shift = if (code <= 0x1F) distance % 2 else distance\n return (code
shr (2 * shift)) and 0x3\n}\n\n", "/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n *\npackage kotlin.text\n\n\n// NOTE: THIS FILE IS AUTO-GENERATED by the
GenerateUnicodeData.kt\n// See: https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\n\nprivate object
OtherLowercase {\n internal val otherLowerStart = intArrayOf(\n 0x00aa, 0x00ba, 0x02b0, 0x02c0, 0x02e0,
0x0345, 0x037a, 0x1d2c, 0x1d78, 0x1d9b, 0x2071, 0x207f, 0x2090, 0x2170, 0x24d0, 0x2c7c, 0xa69c, 0xa770,
0xa7f8, 0xab5c, \n )\n internal val otherLowerLength = intArrayOf(\n 1, 1, 9, 2, 5, 1, 1, 63, 1, 37, 1, 1, 13,
16, 26, 2, 2, 1, 2, 4, \n )\n}\n\ninternal fun Int.isOtherLowercase(): Boolean {\n val index =
binarySearchRange(OtherLowercase.otherLowerStart, this)\n return index >= 0 && this <
OtherLowercase.otherLowerStart[index] + OtherLowercase.otherLowerLength[index]\n}\n\n", "/*\n * Copyright
2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed
by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n *\npackage kotlin.text\n\n\n//
NOTE: THIS FILE IS AUTO-GENERATED by the GenerateUnicodeData.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\n\ninternal fun Int.isOtherUppercase(): Boolean
{\n return this in 0x2160..0x216f\n || this in 0x24b6..0x24cf\n}\n\n", "/*\n * Copyright 2010-2021 JetBrains
s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0
license that can be found in the license/LICENSE.txt file.\n *\npackage kotlin.text\n\n\n// NOTE: THIS FILE IS
AUTO-GENERATED by the GenerateStandardLib.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\n\nimport kotlin.js.*\n\n\n * Returns a
character at the given [index] or throws an [IndexOutOfBoundsException] if the [index] is out of bounds of this char
sequence.\n *\n * @sample samples.collections.Collections.elements.elementAt\n *\npublic actual fun
CharSequence.elementAt(index: Int): Char {\n return elementAtOrElse(index) { throw
IndexOutOfBoundsException("index: $index, length: $length")} }\n}\n\n", "/*\n * Copyright 2010-2021 JetBrains
s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0
license that can be found in the license/LICENSE.txt file.\n *\npackage kotlin.text\n\n\n// NOTE: THIS FILE IS
AUTO-GENERATED by the GenerateUnicodeData.kt\n// See:
https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\n\n// 4 ranges totally\n\ninternal fun
Char.titlecaseCharImpl(): Char {\n val code = this.code\n // Letters repeating <Lu, Lt, Ll> sequence and code of
the Lt is a multiple of 3, e.g. <\u01c4, \u01c5, \u01c6>\n if (code in 0x01c4..0x01cc || code in 0x01f1..0x01f3) {\n
return (3 * ((code + 1) / 3)).toChar()\n }\n // Lower case letters whose title case mapping equivalent is equal
```

to the original letter\n if (code in 0x10d0..0x10fa || code in 0x10fd..0x10ff) {\n return this\n }\n return uppercaseChar()\n }", "/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.collections\n\n/\n\n NOTE: THIS FILE IS AUTO-GENERATED by the GenerateStandardLib.kt\n\n See: https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n\n\nimport kotlin.js.*\nimport kotlin.ranges.contains\nimport kotlin.ranges.reversed\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic actual fun UIntArray.elementAt(index: Int): UInt {\n return elementAtOrElse(index) { throw IndexOutOfBoundsException("index: \$index, size: \$size")} }\n\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic actual fun ULongArray.elementAt(index: Int): ULong {\n return elementAtOrElse(index) { throw IndexOutOfBoundsException("index: \$index, size: \$size")} }\n\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic actual fun UByteArray.elementAt(index: Int): UByte {\n return elementAtOrElse(index) { throw IndexOutOfBoundsException("index: \$index, size: \$size")} }\n\n\n/**\n * Returns an element at the given [index] or throws an [IndexOutOfBoundsException] if the [index] is out of bounds of this array.\n * \n * @sample samples.collections.Collections.Elements.elementAt\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic actual fun UShortArray.elementAt(index: Int): UShort {\n return elementAtOrElse(index) { throw IndexOutOfBoundsException("index: \$index, size: \$size")} }\n\n\n/**\n * Returns a [List] that wraps the original array.\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic actual fun UIntArray.asList(): List<UInt> {\n return object : AbstractList<UInt>(), RandomAccess {\n override val size: Int get() = this@asList.size\n override fun isEmpty(): Boolean = this@asList.isEmpty()\n override fun contains(element: UInt): Boolean = this@asList.contains(element)\n override fun get(index: Int): UInt {\n AbstractList.checkElementIndex(index, size)\n return this@asList[index]\n }\n override fun indexOf(element: UInt): Int {\n @Suppress("USELESS_CAST")\n if ((element as Any?) !is UInt) return -1\n return this@asList.indexOf(element)\n }\n override fun lastIndexOf(element: UInt): Int {\n @Suppress("USELESS_CAST")\n if ((element as Any?) !is UInt) return -1\n return this@asList.lastIndexOf(element)\n }\n }\n\n\n\n/**\n * Returns a [List] that wraps the original array.\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic actual fun ULongArray.asList(): List<ULong> {\n return object : AbstractList<ULong>(), RandomAccess {\n override val size: Int get() = this@asList.size\n override fun isEmpty(): Boolean = this@asList.isEmpty()\n override fun contains(element: ULong): Boolean = this@asList.contains(element)\n override fun get(index: Int): ULong {\n AbstractList.checkElementIndex(index, size)\n return this@asList[index]\n }\n override fun indexOf(element: ULong): Int {\n @Suppress("USELESS_CAST")\n if ((element as Any?) !is ULong) return -1\n return this@asList.indexOf(element)\n }\n override fun lastIndexOf(element: ULong): Int {\n @Suppress("USELESS_CAST")\n if ((element as Any?) !is ULong) return -1\n return this@asList.lastIndexOf(element)\n }\n }\n\n\n\n/**\n * Returns a [List] that wraps the original array.\n */\n\n@SinceKotlin("1.3")\n@ExperimentalUnsignedTypes\npublic actual fun UByteArray.asList(): List<UByte> {\n return object : AbstractList<UByte>(), RandomAccess {\n override val size: Int get() = this@asList.size\n override fun isEmpty(): Boolean = this@asList.isEmpty()\n override fun contains(element: UByte): Boolean = this@asList.contains(element)\n override fun get(index: Int): UByte {\n AbstractList.checkElementIndex(index, size)\n return this@asList[index]\n }\n override fun indexOf(element: UByte): Int {\n @Suppress("USELESS_CAST")\n if ((element as Any?) !is UByte) return -1\n return this@asList.indexOf(element)\n }\n override fun lastIndexOf(element:

```

UByte): Int {\n      @Suppress("USELESS_CAST")\n      if ((element as Any?) !is UByte) return -1\n      return this@asList.lastIndexOf(element)\n    }\n  }\n}\n\n/**\n * Returns a [List] that wraps the original array.\n *\n * @SinceKotlin("1.3")\n * @ExperimentalUnsignedTypes\n * public actual fun UShortArray.asList(): List<UShort>\n *\n * {\n *   return object : AbstractList<UShort>(), RandomAccess {\n *     override val size: Int get() = this@asList.size\n *     override fun isEmpty(): Boolean = this@asList.isEmpty()\n *     override fun contains(element: UShort):\n *       Boolean = this@asList.contains(element)\n *     override fun get(index: Int): UShort {\n *       AbstractList.checkElementIndex(index, size)\n *       return this@asList[index]\n *     }\n *     override fun\n *     indexOf(element: UShort): Int {\n *       @Suppress("USELESS_CAST")\n *       if ((element as Any?) !is\n *         UShort) return -1\n *       return this@asList.indexOf(element)\n *     }\n *     override fun lastIndexOf(element:\n *       UShort): Int {\n *       @Suppress("USELESS_CAST")\n *       if ((element as Any?) !is UShort) return -1\n *       return this@asList.lastIndexOf(element)\n *     }\n *   }\n * }\n * }\n * }\n * }\n */\n * Copyright 2010-2021 JetBrains s.r.o. and\n * Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that\n * can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.text\n\n// NOTE: THIS FILE IS AUTO-\n * GENERATED by the GenerateUnicodeData.kt\n * See:\n * https://github.com/JetBrains/kotlin/tree/master/libraries/stdlib\n * // 9 ranges totally\n * Returns `true` if this\n * character is a whitespace.\n * \n * internal fun Char.isWhitespaceImpl(): Boolean {\n *   val ch = this.code\n *   return ch\n *   in 0x0009..0x000d\n *     || ch in 0x001c..0x0020\n *     || ch == 0x00a0\n *     || ch > 0x1000 && (\n *   ch == 0x1680\n *     || ch in 0x2000..0x200a\n *     || ch == 0x2028\n *     || ch == 0x2029\n *     || ch == 0x202f\n *     || ch == 0x205f\n *     || ch == 0x3000\n *     )\n * }\n * }\n * }\n * }\n */\n * Copyright 2010-2020\n * JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the\n * Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin\n\npublic actual fun\n * interface Comparator<T> {\n *   @JsName("compare")\n *   public actual fun compare(a: T, b: T): Int\n * }\n * }\n * }\n */\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is\n * governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage\n * kotlin.js\n * import kotlin.annotation.AnnotationTarget.*\n * @Target(FUNCTION)\n * @Deprecated("Use inline\n * extension function with body using dynamic")\n * public annotation class\n * nativeGetter\n * @Target(FUNCTION)\n * @Deprecated("Use inline extension\n * function with body using\n * dynamic")\n * public annotation class\n * nativeSetter\n * @Target(FUNCTION)\n * @Deprecated("Use inline extension\n * function with body using\n * dynamic")\n * public annotation class\n * nativeInvoke\n * @Target(CLASS, FUNCTION,\n * PROPERTY)\n * internal annotation class\n * library(public val name: String = "")\n * @Target(CLASS)\n * internal\n * annotation class\n * marker\n * \n * \n * Gives a declaration (a function, a property or a class) specific name in\n * JavaScript.\n * \n * This may be useful in the following cases:\n * \n * * There are two functions for which the\n * compiler gives same name in JavaScript, you can\n * mark one with `@JsName(...)` to prevent the compiler from\n * reporting error.\n * \n * * You are writing a JavaScript library in Kotlin. The compiler produces mangled names\n * for functions with parameters, which is unnatural for usual JavaScript developer.\n * \n * You can put `@JsName(...)`\n * on functions you want to be available from JavaScript.\n * \n * * For some reason you want to rename declaration, e.g.\n * there's common term in JavaScript\n * for a concept provided by the declaration, which is uncommon in Kotlin.\n * \n * Example:\n * \n * ``` kotlin\n * class Person(val name: String) {\n *   fun hello() {\n *     println("Hello\n * $name!")\n *   }\n * }\n * \n * @JsName("helloWithGreeting")\n * fun hello(greeting: String) {\n *   println("$greeting $name!")\n * }\n * }\n * \n * \n * \n * @property name the name which compiler uses both for\n * declaration itself and for all references to the declaration.\n * \n * It's required to denote a valid JavaScript\n * identifier.\n * \n * @Retention(AnnotationRetention.BINARY)\n * @Target(CLASS, FUNCTION, PROPERTY,\n * CONSTRUCTOR, PROPERTY_GETTER, PROPERTY_SETTER)\n * public actual annotation class\n * JsName(actual\n * val name: String)\n * \n * \n * Denotes an `external` declaration that must be imported from native JavaScript\n * library.\n * \n * The compiler produces the code relevant for the target module system, for example, in case of\n * CommonJS,\n * it will import the declaration via the `require(...)` function.\n * \n * The annotation can be used on\n * top-level external declarations (classes, properties, functions) and files.\n * \n * In case of file (which can't be `external`)\n * the following rule applies: all the declarations in\n * the file must be `external`. By applying `@JsModule(...)` on a

```

file you tell the compiler to import a JavaScript object that contain all the declarations from the file.

Example:

```

kotlin @JsModule("jquery") external abstract class JQuery() {
    // some declarations here
}
kotlin @JsModule("jquery") external fun JQuery(element: Element): JQuery
@property import name of a module to import declaration from. It is not interpreted by the Kotlin compiler, it's passed as is directly to the target module system.
@see JsNonModule
@Retention(AnnotationRetention.BINARY) @Target(CLASS, PROPERTY, FUNCTION, FILE) public annotation class JsModule(val import: String) {
    Denotes an `external` declaration that can be used without module system.
    By default, an `external` declaration is available regardless your target module system.
    However, by applying [JsModule] annotation you can make a declaration unavailable to `plain` module system.
    Some JavaScript libraries are distributed both as a standalone downloadable piece of JavaScript and as a module available as an npm package.
    To tell the Kotlin compiler to accept both cases, you can augment [JsModule] with the `@JsNonModule` annotation.
    For example:
kotlin @JsModule("jquery") @JsNonModule @JsName("$") external abstract class JQuery() {
    // some declarations here
}
kotlin @JsModule("jquery") @JsNonModule @JsName("$") external fun JQuery(element: Element): JQuery
@see JsModule
@Retention(AnnotationRetention.BINARY) @Target(CLASS, PROPERTY, FUNCTION, FILE) public annotation class JsNonModule {
    Adds prefix to `external` declarations in a source file.
    JavaScript does not have concept of packages (namespaces). They are usually emulated by nested objects.
    The compiler turns references to `external` declarations either to plain unprefix names (in case of `plain` modules) or to plain imports.
    However, if a JavaScript library provides its declarations in packages, you won't be satisfied with this.
    You can tell the compiler to generate additional prefix before references to `external` declarations using the `@JsQualifier(...)` annotation.
    Note that a file marked with the `@JsQualifier(...)` annotation can't contain non-`external` declarations.
    Example:
kotlin @file:JsQualifier("my.jsPackageName") package some.kotlinPackage external fun foo(x: Int)
kotlin external fun bar(): String
@property value the qualifier to add to the declarations in the generated code.
    It must be a sequence of valid JavaScript identifiers separated by the `.` character.
    Examples of valid qualifiers are: `foo`, `bar.Baz`, `_.$.f`.
@see JsModule
@Retention(AnnotationRetention.BINARY) @Target(AnnotationTarget.FILE) public annotation class JsQualifier(val value: String) {
    Exports top-level declaration on JS platform.
    Compiled module exposes declarations that are marked with this annotation without name mangling.
    This annotation can be applied to either files or top-level declarations.
    It is currently prohibited to export the following kinds of declarations:
    * `expect` declarations
    * inline functions with reified type parameters
    * suspend functions
    * secondary constructors without `@JsName`
    * extension properties
    * enum classes
    * annotation classes
    Signatures of exported declarations must only contain `exportable` types:
    * `dynamic`, `Any`, `String`, `Boolean`, `Byte`, `Short`, `Int`, `Float`, `Double`
    * `BooleanArray`, `ByteArray`, `ShortArray`, `IntArray`, `FloatArray`, `DoubleArray`
    * `Array<exportable-type>`
    * Function types with exportable parameters and return types
    * `external` or `@JsExport` classes and interfaces
    * Nullable counterparts of types above
    * Unit return type. Must not be nullable
    This annotation is experimental, meaning that restrictions mentioned above are subject to change.
@ExperimentalJsExport @Retention(AnnotationRetention.BINARY) @Target(CLASS, PROPERTY, FUNCTION, FILE) @SinceKotlin("1.3") public actual annotation class JsExport("/* Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors. Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.*/") {
    package kotlin.jvm
    // these are used in common generated code in stdlib
    // TODO: find how to deprecate these ones
@Target(AnnotationTarget.FIELD) @Retention(AnnotationRetention.SOURCE) public actual annotation class Volatile
@Target(AnnotationTarget.FUNCTION, AnnotationTarget.PROPERTY_GETTER, AnnotationTarget.PROPERTY_SETTER) @Retention(AnnotationRetention.SOURCE) public actual annotation class Synchronized
/* Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors. Use of this source code is governed by the Apache 2.0 license that can be found in the

```

```

license/LICENSE.txt file.\n */\n\npackage kotlin.collections\n\n/**\n * Provides a skeletal implementation of the
[MutableCollection] interface.\n */\n * @param E the type of elements contained in the collection. The collection is
invariant in its element type.\n */\n\npublic actual abstract class AbstractMutableCollection<E> protected actual
constructor() : AbstractCollection<E>(), MutableCollection<E> {\n\n    actual abstract override fun add(element: E):
Boolean\n\n    actual override fun remove(element: E): Boolean {\n        checkIsMutable()\n        val iterator =
iterator()\n        while (iterator.hasNext()) {\n            if (iterator.next() == element) {\n                iterator.remove()\n
                return true\n            }\n        }\n        return false\n    }\n\n    actual override fun addAll(elements:
Collection<E>): Boolean {\n        checkIsMutable()\n        var modified = false\n        for (element in elements) {\n
            if (add(element)) modified = true\n        }\n        return modified\n    }\n\n    actual override fun
removeAll(elements: Collection<E>): Boolean {\n        checkIsMutable()\n        return (this as
MutableIterable<E>).removeAll { it in elements }\n    }\n\n    actual override fun retainAll(elements:
Collection<E>): Boolean {\n        checkIsMutable()\n        return (this as MutableIterable<E>).removeAll { it !in
elements }\n    }\n\n    actual override fun clear(): Unit {\n        checkIsMutable()\n        val iterator = this.iterator()\n
        while (iterator.hasNext()) {\n            iterator.next()\n            iterator.remove()\n        }\n    }\n\n    @Deprecated("Provided so that subclasses inherit this function", level = DeprecationLevel.HIDDEN)\n
    @JsName("toJSON")\n    protected fun toJSON(): Any = this.toArray()\n\n\n    /**\n     * This method is called
every time when a mutating method is called on this mutable collection.\n     * Mutable collections that are built
(frozen) must throw `UnsupportedOperationException`.\n     */\n\n    internal open fun checkIsMutable(): Unit {\n
    }\n\n\n    /*\n     * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n     * Use of
this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n     */\n\n\n    /*\n     * Based on GWT AbstractList\n     * Copyright 2007 Google Inc.\n     */\n\n\npackage
kotlin.collections\n\n/**\n * Provides a skeletal implementation of the [MutableList] interface.\n */\n * @param E
the type of elements contained in the list. The list is invariant in its element type.\n */\n\npublic actual abstract class
AbstractMutableList<E> protected actual constructor() : AbstractMutableCollection<E>(), MutableList<E> {\n\n    protected
var modCount: Int = 0\n\n    abstract override fun add(index: Int, element: E): Unit\n    abstract override
fun removeAt(index: Int): E\n    abstract override fun set(index: Int, element: E): E\n\n\n    /**\n     * Adds the
specified element to the end of this list.\n     * @return `true` because the list is always modified as the result
of this operation.\n     */\n\n    actual override fun add(element: E): Boolean {\n        checkIsMutable()\n        add(size,
element)\n        return true\n    }\n\n    actual override fun addAll(index: Int, elements: Collection<E>): Boolean {\n
        AbstractList.checkPositionIndex(index, size)\n        checkIsMutable()\n        var _index = index\n        var
changed = false\n        for (e in elements) {\n            add(_index++, e)\n            changed = true\n        }\n        return
changed\n    }\n\n    actual override fun clear() {\n        checkIsMutable()\n        removeRange(0, size)\n    }\n\n    actual
override fun removeAll(elements: Collection<E>): Boolean {\n        checkIsMutable()\n        return
removeAll { it in elements }\n    }\n\n    actual override fun retainAll(elements: Collection<E>): Boolean {\n
        checkIsMutable()\n        return removeAll { it !in elements }\n    }\n\n\n    actual override fun iterator():
MutableIterator<E> = IteratorImpl()\n\n    actual override fun contains(element: E): Boolean = indexOf(element) >=
0\n\n    actual override fun indexOf(element: E): Int {\n        for (index in 0..lastIndex) {\n            if (get(index) ==
element) {\n                return index\n            }\n        }\n        return -1\n    }\n\n    actual override fun
lastIndexOf(element: E): Int {\n        for (index in lastIndex downTo 0) {\n            if (get(index) == element) {\n
                return index\n            }\n        }\n        return -1\n    }\n\n    actual override fun listIterator():
MutableListIterator<E> = listIterator(0)\n\n    actual override fun listIterator(index: Int): MutableListIterator<E> =
ListIteratorImpl(index)\n\n\n    actual override fun subList(fromIndex: Int, toIndex: Int): MutableList<E> =
SubList(this, fromIndex, toIndex)\n\n\n    /**\n     * Removes the range of elements from this list starting from
[fromIndex] and ending with but not including [toIndex].\n     */\n\n    protected open fun removeRange(fromIndex:
Int, toIndex: Int) {\n        val iterator = listIterator(fromIndex)\n        repeat(toIndex - fromIndex) {\n
            iterator.next()\n            iterator.remove()\n        }\n    }\n\n\n    /**\n     * Compares this list with another list instance
with the ordered structural equality.\n     * @return true, if [other] instance is a [List] of the same size, which
contains the same elements in the same order.\n     */\n\n    override fun equals(other: Any?): Boolean {\n        if (other

```



```

=== this) return true\n    if (other !is List<*>) return false\n\n    return AbstractList.orderedEquals(this, other)\n
}\n\n /**\n * Returns the hash code value for this list.\n */\n override fun hashCode(): Int =
AbstractList.orderedHashCode(this)\n\n private open inner class IteratorImpl : MutableIterator<E> {\n /**
the index of the item that will be returned on the next call to [next]()\n */\n protected var index = 0\n /** the
index of the item that was returned on the previous call to [next]()\n */\n * or [ListIterator.previous]() (for
`ListIterator`),\n * -1 if no such item exists\n */\n protected var last = -1\n\n override fun
hasNext(): Boolean = index < size\n\n override fun next(): E {\n if (!hasNext()) throw
NoSuchElementException()\n last = index++\n return get(last)\n }\n\n override fun remove()\n
{\n check(last != -1) { \"Call next() or previous() before removing element from the iterator.\" }\n\n
removeAt(last)\n index = last\n last = -1\n }\n }\n\n /**\n * Implementation of
`MutableListIterator` for abstract lists.\n */\n private inner class ListIteratorImpl(index: Int) : IteratorImpl(),
MutableListIterator<E> {\n\n init {\n AbstractList.checkPositionIndex(index,
this@AbstractMutableList.size)\n this.index = index\n }\n\n override fun hasPrevious(): Boolean =
index > 0\n\n override fun nextIndex(): Int = index\n\n override fun previous(): E {\n if
(!hasPrevious()) throw NoSuchElementException()\n last = --index\n return get(last)\n }\n\n
override fun previousIndex(): Int = index - 1\n\n override fun add(element: E) {\n add(index, element)\n
index++\n last = -1\n }\n\n override fun set(element: E) {\n check(last != -1) { \"Call
next() or previous() before updating element value with the iterator.\" }\n set(last, element)\n }\n }\n\n
private class SubList<E>(private val list: AbstractMutableList<E>, private val fromIndex: Int, toIndex: Int) :
AbstractMutableList<E>(), RandomAccess {\n private var _size: Int = 0\n\n init {\n
AbstractList.checkRangeIndexes(fromIndex, toIndex, list.size)\n this._size = toIndex - fromIndex\n }\n\n
override fun add(index: Int, element: E) {\n AbstractList.checkPositionIndex(index, _size)\n\n
list.add(fromIndex + index, element)\n _size++\n }\n\n override fun get(index: Int): E {\n
AbstractList.checkElementIndex(index, _size)\n\n return list[fromIndex + index]\n }\n\n override
fun removeAt(index: Int): E {\n AbstractList.checkElementIndex(index, _size)\n\n val result =
list.removeAt(fromIndex + index)\n _size--\n return result\n }\n\n override fun set(index: Int,
element: E): E {\n AbstractList.checkElementIndex(index, _size)\n\n return list.set(fromIndex + index,
element)\n }\n\n override val size: Int get() = _size\n\n internal override fun checkIsMutable(): Unit =
list.checkIsMutable()\n }\n\n}\n\n\", \"/*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\n/*\n * Based on GWT AbstractMap\n * Copyright 2007 Google Inc.\n */\n\npackage kotlin.collections\n\n/**\n * Provides a skeletal implementation of the [MutableMap] interface.\n */\n * The implementor is required to implement [entries] property, which should return mutable set of map entries, and
[put] function.\n */\n * @param K the type of map keys. The map is invariant in its key type.\n * @param V the type
of map values. The map is invariant in its value type.\n */\n\npublic actual abstract class AbstractMutableMap<K, V>
protected actual constructor() : AbstractMap<K, V>(), MutableMap<K, V> {\n\n /**\n * A mutable
[Map.Entry] shared by several [Map] implementations.\n */\n\n internal open class SimpleEntry<K, V>(override
val key: K, value: V) : MutableMap.MutableEntry<K, V> {\n\n constructor(entry: Map.Entry<K, V>) :
this(entry.key, entry.value)\n\n private var _value = value\n\n override val value: V get() = _value\n\n
override fun setValue(newValue: V): V {\n // Should check if the map containing this entry is mutable.\n
// However, to not increase entry memory footprint it might be worthwhile not to check it here and\n //
force subclasses that implement `build()` (freezing) operation to implement their own `MutableEntry`.\n\n
this@AbstractMutableMap.checkIsMutable()\n\n val oldValue = this._value\n this._value = newValue\n\n
return oldValue\n }\n\n override fun hashCode(): Int = entryHashCode(this)\n\n override fun
toString(): String = entryToString(this)\n\n override fun equals(other: Any?): Boolean = entryEquals(this,
other)\n\n }\n\n // intermediate abstract class to workaround KT-43321\n\n internal abstract class
AbstractEntrySet<E> : Map.Entry<K, V>, K, V> : AbstractMutableSet<E>() {\n\n final override fun
contains(element: E): Boolean = containsEntry(element)\n\n abstract fun containsEntry(element: Map.Entry<K,

```

```

V>): Boolean\n    final override fun remove(element: E): Boolean = removeEntry(element)\n    abstract fun
removeEntry(element: Map.Entry<K, V>): Boolean\n    }\n\n    actual override fun clear() {\n    entries.clear()\n
}\n\n    private var _keys: MutableSet<K>? = null\n    actual override val keys: MutableSet<K>\n    get() {\n
if (_keys == null) {\n        _keys = object : AbstractMutableSet<K>() {\n            override fun
add(element: K): Boolean = throw UnsupportedOperationException("Add is not supported on keys")\n
override fun clear() {\n                this@AbstractMutableMap.clear()\n            }\n            override
operator fun contains(element: K): Boolean = containsKey(element)\n            override operator fun iterator():
MutableIterator<K> {\n                val entryIterator = entries.iterator()\n                return object :
MutableIterator<K> {\n                    override fun hasNext(): Boolean = entryIterator.hasNext()\n
                    override fun next(): K = entryIterator.next().key\n                    override fun remove() =
entryIterator.remove()\n                }\n            }\n        }\n        override fun remove(element: K): Boolean
{\n            checkIsMutable()\n            if (containsKey(element)) {\n
this@AbstractMutableMap.remove(element)\n                return true\n            }\n            return
false\n        }\n        override val size: Int get() = this@AbstractMutableMap.size\n
override fun checkIsMutable(): Unit = this@AbstractMutableMap.checkIsMutable()\n    }\n    }\n
return _keys!!\n    }\n\n    actual abstract override fun put(key: K, value: V): V?\n    actual override fun
putAll(from: Map<out K, V>) {\n    checkIsMutable()\n    for ((key, value) in from) {\n        put(key,
value)\n    }\n    }\n\n    private var _values: MutableCollection<V>? = null\n    actual override val values:
MutableCollection<V>\n    get() {\n        if (_values == null) {\n            _values = object :
AbstractMutableCollection<V>() {\n                override fun add(element: V): Boolean = throw
UnsupportedOperationException("Add is not supported on values")\n                override fun clear() =
this@AbstractMutableMap.clear()\n                override operator fun contains(element: V): Boolean =
containsValue(element)\n                override operator fun iterator(): MutableIterator<V> {\n                    val
entryIterator = entries.iterator()\n                    return object : MutableIterator<V> {\n                        override fun
hasNext(): Boolean = entryIterator.hasNext()\n                        override fun next(): V = entryIterator.next().value\n
                        override fun remove() = entryIterator.remove()\n                    }\n                }\n
            }\n        }\n        override val size: Int get() = this@AbstractMutableMap.size\n
override fun checkIsMutable(): Unit =
this@AbstractMutableMap.checkIsMutable()\n    }\n    }\n    return _values!!\n    }\n\n    actual
override fun remove(key: K): V? {\n    checkIsMutable()\n    val iter = entries.iterator()\n    while
(iter.hasNext()) {\n        val entry = iter.next()\n        val k = entry.key\n        if (key == k) {\n            val
value = entry.value\n            iter.remove()\n            return value\n        }\n    }\n    return null\n    }\n\n
/**\n * This method is called every time when a mutating method is called on this mutable map.\n * Mutable
maps that are built (frozen) must throw `UnsupportedOperationException`.\n */\n    internal open fun
checkIsMutable(): Unit {\n    }\n\n    /**\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\npackage kotlin.collections\n\n/**\n * Provides a skeletal implementation of the
[MutableSet] interface.\n */\n * @param E the type of elements contained in the set. The set is invariant in its
element type.\n */\npublic actual abstract class AbstractMutableSet<E> protected actual constructor() :
AbstractMutableCollection<E>(), MutableSet<E> {\n\n    /**\n * Compares this set with another set instance with
the unordered structural equality.\n */\n * @return `true`, if [other] instance is a [Set] of the same size, all
elements of which are contained in this set.\n */\n    override fun equals(other: Any?): Boolean {\n        if (other
=== this) return true\n        if (other !is Set<*>) return false\n        return AbstractSet.setEquals(this, other)\n    }\n\n
/**\n * Returns the hash code value for this set.\n */\n    override fun hashCode(): Int =
AbstractSet.unorderedHashCode(this)\n\n    /**\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\npackage kotlin.collections\n\n/**\n * Provides a [MutableList] implementation,
which uses a resizable array as its backing storage.\n */\n * This implementation doesn't provide a way to manage
capacity, as backing JS array is resizeable itself.\n * There is no speed advantage to pre-allocating array sizes in

```

```

JavaScript, so this implementation does not include any of the
 * capacity and "growth increment" concepts.
 * public actual open class ArrayList<E> internal constructor(private var array: Array<Any?>) :
AbstractMutableList<E>(), MutableList<E>, RandomAccess {
 private var isReadOnly: Boolean = false
 /**
 * Creates an empty [ArrayList].
 */
 * public actual constructor() : this(emptyArray()) {}
 /**
 * Creates an empty [ArrayList].
 * @param initialCapacity initial capacity (ignored)
 */
 * public actual
constructor(initialCapacity: Int) : this(emptyArray()) {}
 /**
 * Creates an [ArrayList] filled from the
 [elements] collection.
 */
 * public actual constructor(elements: Collection<E>) :
this(elements.toArray<Any?>()) {}
 @PublishedApi
 internal fun build(): List<E> {
 checkIsMutable()
 isReadOnly = true
 return this
 }
 /** Does nothing in this ArrayList
implementation.
 */
 * public actual fun trimToSize() {}
 /** Does nothing in this ArrayList implementation.
 */
 * public actual fun ensureCapacity(minCapacity: Int) {}
 actual override val size: Int get() = array.size
 @Suppress("UNCHECKED_CAST")
 actual override fun get(index: Int): E = array[rangeCheck(index)] as E
 actual override fun set(index: Int, element: E): E {
 checkIsMutable()
 rangeCheck(index)
 @Suppress("UNCHECKED_CAST")
 return array[index].apply { array[index] = element } as E
 }
 actual override fun add(element: E): Boolean {
 checkIsMutable()
 array.asDynamic().push(element)
 modCount++
 return true
 }
 actual override fun add(index: Int, element: E): Unit {
 checkIsMutable()
 array.asDynamic().splice(insertionRangeCheck(index), 0, element)
 modCount++
 }
 actual override fun addAll(elements: Collection<E>): Boolean {
 checkIsMutable()
 if
(elements.isEmpty()) return false
 array += elements.toArray<Any?>()
 modCount++
 return true
 }
 actual override fun addAll(index: Int, elements: Collection<E>): Boolean {
 checkIsMutable()
 insertionRangeCheck(index)
 if (index == size) return addAll(elements)
 if
(elements.isEmpty()) return false
 when (index) {
 size -> return addAll(elements)
 0 -> array
= elements.toArray<Any?>() + array
 else -> array = array.copyOfRange(0,
index).asDynamic().concat(elements.toArray<Any?>(), array.copyOfRange(index, size))
 }
 modCount++
 return true
 }
 actual override fun removeAt(index: Int): E {
 checkIsMutable()
 rangeCheck(index)
 modCount++
 return if (index == lastIndex)
array.asDynamic().pop()
else
array.asDynamic().splice(index, 1)[0]
 }
 actual override fun remove(element: E): Boolean {
 checkIsMutable()
 for (index in array.indices) {
 if (array[index] == element) {
array.asDynamic().splice(index, 1)
 modCount++
 return true
 }
 }
 return
false
 }
 override fun removeRange(fromIndex: Int, toIndex: Int) {
 checkIsMutable()
 modCount++
 array.asDynamic().splice(fromIndex, toIndex - fromIndex)
 }
 actual override fun
clear() {
 checkIsMutable()
 array = emptyArray()
 modCount++
 }
 actual override fun
indexOf(element: E): Int = array.indexOf(element)
 actual override fun lastIndexOf(element: E): Int =
array.lastIndexOf(element)
 override fun toString() = arrayToString(array)
 @Suppress("UNCHECKED_CAST")
 override fun <T> toArray(array: Array<T>): Array<T> {
 if
(array.size < size) {
 return toArray() as Array<T>
 }
 (this.array as
Array<T>).copyInto(array)
 if (array.size > size) {
 array[size] = null as T // null-terminate
 }
 return array
 }
 override fun toArray(): Array<Any?> {
 return js("[]").slice.call(array)
 }
 internal override fun checkIsMutable() {
 if (isReadOnly) throw UnsupportedOperationException()
 }
 private fun rangeCheck(index: Int) = index.apply {
AbstractList.checkElementIndex(index, size)
 }
 private fun insertionRangeCheck(index: Int) = index.apply {
AbstractList.checkPositionIndex(index,
size)
 }
 }
 /**
 * Copyright 2010-2019 JetBrains s.r.o. and Kotlin Programming Language contributors.
 * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.
 */
 * package kotlin.collections
 * internal fun <T> sortArrayWith(array: Array<out T>, comparison: (T, T) -> Int)
 {
 if (getStableSortingIsSupported())
array.asDynamic().sort(comparison)
 } else {
mergeSort(array.unsafeCast<Array<T>>(), 0, array.lastIndex, Comparator(comparison))
 }
 }
 * internal fun
<T> sortArrayWith(array: Array<out T>, comparator: Comparator<in T>) {
 if (getStableSortingIsSupported())
 {
 val comparison = { a: T, b: T -> comparator.compare(a, b) }
 array.asDynamic().sort(comparison)
 }
 }

```

```

} else {\n    mergeSort(array.unsafeCast<Array<T>>(), 0, array.lastIndex, comparator)\n } }\n\ninternal fun
<T> sortArrayWith(array: Array<out T>, fromIndex: Int, toIndex: Int, comparator: Comparator<in T>) {\n if
(fromIndex < toIndex - 1) {\n    mergeSort(array.unsafeCast<Array<T>>(), fromIndex, toIndex - 1, comparator)\n
}\n}\n\ninternal fun <T : Comparable<T>> sortArray(array: Array<out T>) {\n if
(getStableSortingIsSupported()) {\n    val comparison = { a: T, b: T -> a.compareTo(b) }\n
array.asDynamic().sort(comparison)\n } else {\n    mergeSort(array.unsafeCast<Array<T>>(), 0,
array.lastIndex, naturalOrder())\n } }\n\nprivate var _stableSortingIsSupported: Boolean? = null\nprivate fun
getStableSortingIsSupported(): Boolean {\n    _stableSortingIsSupported?.let { return it }\n
_stableSortingIsSupported = false\n    val array = js("[]").unsafeCast<Array<Int>>()\n // known
implementations may use stable sort for arrays of up to 512 elements\n // so we create slightly more elements to
test stability\n for (index in 0 until 600) array.asDynamic().push(index)\n    val comparison = { a: Int, b: Int -> (a
and 3) - (b and 3) }\n    array.asDynamic().sort(comparison)\n for (index in 1 until array.size) {\n    val a =
array[index - 1]\n    val b = array[index]\n    if ((a and 3) == (b and 3) && a >= b) return false\n } \n
_stableSortingIsSupported = true\n return true\n}\n\nprivate fun <T> mergeSort(array: Array<T>, start: Int,
endInclusive: Int, comparator: Comparator<in T>) {\n    val buffer =
arrayOfNulls<Any?>(array.size).unsafeCast<Array<T>>()\n    val result = mergeSort(array, buffer, start,
endInclusive, comparator)\n    if (result !== array) {\n        for (i in start..endInclusive) array[i] = result[i]\n
}\n}\n\n// Both start and end are inclusive indices.\nprivate fun <T> mergeSort(array: Array<T>, buffer: Array<T>,
start: Int, end: Int, comparator: Comparator<in T>): Array<T> {\n    if (start == end) {\n        return array\n    }\n
val median = (start + end) / 2\n    val left = mergeSort(array, buffer, start, median, comparator)\n    val right =
mergeSort(array, buffer, median + 1, end, comparator)\n    val target = if (left === buffer) array else buffer\n //
Merge.\n    var leftIndex = start\n    var rightIndex = median + 1\n    for (i in start..end) {\n        when {\n
leftIndex <= median && rightIndex <= end -> {\n            val leftValue = left[leftIndex]\n            val rightValue
= right[rightIndex]\n            if (comparator.compare(leftValue, rightValue) <= 0) {\n                target[i] =
leftValue\n                leftIndex++\n            } else {\n                target[i] = rightValue\n
rightIndex++\n            }\n        }\n        leftIndex <= median -> {\n            target[i] = left[leftIndex]\n
leftIndex++\n        }\n        else /* rightIndex <= end */ -> {\n            target[i] = right[rightIndex]\n
rightIndex++\n        }\n        Unit // TODO: Fix KT-31506\n    }\n    }\n    return target\n},"/*\n *
Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is
governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage
kotlin.collections\n\n@OptIn(ExperimentalUnsignedTypes::class)\n@SinceKotlin("1.3")\n@kotlin.js.JsName("
contentDeepHashCodeImpl")\ninternal fun <T> Array<out T>?.contentDeepHashCodeImpl(): Int {\n    if (this ==
null) return 0\n    var result = 1\n    for (element in this) {\n        val elementHash = when {\n            element == null
-> 0\n            isArrayish(element) -> (element.unsafeCast<Array<*>>()).contentDeepHashCodeImpl()\n
element is UByteArray -> element.contentHashCode()\n            element is UShortArray ->
element.contentHashCode()\n            element is UIntArray -> element.contentHashCode()\n            element is
ULongArray -> element.contentHashCode()\n            else -> element.hashCode()\n        }\n        result = 31 * result + elementHash\n    }\n    return result\n},"/*\n * Copyright 2010-2018 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.collections\n\ninternal interface
EqualityComparator {\n    /*\n     * Subclasses must override to return a value indicating\n     * whether or not two
keys or values are equal.\n     */\n    abstract fun equals(value1: Any?, value2: Any?): Boolean\n\n    /*\n     *
Subclasses must override to return the hash code of a given key.\n     */\n    abstract fun getHashCode(value: Any?):
Int\n}\n\nobject hashCode : EqualityComparator {\n    override fun equals(value1: Any?, value2: Any?):
Boolean = value1 == value2\n    override fun getHashCode(value: Any?): Int = value?.hashCode() ?: 0\n
}\n},"/*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this
source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n *
Based on GWT AbstractHashMap\n * Copyright 2008 Google Inc.\n */\n\npackage kotlin.collections\n\nimport

```

```

kotlin.collections.MutableMap.MutableEntry\n\n/**\n * Hash table based implementation of the [MutableMap]
interface.\n *\n * This implementation makes no guarantees regarding the order of enumeration of [keys], [values]
and [entries] collections.\n */\n// Classes that extend HashMap and implement `build()` (freezing) operation\n// have
to make sure mutating methods check `checkIsMutable`.\n\npublic actual open class HashMap<K, V> :
AbstractMutableMap<K, V>, MutableMap<K, V> {\n\n    private inner class EntrySet :
AbstractEntrySet<MutableEntry<K, V>, K, V>() {\n\n        override fun add(element: MutableEntry<K, V>):
Boolean = throw UnsupportedOperationException("Add is not supported on entries")\n        override fun clear()
{\n            this@HashMap.clear()\n        }\n\n        override fun containsEntry(element: Map.Entry<K, V>): Boolean
= this@HashMap.containsEntry(element)\n\n        override operator fun iterator():
MutableIterator<MutableEntry<K, V>> = internalMap.iterator()\n\n        override fun removeEntry(element:
Map.Entry<K, V>): Boolean {\n            if (contains(element)) {\n                this@HashMap.remove(element.key)\n
            }\n            return true\n        }\n\n        return false\n    }\n\n    override val size: Int get() =
this@HashMap.size\n }\n\n\n /**\n * Internal implementation of the map: either string-based or hashcode-
based.\n *\n */\n private val internalMap: InternalMap<K, V>\n private val equality: EqualityComparator\n\n\n internal constructor(internalMap: InternalMap<K, V>) : super() {\n    this.internalMap = internalMap\n
this.equality = internalMap.equality\n }\n\n /**\n * Constructs an empty [HashMap] instance.\n *\n */\n actual constructor() : this(InternalHashCodeMap(EqualityComparator.HashCode))\n\n /**\n * Constructs an
empty [HashMap] instance.\n *\n * @param initialCapacity the initial capacity (ignored)\n * @param
loadFactor the load factor (ignored)\n *\n * @throws IllegalArgumentException if the initial capacity or
load factor are negative\n */\n actual constructor(initialCapacity: Int, loadFactor: Float) : this() {\n    // This
implementation of HashMap has no need of load factors or capacities.\n    require(initialCapacity >= 0) {\n
        "Negative initial capacity: $initialCapacity"\n    }\n    require(loadFactor >= 0) {\n        "Non-positive load factor:
$loadFactor"\n    }\n }\n\n actual constructor(initialCapacity: Int) : this(initialCapacity, 0.0f)\n\n /**\n *
Constructs an instance of [HashMap] filled with the contents of the specified [original] map.\n *\n */\n actual
constructor(original: Map<out K, V>) : this() {\n    this.putAll(original)\n }\n\n actual override fun clear() {\n
    internalMap.clear()\n\n // structureChanged(this)\n }\n\n actual override fun containsKey(key: K): Boolean
= internalMap.containsKey()\n\n actual override fun containsValue(value: V): Boolean = internalMap.any {\n
    equality.equals(it.value, value)\n }\n\n private var _entries: MutableSet<MutableMap.MutableEntry<K, V>>? =
null\n\n actual override val entries: MutableSet<MutableMap.MutableEntry<K, V>>\n    get() {\n        if
(_entries == null) {\n            _entries = createEntrySet()\n        }\n        return _entries!!\n    }\n\n internal
open fun createEntrySet(): MutableSet<MutableMap.MutableEntry<K, V>> = EntrySet()\n\n actual override
operator fun get(key: K): V? = internalMap.get(key)\n\n actual override fun put(key: K, value: V): V? =
internalMap.put(key, value)\n\n actual override fun remove(key: K): V? = internalMap.remove(key)\n\n actual
override val size: Int get() = internalMap.size\n }\n\n\n /**\n * Constructs the specialized implementation of
[HashMap] with [String] keys, which stores the keys as properties of\n *\n * JS object without hashing them.\n *\n
*/\n\n public fun <V> stringMapOf(vararg pairs: Pair<String, V>): HashMap<String, V> {\n    return
HashMap<String, V>(InternalStringMap(EqualityComparator.HashCode)).apply { putAll(pairs) }\n }\n\n\n /**\n *
Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n *\n * Use of this source code is
governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n *\n */\n\n /**\n * Based on GWT
HashSet\n *\n * Copyright 2008 Google Inc.\n */\n\n package kotlin.collections\n\n /**\n * The implementation of the
[MutableSet] interface, backed by a [HashMap] instance.\n *\n */\n\n // Classes that extend HashSet and implement
`build()` (freezing) operation\n // have to make sure mutating methods check `checkIsMutable`.\n\n public actual open
class HashSet<E> : AbstractMutableSet<E>, MutableSet<E> {\n\n    internal val map: HashMap<E, Any>\n\n\n /**\n *
Constructs a new empty [HashSet].\n *\n */\n actual constructor() {\n        map = HashMap<E, Any>()\n    }\n\n /**\n *
Constructs a new [HashSet] filled with the elements of the specified collection.\n *\n */\n actual
constructor(elements: Collection<E>) {\n        map = HashMap<E, Any>(elements.size)\n        addAll(elements)\n    }\n\n /**\n *
Constructs a new empty [HashSet].\n *\n * @param initialCapacity the initial capacity
(ignored)\n * @param loadFactor the load factor (ignored)\n *\n * @throws IllegalArgumentException if

```

```

the initial capacity or load factor are negative\n    */\n    actual constructor(initialCapacity: Int, loadFactor: Float)
{\n    map = HashMap<E, Any>(initialCapacity, loadFactor)\n } \n\n actual constructor(initialCapacity: Int) :
this(initialCapacity, 0.0f)\n\n /**\n * Protected constructor to specify the underlying map. This is used by\n *
LinkedHashSet.\n\n * @param map underlying map to use.\n */\n internal constructor(map: HashMap<E,
Any>) {\n    this.map = map\n } \n\n actual override fun add(element: E): Boolean {\n    val old =
map.put(element, this)\n    return old == null\n } \n\n actual override fun clear() {\n    map.clear()\n } \n\n//
public override fun clone(): Any {\n//    return HashSet<E>(this)\n// } \n\n actual override operator fun
contains(element: E): Boolean = map.containsKey(element)\n\n actual override fun isEmpty(): Boolean =
map.isEmpty()\n\n actual override fun iterator(): MutableIterator<E> = map.keys.iterator()\n\n actual override
fun remove(element: E): Boolean = map.remove(element) != null\n\n actual override val size: Int get() =
map.size\n\n}\n\n/**\n * Creates a new instance of the specialized implementation of [HashSet] with the specified
[String] elements,\n * which elements the keys as properties of JS object without hashing them.\n */\n\npublic fun
stringSetOf(vararg elements: String): HashSet<String> {\n    return HashSet(stringMapOf<Any>()).apply {
addAll(elements) }\n}\n\n", /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\n * Based on GWT InternalHashCodeMap\n * Copyright 2008 Google Inc.\n\n
*/\n\npackage kotlin.collections\n\nimport kotlin.collections.MutableMap.MutableEntry\nimport
kotlin.collections.AbstractMutableMap.SimpleEntry\n\n/**\n * A simple wrapper around JavaScriptObject to
provide [java.util.Map]-like semantics for any\n * key type.\n * *\n * Implementation notes:\n * *\n * A key's
hashCode is the index in backingMap which should contain that key. Since several keys may\n * have the same
hash, each value in hashCodeMap is actually an array containing all entries whose\n * keys share the same hash.\n
*/\n\ninternal class InternalHashCodeMap<K, V>(override val equality: EqualityComparator) : InternalMap<K, V>
{\n\n    private var backingMap: dynamic = createJsMap()\n    override var size: Int = 0\n    private set\n\n    override fun put(key: K, value: V): V? {\n        val hashCode = equality.getHashCode(key)\n        val chainOrEntry
= getChainOrEntryOrNull(hashCode)\n        if (chainOrEntry == null) {\n            // This is a new chain, put it to the
map.\n            backingMap[hashCode] = SimpleEntry(key, value)\n        } else {\n            if (chainOrEntry !is
Array<*>) {\n                // It is an entry\n                val entry: SimpleEntry<K, V> = chainOrEntry\n                if
(equality.equals(entry.key, key)) {\n                    return entry.setValue(value)\n                } else {\n
backingMap[hashCode] = arrayOf(entry, SimpleEntry(key, value))\n                    size++\n                    return null\n
                }\n            } else {\n                // Chain already exists, perhaps key also exists.\n                val chain:
Array<MutableEntry<K, V>> = chainOrEntry\n                val entry = chain.findEntryInChain(key)\n                if
(entry != null) {\n                    return entry.setValue(value)\n                }\n                chain.asDynamic().push(SimpleEntry(key, value))\n                }\n            }\n            size++\n\n// structureChanged(host)\n
return null\n        }\n\n    override fun remove(key: K): V? {\n        val hashCode = equality.getHashCode(key)\n        val chainOrEntry = getChainOrEntryOrNull(hashCode) ?: return null\n        if (chainOrEntry !is Array<*>) {\n            val entry: MutableEntry<K, V> = chainOrEntry\n            if (equality.equals(entry.key, key)) {\n                jsDeleteProperty(backingMap, hashCode)\n                size--\n                return entry.value\n            } else {\n                return null\n            }\n        } else {\n            val chain: Array<MutableEntry<K, V>> = chainOrEntry\n            for
(index in chain.indices) {\n                val entry = chain[index]\n                if (equality.equals(key, entry.key)) {\n                    if (chain.size == 1) {\n                        chain.asDynamic().length = 0\n                        // remove the whole
array\n                        jsDeleteProperty(backingMap, hashCode)\n                    } else {\n                        // splice out
the entry we're removing\n                        chain.asDynamic().splice(index, 1)\n                    }\n                    size--\n\n// structureChanged(host)\n
return entry.value\n                }\n            }\n            return null\n        }\n\n    override fun clear() {\n        backingMap = createJsMap()\n        size = 0\n    }\n\n    override fun
contains(key: K): Boolean = getEntry(key) != null\n\n    override fun get(key: K): V? = getEntry(key)?.value\n\n    private fun getEntry(key: K): MutableEntry<K, V>? {\n        val chainOrEntry =
getChainOrEntryOrNull(equality.getHashCode(key)) ?: return null\n        if (chainOrEntry !is Array<*>) {\n            val entry: MutableEntry<K, V> = chainOrEntry\n            if (equality.equals(entry.key, key)) {\n                return

```

```

entry\n    } else {\n        return null\n    }\n    } else {\n        val chain: Array<MutableEntry<K,
V>> = chainOrEntry\n        return chain.findEntryInChain(key)\n    }\n}\n\nprivate fun
Array<MutableEntry<K, V>>.findEntryInChain(key: K): MutableEntry<K, V>? =\n    firstOrNull { entry ->
equality.equals(entry.key, key) }\n\noverride fun iterator(): MutableIterator<MutableEntry<K, V>> {\n\nreturn object : MutableIterator<MutableEntry<K, V>> {\n    var state = -1 // -1 not ready, 0 - ready, 1 -
done\n\n    val keys: Array<String> = js("Object").keys(backingMap)\n    var keyIndex = -1\n\nvar chainOrEntry: dynamic = null\n    var isChain = false\n    var itemIndex = -1\n    var lastEntry:
MutableEntry<K, V>? = null\n\n    private fun computeNext(): Int {\n        if (chainOrEntry != null &&
isChain) {\n            val chainSize: Int = chainOrEntry.unsafeCast<Array<MutableEntry<K, V>>>().size\n
            if (++itemIndex < chainSize)\n                return 0\n            }\n            if (++keyIndex < keys.size)\n                chainOrEntry = backingMap[keys[keyIndex]]\n                isChain = chainOrEntry is Array<*>\n                itemIndex = 0\n                return 0\n            } else {\n                chainOrEntry = null\n
return 1\n            }\n        }\n\n        override fun hasNext(): Boolean {\n            if (state == -1)\n                state = computeNext()\n                return state == 0\n            }\n\n            override fun next(): MutableEntry<K, V>
{\n                if (!hasNext()) throw NoSuchElementException()\n                val lastEntry = if (isChain) {\n                    chainOrEntry.unsafeCast<Array<MutableEntry<K, V>>>()[itemIndex]\n                } else {\n                    chainOrEntry.unsafeCast<MutableEntry<K, V>>()\n                }\n                this.lastEntry = lastEntry\n
state = -1\n                return lastEntry\n            }\n\n            override fun remove() {\n                checkNotNull(lastEntry)\n                this@InternalHashMap.remove(lastEntry!!.key)\n                lastEntry =
null\n                // the chain being iterated just got modified by InternalHashMap.remove\n                itemIndex--\n            }\n        }\n\n        private fun getChainOrEntryOrNull(hashCode: Int): dynamic {\n            val
chainOrEntry = backingMap[hashCode]\n            return if (chainOrEntry === undefined) null else chainOrEntry\n        }\n\n    }\n}\n\n"/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of
this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*/\n\npackage kotlin.collections\n\n/**\n * The common interface of [InternalStringMap] and
[InternalHashMap].\n */\n\ninternal interface InternalMap<K, V> :
MutableIterable<MutableMap.MutableEntry<K, V>> {\n    val equality: EqualityComparator\n    val size: Int\n
operator fun contains(key: K): Boolean\n    operator fun get(key: K): V?\n\n    fun put(key: K, value: V): V?\n    fun
remove(key: K): V?\n    fun clear(): Unit\n\n    fun createJsMap(): dynamic {\n        val result =
js("Object.create(null)")\n        // force to switch object representation to dictionary mode\n        result["foo"] =
1\n        jsDeleteProperty(result, "foo")\n        return result\n    }\n}\n\n"/*\n * Copyright 2010-2018 JetBrains s.r.o.
and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license
that can be found in the license/LICENSE.txt file.\n */\n\n/*\n * Based on GWT InternalStringMap\n * Copyright
2008 Google Inc.\n */\n\npackage kotlin.collections\n\nimport kotlin.collections.MutableMap.MutableEntry\n\n/**\n * A simple wrapper around JavaScript Map for key type is string.\n */\n * Though this map is instantiated only with
K=String, the K type is not fixed to String statically,\n * because we want to have it erased to Any? in order not to
generate type-safe override bridges for\n * [get], [contains], [remove] etc, if they ever are generated.\n */\n\ninternal
class InternalStringMap<K, V>(override val equality: EqualityComparator) : InternalMap<K, V> {\n\n    private var
backingMap: dynamic = createJsMap()\n    override var size: Int = 0\n    private set\n\n    /**\n     * A mod
count to track 'value' replacements in map to ensure that the 'value' that we have in the\n     * iterator entry is
guaranteed to be still correct.\n     * This is to optimize for the common scenario where the values are not modified
during\n     * iterations where the entries are never stale.\n     */\n\n    private var valueMod: Int = 0\n    override
operator fun contains(key: K): Boolean {\n        if (key !is String) return false\n        return backingMap[key] !==
undefined\n    }\n\n    override operator fun get(key: K): V? {\n        if (key !is String) return null\n        val value =
backingMap[key]\n        return if (value !== undefined) value.unsafeCast<V>() else null\n    }\n\n    override fun
put(key: K, value: V): V? {\n        require(key is String)\n        val oldValue = backingMap[key]\n
backingMap[key] = value\n        if (oldValue === undefined) {\n            size++\n\n            structureChanged(host)\n            return null\n        } else {\n            valueMod++\n            return

```

```

oldValue.unsafeCast<V>()\n    }\n }\n\n override fun remove(key: K): V? {\n    if (key !is String) return\n    null\n    val value = backingMap[key]\n    if (value !== undefined) {\n        jsDeleteProperty(backingMap,\n        key)\n        size--\n//        structureChanged(host)\n        return value.unsafeCast<V>()\n    } else {\n//\n    valueMod++\n    return null\n    }\n }\n\n\n override fun clear() {\n    backingMap = createJsMap()\n    size = 0\n }\n\n\n override fun iterator(): MutableIterator<MutableEntry<K, V>> {\n    return object :\n    MutableIterator<MutableEntry<K, V>> {\n        private val keys: Array<String> =\n        js("Object").keys(backingMap)\n        private val iterator = keys.iterator()\n        private var lastKey: String? =\n        null\n\n        override fun hasNext(): Boolean = iterator.hasNext()\n\n        override fun next():\n        MutableEntry<K, V> {\n            val key = iterator.next()\n            lastKey = key\n            @Suppress("UNCHECKED_CAST")\n            return newMapEntry(key as K)\n        }\n\n        override\n        fun remove() {\n            @Suppress("UNCHECKED_CAST")\n            this@InternalStringMap.remove(checkNotNull(lastKey) as K)\n        }\n    }\n }\n\n\n private fun\n    newMapEntry(key: K): MutableEntry<K, V> = object : MutableEntry<K, V> {\n        override val key: K get() =\n        key\n        override val value: V get() = this@InternalStringMap[key].unsafeCast<V>()\n\n        override fun\n        setValue(newValue: V): V = this@InternalStringMap.put(key, newValue).unsafeCast<V>()\n\n        override fun\n        hashCode(): Int = AbstractMap.entryHashCode(this)\n\n        override fun toString(): String =\n        AbstractMap.entryToString(this)\n\n        override fun equals(other: Any?): Boolean = AbstractMap.entryEquals(this,\n        other)\n    }\n }\n\n\n", /*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n\n * Based on GWT LinkedHashMap\n * Copyright 2008 Google Inc.\n */\n\n\npackage\n    kotlin.collections\n\n\nimport kotlin.collections.MutableMap.MutableEntry\n\n\n/**\n * Hash table based\n    implementation of the [MutableMap] interface, which additionally preserves the insertion order\n * of entries during\n    the iteration.\n * The insertion order is preserved by maintaining a doubly-linked list of all of its entries.\n * The\n * public actual open class LinkedHashMap<K, V> : HashMap<K, V>, MutableMap<K, V> {\n * The\n * entry we use includes next/prev pointers for a doubly-linked circular\n * list with a head node. This reduces the\n * special cases we have to deal with\n * in the list operations.\n * Note that we duplicate the key from the\n * underlying hash map so we can find\n * the eldest entry. The alternative would have been to modify HashMap so\n * more\n * of the code was directly usable here, but this would have added some\n * overhead to HashMap, or to\n    reimplement most of the HashMap code here with\n * small modifications. Paying a small storage cost only if\n    you use\n * LinkedHashMap and minimizing code size seemed like a better tradeoff\n * private inner class\n    ChainEntry<K, V>(key: K, value: V) : AbstractMutableMap.SimpleEntry<K, V>(key, value) {\n        internal var\n        next: ChainEntry<K, V>? = null\n        internal var prev: ChainEntry<K, V>? = null\n\n        override fun\n        setValue(newValue: V): V {\n            this@LinkedHashMap.checkIsMutable()\n            return\n            super.setValue(newValue)\n        }\n    }\n\n    private inner class EntrySet : AbstractEntrySet<MutableEntry<K,\n    V>, K, V>() {\n        private inner class EntryIterator : MutableIterator<MutableEntry<K, V>> {\n            // The\n            last entry that was returned from this iterator.\n            private var last: ChainEntry<K, V>? = null\n            // The\n            next entry to return from this iterator.\n            private var next: ChainEntry<K, V>? = null\n\n            init {\n                next = head\n//                recordLastKnownStructure(map, this)\n            }\n\n            override fun hasNext():\n            Boolean {\n                return next !== null\n            }\n\n            override fun next(): MutableEntry<K, V> {\n//\n                checkStructuralChange(map, this)\n                if (!hasNext()) throw NoSuchElementException()\n\n                val\n                current = next!!\n                last = current\n                next = current.next.takeIf { it !== head }\n                return\n                current\n            }\n\n            override fun remove() {\n                check(last != null)\n                this@EntrySet.checkIsMutable()\n//                checkStructuralChange(map, this)\n                last!!.remove()\n                map.remove(last!!.key)\n//                recordLastKnownStructure(map, this)\n                last = null\n            }\n        }\n    }\n\n    override fun add(element: MutableEntry<K, V>): Boolean = throw\n    UnsupportedOperationException("Add is not supported on entries")\n\n    override fun clear() {\n        this@LinkedHashMap.clear()\n    }\n\n    override fun containsEntry(element: Map.Entry<K, V>): Boolean =\n        this@LinkedHashMap.containsEntry(element)\n\n    override operator fun iterator():

```



```

MutableIterator<MutableEntry<K, V>> = EntryIterator()\n\n    override fun removeEntry(element: Map.Entry<K,
V>): Boolean {\n        checkIsMutable()\n        if (contains(element)) {\n
this@LinkedHashMap.remove(element.key)\n            return true\n        }\n        return false\n    }\n\n    override val size: Int get() = this@LinkedHashMap.size\n\n    override fun checkIsMutable(): Unit =
this@LinkedHashMap.checkIsMutable()\n    }\n\n    /*\n     * The head of the insert order chain, which is a doubly-
linked circular\n     * list.\n     * The most recently inserted node is at the end of the chain, ie.\n     * chain.prev.\n     */\n    private var head: ChainEntry<K, V>? = null\n\n    /*\n     * Add this node to the end of the chain.\n     */\n    private fun ChainEntry<K, V>.addToEnd() {\n        // This entry is not in the list.\n        check(next == null && prev
== null)\n        val _head = head\n        if (_head == null) {\n            head = this\n            next = this\n            prev =
this\n        } else {\n            // Chain is valid.\n            val _tail = checkNotNull(_head.prev)\n            // Update me.\n            prev = _tail\n            next = _head\n            // Update my new siblings: current head and old tail\n
_head.prev = this\n            _tail.next = this\n        }\n    }\n\n    /*\n     * Remove this node from the chain it is a part
of.\n     */\n    private fun ChainEntry<K, V>.remove() {\n        if (this.next === this) {\n            // if this is single
element, remove head\n            head = null\n        } else {\n            if (head === this) {\n                // if this is first
element, move head to next\n                head = next\n            }\n            next!!.prev = prev\n            prev!!.next =
next\n        }\n        next = null\n        prev = null\n    }\n\n    /*\n     * The hashmap that keeps track of our entries and
the chain. Note that we\n     * duplicate the key here to eliminate changes to HashMap and minimize the\n     * code
here, at the expense of additional space.\n     */\n    private val map: HashMap<K, ChainEntry<K, V>>\n\n    private
var isReadOnly: Boolean = false\n\n    /*\n     * Constructs an empty [LinkedHashMap] instance.\n     */\n    actual
constructor() : super() {\n        map = HashMap<K, ChainEntry<K, V>>()\n    }\n\n    internal
constructor(backingMap: HashMap<K, Any>) : super() {\n        @Suppress("UNCHECKED_CAST") // expected
to work due to erasure\n        map = backingMap as HashMap<K, ChainEntry<K, V>>\n    }\n\n    /*\n     *
Constructs an empty [LinkedHashMap] instance.\n     * @param initialCapacity the initial capacity
(ignored)\n     * @param loadFactor the load factor (ignored)\n     * @throws IllegalArgumentException if
the initial capacity or load factor are negative\n     */\n    actual constructor(initialCapacity: Int, loadFactor: Float) :
super(initialCapacity, loadFactor) {\n        map = HashMap<K, ChainEntry<K, V>>()\n    }\n\n    actual
constructor(initialCapacity: Int) : this(initialCapacity, 0.0f)\n\n    /*\n     * Constructs an instance of
[LinkedHashMap] filled with the contents of the specified [original] map.\n     */\n    actual constructor(original:
Map<out K, V>) {\n        map = HashMap<K, ChainEntry<K, V>>()\n        this.putAll(original)\n    }\n\n    @PublishedApi\n    internal fun build(): Map<K, V> {\n        checkIsMutable()\n        isReadOnly = true\n
return this\n    }\n\n    actual override fun clear() {\n        checkIsMutable()\n        map.clear()\n        head = null\n
}\n\n    // override fun clone(): Any {\n    //     return LinkedHashMap(this)\n    // }\n\n    actual override fun
containsKey(key: K): Boolean = map.containsKey(key)\n\n    actual override fun containsValue(value: V): Boolean
{\n        var node: ChainEntry<K, V> = head ?: return false\n        do {\n            if (node.value == value) {\n
return true\n            }\n            node = node.next!!\n        } while (node != head)\n        return false\n    }\n\n    internal override fun createEntrySet(): MutableSet<MutableMap.MutableEntry<K, V>> = EntrySet()\n\n    actual
override operator fun get(key: K): V? = map.get(key)?.value\n\n    actual override fun put(key: K, value: V): V? {\n
        checkIsMutable()\n        val old = map.get(key)\n        if (old == null) {\n            val newEntry =
ChainEntry(key, value)\n            map.put(key, newEntry)\n            newEntry.addToEnd()\n            return null\n
        } else {\n            return old.setValue(value)\n        }\n    }\n\n    actual override fun remove(key: K): V? {\n
        checkIsMutable()\n        val entry = map.remove(key)\n        if (entry != null) {\n            entry.remove()\n
return entry.value\n        }\n        return null\n    }\n\n    actual override val size: Int get() = map.size\n\n    internal
override fun checkIsMutable() {\n        if (isReadOnly) throw UnsupportedOperationException()\n    }\n}\n\n    /*\n     * Constructs the specialized implementation of [LinkedHashMap] with [String] keys, which stores the keys as
properties of\n     * JS object without hashing them.\n     */\n    public fun <V> linkedStringMapOf(vararg pairs:
Pair<String, V>): LinkedHashMap<String, V> {\n        return LinkedHashMap<String,
V>(stringMapOf<Any>()).apply { putAll(pairs) }\n    }\n}\n\n    /*\n     * Copyright 2010-2018 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n     * Use of this source code is governed by the Apache 2.0 license that can be

```

```

found in the license/LICENSE.txt file.\n */\n */\n * Based on GWT LinkedHashSet\n * Copyright 2008 Google
Inc.\n */\n\npackage kotlin.collections\n\n/**\n * The implementation of the [MutableSet] interface, backed by a
[LinkedHashMap] instance.\n */\n * This implementation preserves the insertion order of elements during the
iteration.\n */\n\npublic actual open class LinkedHashSet<E> : HashSet<E>, MutableSet<E> {\n\n    internal
constructor(map: LinkedHashMap<E, Any>) : super(map)\n\n    /**\n     * Constructs a new empty
[LinkedHashSet].\n     */\n    actual constructor() : super(LinkedHashMap<E, Any>())\n\n    /**\n     * Constructs a
new [LinkedHashSet] filled with the elements of the specified collection.\n     */\n    actual constructor(elements:
Collection<E>) : super(LinkedHashMap<E, Any>()) {\n        addAll(elements)\n    }\n\n    /**\n     * Constructs a
new empty [LinkedHashSet].\n     */\n    @param initialCapacity the initial capacity (ignored)\n     * @param
loadFactor the load factor (ignored)\n     */\n    @throws IllegalArgumentException if the initial capacity or
load factor are negative\n     */\n    actual constructor(initialCapacity: Int, loadFactor: Float) :
super(LinkedHashMap<E, Any>(initialCapacity, loadFactor))\n\n    actual constructor(initialCapacity: Int) :
this(initialCapacity, 0.0f)\n\n    @PublishedApi\n    internal fun build(): Set<E> {\n        (map as
LinkedHashMap<E, Any>).build()\n        return this\n    }\n\n    internal override fun checkIsMutable(): Unit =
map.checkIsMutable()\n\n    // public override fun clone(): Any {\n    //     return LinkedHashSet(this)\n    // }\n\n}\n\n/**\n * Creates a new instance of the specialized implementation of [LinkedHashSet] with the specified
[String] elements,\n * which elements the keys as properties of JS object without hashing them.\n */\n\npublic fun
linkedStringSetOf(vararg elements: String): LinkedHashSet<String> {\n    return
LinkedHashSet(linkedStringMapOf<Any>()).apply { addAll(elements) }\n}\n\n", /*\n * Copyright 2010-2020
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin\n\nimport
kotlin.contracts.*\n\n@DeprecatedSinceKotlin(warningSince = \"1.6\")\n@Deprecated(\"Synchronization on any
object is not supported in Kotlin/JS\")\n\nReplaceWith(\"run(block)\")\n\n@kotlin.internal.InlineOnly\n\n@Suppress(\"UNUSED_PARAMETER\")\n\npublic
inline fun <R> synchronized(lock: Any, block: () -> R): R {\n    contract {\n        callsInPlace(block,
InvocationKind.EXACTLY_ONCE)\n    }\n    return block()\n}\n\n", /*\n * Copyright 2010-2018 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.io\n\ninternal abstract class BaseOutput {\n
open fun println() {\n    print(\"\\n\")\n }\n\n    open fun println(message: Any?) {\n        print(message)\n
println()\n    }\n\n    abstract fun print(message: Any?)\n\n    open fun flush() {\n    }\n\n}\n\n/** JsName used to make the
declaration available outside of module to test it */\n\n@JsName(\"NodeJsOutput\")\n\ninternal class NodeJsOutput(val
outputStream: dynamic) : BaseOutput() {\n    override fun print(message: Any?) {\n        // TODO: Using local
variable because of bug in block decomposition lowering in IR backend\n        val messageString =
String(message)\n        outputStream.write(messageString)\n    }\n\n}\n\n/** JsName used to make the declaration
available outside of module to test it */\n\n@JsName(\"OutputToConsoleLog\")\n\ninternal class OutputToConsoleLog
: BaseOutput() {\n    override fun print(message: Any?) {\n        console.log(message)\n    }\n\n    override fun
println(message: Any?) {\n        console.log(message)\n    }\n\n    override fun println() {\n        console.log(\"\")\n
}\n\n}\n\n/** JsName used to make the declaration available outside of module to test it and use at try.kotl.in
*/\n\n@JsName(\"BufferedOutput\")\n\ninternal open class BufferedOutput : BaseOutput() {\n    var buffer = \"\"\n\n    override fun print(message: Any?) {\n        buffer += String(message)\n    }\n\n    override fun flush() {\n        buffer
= \"\"\n    }\n\n}\n\n/** JsName used to make the declaration available outside of module to test it
*/\n\n@JsName(\"BufferedOutputToConsoleLog\")\n\ninternal class BufferedOutputToConsoleLog : BufferedOutput()
{\n    override fun print(message: Any?) {\n        var s = String(message)\n        val i = s.nativeLastIndexOf(\"\\n\",
0)\n        if (i >= 0) {\n            buffer += s.substring(0, i)\n            flush()\n            s = s.substring(i + 1)\n        }\n        buffer += s\n    }\n\n    override fun flush() {\n        console.log(buffer)\n        buffer = \"\"\n    }\n\n}\n\n/** JsName
used to make the declaration available outside of module to test it and use at try.kotl.in
*/\n\n@JsName(\"output\")\n\ninternal var output = run {\n    val isNode: Boolean = js(\"typeof process !== 'undefined'
&& process.versions && !!process.versions.node\")\n    if (isNode) NodeJsOutput(js(\"process.stdout\")) else

```

```

BufferedOutputToConsoleLog()\n\n@kotlin.internal.InlineOnly\nprivate inline fun String(value: Any?): String =
js("String")(value)\n\n/** Prints the line separator to the standard output stream. */\npublic actual fun println() {\n    output.println()\n}\n\n/** Prints the given [message] and the line separator to the standard output stream. */\npublic actual fun println(message: Any?) {\n    output.println(message)\n}\n\n/** Prints the given [message] to the standard output stream. */\npublic actual fun print(message: Any?) {\n    output.print(message)\n}\n\n@SinceKotlin("1.6")\npublic actual fun readln(): String = throw
UnsupportedOperationException("readln is not supported in Kotlin/JS")\n\n@SinceKotlin("1.6")\npublic actual fun readlnOrNull(): String? = throw UnsupportedOperationException("readlnOrNull is not supported in Kotlin/JS"), /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.coroutines\nimport kotlin.coroutines.intrinsics.CoroutineSingletons.*\nimport kotlin.coroutines.intrinsics.COROUTINE_SUSPENDED\n\n@PublishedApi\n@SinceKotlin("1.3")\ninternal actual class SafeContinuation<in T>\ninternal actual constructor(\n    private val delegate: Continuation<T>,\n    initialResult: Any?\n) : Continuation<T> {\n    @PublishedApi\n    internal actual constructor(delegate: Continuation<T>) : this(delegate, UNDECIDED)\n\n    public actual override val context: CoroutineContext\n    get() = delegate.context\n\n    private var result: Any? = initialResult\n\n    public actual override fun resumeWith(result: Result<T>) {\n        val cur = this.result\n        when {\n            cur === UNDECIDED -> {\n                this.result = result.value\n            }\n            cur === COROUTINE_SUSPENDED -> {\n                this.result = RESUMED\n                delegate.resumeWith(result)\n            }\n            else -> throw
IllegalStateException("Already resumed")\n        }\n    }\n\n    @PublishedApi\n    internal actual fun getOrThrow(): Any? {\n        if (result === UNDECIDED) {\n            result = COROUTINE_SUSPENDED\n            return COROUTINE_SUSPENDED\n        }\n        val result = this.result\n        return when {\n            result === RESUMED -> COROUTINE_SUSPENDED // already called continuation, indicate COROUTINE_SUSPENDED upstream\n            result is Result.Failure -> throw result.exception\n            else -> result // either COROUTINE_SUSPENDED or data\n        }\n    }\n}\n\n", /*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.coroutines.cancellation\n\n@SinceKotlin("1.4")\npublic actual open class CancellationException :
IllegalStateException {\n    actual constructor() : super()\n    actual constructor(message: String?) : super(message)\n    constructor(message: String?, cause: Throwable?) : super(message, cause)\n    constructor(cause: Throwable?) : super(cause)\n}\n\n", /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.coroutines.js.internal\nimport kotlin.coroutines.Continuation\nimport kotlin.coroutines.EmptyCoroutineContext\n\n@PublishedApi\n@SinceKotlin("1.3")\ninternal val EmptyContinuation = Continuation<Any?>(EmptyCoroutineContext) { result -> result.getOrThrow() }\n\n", /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.js\n\n/**\n * Exposes the [Date API](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Date) to Kotlin.\n */\n\n@Suppress("NOT_DOCUMENTED")\npublic external class Date() {\n    public constructor(milliseconds: Number)\n    public constructor(dateString: String)\n    public constructor(year: Int, month: Int)\n    public constructor(year: Int, month: Int, day: Int)\n    public constructor(year: Int, month: Int, day: Int, hour: Int)\n    public constructor(year: Int, month: Int, day: Int, hour: Int, minute: Int)\n    public constructor(year: Int, month: Int, day: Int, hour: Int, minute: Int, second: Int)\n    public constructor(year: Int, month: Int, day: Int, hour: Int, minute: Int, second: Int, millisecond: Number)\n\n    public fun getDate(): Int\n    public fun getDay(): Int\n    public fun getFullYear(): Int\n    public fun getHours(): Int\n    public fun getMilliseconds(): Int\n    public fun getMinutes(): Int\n    public fun getMonth(): Int\n    public fun getSeconds(): Int\n    public fun getTime(): Double\n    public fun getTimezoneOffset(): Int\n    public fun getUTCDate(): Int\n    public fun

```



```

Element.hasClass(cssClass: String): Boolean = this.newHasClass(cssClass)\n\n/**\n * Adds CSS class to element.
Has no effect if all specified classes are already in class attribute of the element\n *\n * @return true if at least one
class has been added\n */\n@LowPriorityInOverloadResolution\n@Deprecated(\n    message = \"This API is moved
to another package, use 'kotlinx.dom.addClass' instead.\",\n    replaceWith =
ReplaceWith(\"this.addClass(cssClasses)\", \"kotlinx.dom.addClass\")\n)\n@DeprecatedSinceKotlin(warningSince
= \"1.4\", errorSince = \"1.6\")\ninline fun Element.addClass(vararg cssClasses: String): Boolean =
this.newAddClass(*cssClasses)\n\n/**\n * Removes all [cssClasses] from element. Has no effect if all specified
classes are missing in class attribute of the element\n *\n * @return true if at least one class has been removed\n
*/\n@LowPriorityInOverloadResolution\n@Deprecated(\n    message = \"This API is moved to another package,
use 'kotlinx.dom.removeClass' instead.\",\n    replaceWith = ReplaceWith(\"this.removeClass(cssClasses)\",
\"kotlinx.dom.removeClass\")\n)\n@DeprecatedSinceKotlin(warningSince = \"1.4\", errorSince = \"1.6\")\ninline
fun Element.removeClass(vararg cssClasses: String): Boolean = this.newRemoveClass(*cssClasses), /*\n *
Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is
governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage
kotlin.dom\n\nimport org.w3c.dom.Element\nimport org.w3c.dom.Node\nimport
kotlin.internal.LowPriorityInOverloadResolution\nimport kotlinx.dom.isElement as newIsElement\nimport
kotlinx.dom.isText as newIsText\n\n/**\n * Gets a value indicating whether this node is a TEXT_NODE or a
CDATA_SECTION_NODE.\n */\n@LowPriorityInOverloadResolution\n@Deprecated(\n    message = \"This API
is moved to another package, use 'kotlinx.dom.isText' instead.\",\n    replaceWith = ReplaceWith(\"this.isText\",
\"kotlinx.dom.isText\")\n)\n@DeprecatedSinceKotlin(warningSince = \"1.4\", errorSince = \"1.6\")\npublic val
Node.isText: Boolean\n    inline get() = this.newIsText\n\n/**\n * Gets a value indicating whether this node is an
[Element].\n */\n@LowPriorityInOverloadResolution\n@Deprecated(\n    message = \"This API is moved to
another package, use 'kotlinx.dom.isElement' instead.\",\n    replaceWith = ReplaceWith(\"this.isElement\",
\"kotlinx.dom.isElement\")\n)\n@DeprecatedSinceKotlin(warningSince = \"1.4\", errorSince = \"1.6\")\npublic val
Node.isElement: Boolean\n    inline get() = this.newIsElement\n\n\", /*\n * Copyright 2010-2018 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n */\n\npackage org.w3c.dom.events\n\npublic fun
EventListener(handler: (Event) -> Unit): EventListener = EventListenerHandler(handler)\n\nprivate class
EventListenerHandler(private val handler: (Event) -> Unit) : EventListener {\n    public override fun
handleEvent(event: Event) {\n        handler(event)\n    }\n    public override fun toString(): String =
\"EventListenerHandler($handler)\"\n\n\", /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage org.w3c.dom\n\npublic external interface ItemArrayLike<out T> {\n
val length: Int\n    fun item(index: Int): T?\n}\n\n/**\n * Returns the view of this `ItemArrayLike<T>` collection as
`List<T>`\n */\n@public fun <T> ItemArrayLike<T>.asList(): List<T> = object : AbstractList<T>() {\n    override val
size: Int get() = this@asList.length\n\n    override fun get(index: Int): T = when (index) {\n        in 0..lastIndex ->
this@asList.item(index).unsafeCast<T>()\n        else -> throw IndexOutOfBoundsException(\"index $index is not in
range [0..$lastIndex]\")\n    }\n\n\", /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlin.dom\n\nimport org.w3c.dom.Element\nimport
org.w3c.dom.Node\nimport kotlin.internal.LowPriorityInOverloadResolution\nimport kotlinx.dom.appendText as
newAppendText\nimport kotlinx.dom.clear as newClear\n\n/**\n * Removes all the children from this node.
*/\n@LowPriorityInOverloadResolution\n@Deprecated(\n    message = \"This API is moved to another package,
use 'kotlinx.dom.clear' instead.\",\n    replaceWith = ReplaceWith(\"this.clear()\",
\"kotlinx.dom.clear\")\n)\n@DeprecatedSinceKotlin(warningSince = \"1.4\", errorSince = \"1.6\")\npublic inline fun
Node.clear() = this.newClear()\n\n/**\n * Creates text node and append it to the element.\n *\n * @return this
element\n */\n@LowPriorityInOverloadResolution\n@Deprecated(\n    message = \"This API is moved to another
package, use 'kotlinx.dom.appendText' instead.\",\n    replaceWith = ReplaceWith(\"this.appendText(text)\",

```

```

@DeprecatedSinceKotlin(warningSince = "1.4", errorSince = "1.6")
inline fun Element.appendText(text: String): Element = this.newAppendText(text)
"/**
 * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.
 * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.
 */
package kotlin.js
/**
 * Reinterprets this value as a value of the [dynamic type](/docs/reference/dynamic-type.html).
 */
@kotlin.internal.InlineOnly
public inline fun Any?.asDynamic(): dynamic = this
/**
 * Reinterprets this value as a value of the specified type [T] without any actual type checking.
 */
@kotlin.internal.InlineOnly
public inline fun <T> Any?.unsafeCast(): @kotlin.internal.NoInfer T = this.asDynamic()
/**
 * Reinterprets this `dynamic` value as a value of the specified type [T] without any actual type checking.
 */
@kotlin.internal.DynamicExtension
@JsName("unsafeCastDynamic")
@kotlin.internal.InlineOnly
public inline fun <T> dynamic.unsafeCast(): @kotlin.internal.NoInfer T = this
/**
 * Allows to iterate this `dynamic` object in the following cases:
 * - when it has an `iterator` function,
 * - when it is an array
 * - when it is an instance of [kotlin.collections.Iterable]
 */
@kotlin.internal.DynamicExtension
public operator fun dynamic.iterator(): Iterator<dynamic> {
    val r: Any? = this
    return when {
        this["iterator"] != null -> this["iterator]()
        isArrayish(r) -> r.unsafeCast<Array<*>>().iterator()
        else -> (r as Iterable<*>).iterator()
    }
}
"/**
 * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.
 * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.
 */
// a package is omitted to get declarations directly under the module
@JsName("throwNPE")
internal fun throwNPE(message: String) {
    throw NullPointerException(message)
}
@JsName("throwCCE")
internal fun throwCCE() {
    throw ClassCastException("Illegal cast")
}
@JsName("throwISE")
internal fun throwISE(message: String) {
    throw IllegalStateException(message)
}
@JsName("throwUPAE")
internal fun throwUPAE(propertyName: String) {
    throw UninitializedPropertyAccessException("lateinit property ${propertyName} has not been initialized")
}
"/**
 * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.
 * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.
 */
package kotlin.collections
/**
 * Groups elements from the [Grouping] source by key and counts elements in each group.
 */
@return a [Map] associating the key of each group with the count of elements in the group.
/**
 * @sample samples.collections.Grouping.groupingByEachCount
 */
@SinceKotlin("1.1")
public actual fun <T, K> Grouping<T, K>.eachCount(): Map<K, Int> = fold(0) { acc, _ -> acc + 1 }
/**
 * Groups elements from the [Grouping] source by key and sums values provided by the [valueSelector] function for elements in each group.
 */
@return a [Map] associating the key of each group with the count of element in the group.
@SinceKotlin("1.1")
public inline fun <T, K> Grouping<T, K>.eachSumOf(valueSelector: (T) -> Int): Map<K, Int> = fold(0) { acc, e -> acc + valueSelector(e) }
"/**
 * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.
 * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.
 */
@file:kotlin.jvm.JvmName("GroupingKt")
@file:kotlin.jvm.JvmMultifileClass
package kotlin.collections
/**
 * Represents a source of elements with a [keyOf] function, which can be applied to each element to get its key.
 */
/**
 * A [Grouping] structure serves as an intermediate step in group-and-fold operations:
 * - they group elements by their keys and then fold each group with some aggregating operation.
 * - It is created by attaching `keySelector: (T) -> K` function to a source of elements.
 * - To get an instance of [Grouping] use one of `groupingBy` extension functions:
 * - [Iterable.groupingBy]
 * - [Sequence.groupingBy]
 * - [Array.groupingBy]
 * - [CharSequence.groupingBy]
 */
/**
 * For the list of group-and-fold operations available, see the [extension functions](#extension-functions) for `Grouping`.
 */
@SinceKotlin("1.1")
public interface Grouping<T, out K> {
    /**
     * Returns an [Iterator] over the elements of the source of this grouping.
     */
    fun sourceIterator(): Iterator<T>
    /**
     * Extracts the key of an [element].
     */
    fun keyOf(element: T): K
}
/**
 * Groups elements from the [Grouping] source by key and applies [operation] to the elements of each group sequentially,
 * - passing the previously accumulated value and the current element as arguments, and stores the results in a new map.
 * - The key for each element is provided by the [Grouping.keyOf] function.
 */
}

```

@param operation function is invoked on each element with the following parameters:

- * - `key`: the key of the group this element belongs to;
- * - `accumulator`: the current value of the accumulator of the group, can be `null` if it's the first `element` encountered in the group;
- * - `element`: the element from the source being aggregated;
- * - `first`: indicates whether it's the first `element` encountered in the group.

* @return a [Map] associating the key of each group with the result of aggregation of the group elements.

* @sample

```

samples.collections.Grouping.aggregateByRadix
*/
@SinceKotlin("1.1")
public inline fun <T, K, R>
Grouping<T, K>.aggregate(\n operation: (key: K, accumulator: R?, element: T, first: Boolean) -> R\n): Map<K, R> {
\n return aggregateTo(mutableMapOf<K, R>(), operation)\n}\n/n/**
\n * Groups elements from the [Grouping] source by key and applies [operation] to the elements of each group sequentially,
\n * passing the previously accumulated value and the current element as arguments,
\n * and stores the results in the given [destination] map.
\n * The key for each element is provided by the [Grouping.keyOf] function.
\n * @param operation a function that is invoked on each element with the following parameters:
\n * - `key`: the key of the group this element belongs to;
\n * - `accumulator`: the current value of the accumulator of the group, can be `null` if it's the first `element` encountered in the group;
\n * - `element`: the element from the source being aggregated;
\n * - `first`: indicates whether it's the first `element` encountered in the group.
\n * If the [destination] map already has a value corresponding to some key,
\n * then the elements being aggregated for that key are never considered as `first`.
\n * @return the [destination] map associating the key of each group with the result of aggregation of the group elements.
\n * @sample samples.collections.Grouping.aggregateByRadixTo
\n */
@SinceKotlin("1.1")
public inline fun <T, K, R, M : MutableMap<in K, R>> Grouping<T, K>.aggregateTo(\n destination: M,\n operation: (key: K, accumulator: R?, element: T, first: Boolean) -> R\n): M {
\n for (e in this.sourceIterator()) {
\n val key = keyOf(e)
\n val accumulator = destination[key]
\n destination[key] = operation(key, accumulator, e, accumulator == null && !destination.containsKey(key))
\n }
\n return destination\n}\n/n/**
\n * Groups elements from the [Grouping] source by key and applies [operation] to the elements of each group sequentially,
\n * passing the previously accumulated value and the current element as arguments, and stores the results in a new map.
\n * An initial value of accumulator is provided by [initialValueSelector] function.
\n * @param initialValueSelector a function that provides an initial value of accumulator for each group.
\n * It's invoked with parameters:
\n * - `key`: the key of the group;
\n * - `element`: the first element being encountered in that group.
\n * @param operation a function that is invoked on each element with the following parameters:
\n * - `key`: the key of the group this element belongs to;
\n * - `accumulator`: the current value of the accumulator of the group;
\n * - `element`: the element from the source being accumulated.
\n * @return a [Map] associating the key of each group with the result of accumulating the group elements.
\n * @sample samples.collections.Grouping.foldByEvenLengthWithComputedInitialValue
\n */
@SinceKotlin("1.1")
public inline fun <T, K, R> Grouping<T, K>.fold(\n initialValueSelector: (key: K, element: T) -> R,\n operation: (key: K, accumulator: R, element: T) -> R\n): Map<K, R> =\n@Suppress("UNCHECKED_CAST")
\n aggregate { key, acc, e, first -> operation(key, if (first) initialValueSelector(key, e) else acc as R, e) }\n/n/**
\n * Groups elements from the [Grouping] source by key and applies [operation] to the elements of each group sequentially,
\n * passing the previously accumulated value and the current element as arguments,
\n * and stores the results in the given [destination] map.
\n * An initial value of accumulator is provided by [initialValueSelector] function.
\n * @param initialValueSelector a function that provides an initial value of accumulator for each group.
\n * It's invoked with parameters:
\n * - `key`: the key of the group;
\n * - `element`: the first element being encountered in that group.
\n * If the [destination] map already has a value corresponding to some key, that value is used as an initial value of
\n * the accumulator for that group and the [initialValueSelector] function is not called for that group.
\n * @param operation a function that is invoked on each element with the following parameters:
\n * - `key`: the key of the group this element belongs to;
\n * - `accumulator`: the current value of the accumulator of the group;
\n * - `element`: the element from the source being accumulated.
\n * @return the [destination] map associating the key of each group with the result of accumulating the group elements.
\n * @sample
\n samples.collections.Grouping.foldByEvenLengthWithComputedInitialValueTo
\n */
@SinceKotlin("1.1")
public

```

```

inline fun <T, K, R, M : MutableMap<in K, R>> Grouping<T, K>.foldTo(\n destination: M,\n
initialValueSelector: (key: K, element: T) -> R,\n operation: (key: K, accumulator: R, element: T) -> R)\n): M =\n
@Suppress("UNCHECKED_CAST")\n aggregateTo(destination) { key, acc, e, first -> operation(key, if (first)
initialValueSelector(key, e) else acc as R, e) }\n\n/**\n * Groups elements from the [Grouping] source by key and
applies [operation] to the elements of each group sequentially,\n * passing the previously accumulated value and the
current element as arguments, and stores the results in a new map.\n * An initial value of accumulator is the same
[initialValue] for each group.\n * @param operation a function that is invoked on each element with the
following parameters:\n * - `accumulator`: the current value of the accumulator of the group;\n * - `element`: the
element from the source being accumulated.\n * @return a [Map] associating the key of each group with the
result of accumulating the group elements.\n * @sample
samples.collections.Grouping.foldByEvenLengthWithConstantInitialValue\n */\n@SinceKotlin("1.1")\npublic
inline fun <T, K, R> Grouping<T, K>.fold(\n initialValue: R,\n operation: (accumulator: R, element: T) -> R)\n):
Map<K, R> =\n @Suppress("UNCHECKED_CAST")\n aggregate { _, acc, e, first -> operation(if (first)
initialValue else acc as R, e) }\n\n/**\n * Groups elements from the [Grouping] source by key and applies
[operation] to the elements of each group sequentially,\n * passing the previously accumulated value and the current
element as arguments,\n * and stores the results in the given [destination] map.\n * An initial value of accumulator
is the same [initialValue] for each group.\n * If the [destination] map already has a value corresponding to the key
of some group,\n * that value is used as an initial value of the accumulator for that group.\n * @param operation
a function that is invoked on each element with the following parameters:\n * - `accumulator`: the current value of
the accumulator of the group;\n * - `element`: the element from the source being accumulated.\n * @return the
[destination] map associating the key of each group with the result of accumulating the group elements.\n *
@sample samples.collections.Grouping.foldByEvenLengthWithConstantInitialValueTo\n */\n@SinceKotlin("1.1")\npublic
inline fun <T, K, R, M : MutableMap<in K, R>> Grouping<T, K>.foldTo(\n
destination: M,\n initialValue: R,\n operation: (accumulator: R, element: T) -> R)\n): M =\n
@Suppress("UNCHECKED_CAST")\n aggregateTo(destination) { _, acc, e, first -> operation(if (first)
initialValue else acc as R, e) }\n\n/**\n * Groups elements from the [Grouping] source by key and applies the
reducing [operation] to the elements of each group\n * sequentially starting from the second element of the group,\n
* passing the previously accumulated value and the current element as arguments,\n * and stores the results in a new
map.\n * An initial value of accumulator is the first element of the group.\n * @param operation a function that
is invoked on each subsequent element of the group with the following parameters:\n * - `key`: the key of the group
this element belongs to;\n * - `accumulator`: the current value of the accumulator of the group;\n * - `element`: the
element from the source being accumulated.\n * @return a [Map] associating the key of each group with the
result of accumulating the group elements.\n * @sample samples.collections.Grouping.reduceByMaxVowels\n */\n@SinceKotlin("1.1")\npublic
inline fun <S, T : S, K> Grouping<T, K>.reduce(\n operation: (key: K,
accumulator: S, element: T) -> S)\n): Map<K, S> =\n aggregate { key, acc, e, first ->\n
@Suppress("UNCHECKED_CAST")\n if (first) e else operation(key, acc as S, e)\n }\n\n/**\n * Groups
elements from the [Grouping] source by key and applies the reducing [operation] to the elements of each group\n *
sequentially starting from the second element of the group,\n * passing the previously accumulated value and the
current element as arguments,\n * and stores the results in the given [destination] map.\n * An initial value of
accumulator is the first element of the group.\n * If the [destination] map already has a value corresponding to
the key of some group,\n * that value is used as an initial value of the accumulator for that group and the first
element of that group is also\n * subjected to the [operation].\n * @param operation a function that is invoked on
each subsequent element of the group with the following parameters:\n * - `accumulator`: the current value of the
accumulator of the group;\n * - `element`: the element from the source being folded;\n * @return the
[destination] map associating the key of each group with the result of accumulating the group elements.\n *
@sample samples.collections.Grouping.reduceByMaxVowelsTo\n */\n@SinceKotlin("1.1")\npublic
inline fun <S,
T : S, K, M : MutableMap<in K, S>> Grouping<T, K>.reduceTo(\n destination: M,\n operation: (key: K,
accumulator: S, element: T) -> S)\n): M =\n aggregateTo(destination) { key, acc, e, first ->\n

```



```

@Suppress("UNCHECKED_CAST")\n    if (first) e else operation(key, acc as S, e)\n    }\n\n/**\n * Groups
elements from the [Grouping] source by key and counts elements in each group to the given [destination] map.\n *\n * If the [destination] map already has a value corresponding to the key of some group,\n * that value is used as an
initial value of the counter for that group.\n *\n * @return the [destination] map associating the key of each group
with the count of elements in the group.\n *\n * @sample samples.collections.Grouping.groupingByEachCount\n
*\n*\n@SinceKotlin("1.1")\npublic fun <T, K, M : MutableMap<in K, Int>> Grouping<T,
K>.eachCountTo(destination: M): M =\n    foldTo(destination, 0) { acc, _ -> acc + 1 }\n\n/**\n * Groups
elements from the [Grouping] source by key and sums values provided by the [valueSelector] function for elements
in each group\n * to the given [destination] map.\n *\n * If the [destination] map already has a value
corresponding to the key of some group,\n * that value is used as an initial value of the sum for that group.\n *\n *
@return the [destination] map associating the key of each group with the sum of elements in the group.\n
*\n*\n@SinceKotlin("1.1")\npublic inline fun <T, K, M : MutableMap<in K, Int>> Grouping<T,
K>.eachSumOfTo(destination: M, valueSelector: (T) -> Int): M =\n    foldTo(destination, 0) { acc, e -> acc +
valueSelector(e)}\n\n*\n*\n// TODO: sum by long and by double overloads\n\npublic inline fun <T, K, M :
MutableMap<in K, Long>> Grouping<T, K>.sumEachByLongTo(destination: M, valueSelector: (T) -> Long): M
=\n    foldTo(destination, 0L) { acc, e -> acc + valueSelector(e)}\n\npublic inline fun <T, K> Grouping<T,
K>.sumEachByLong(valueSelector: (T) -> Long): Map<K, Long> =\n    fold(0L) { acc, e -> acc +
valueSelector(e)}\n\npublic inline fun <T, K, M : MutableMap<in K, Double>> Grouping<T,
K>.sumEachByDoubleTo(destination: M, valueSelector: (T) -> Double): M =\n    foldTo(destination, 0.0) { acc, e
-> acc + valueSelector(e)}\n\npublic inline fun <T, K> Grouping<T, K>.sumEachByDouble(valueSelector: (T) ->
Double): Map<K, Double> =\n    fold(0.0) { acc, e -> acc + valueSelector(e)}\n\n*/\n * Copyright 2010-2018
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n *\n*\npackage kotlin.js\n\n/**\n * An
interface for indexing access to a collection of key-value pairs, where type of key is [String] and type of value is
[Any?][Any].\n *\n*\npublic external interface Json {\n    /**\n     * Calls to the function will be translated to indexing
operation (square brackets) on the receiver with [propertyName] as the argument.\n     *\n     * E.g. for next code:\n
     *\n     * ```kotlin\n     * fun test(j: Json, p: String) = j["prop"] + j.get(p)\n     * ```\n     *\n     * will be generated:\n
     *\n     * ```js\n     * function test(j, p) {\n     *     return j["prop"] + j[p];\n     * }\n     * ```\n     *\n     *\n     * operator fun
get(propertyName: String): Any?;\n     *\n     * Calls of the function will be translated to an assignment of [value]
to the receiver indexed (with square brackets/index operation) with [propertyName].\n     *\n     * E.g. for the
following code:\n     *\n     * ```kotlin\n     * fun test(j: Json, p: String, newValue: Any) {\n     *     j["prop"] = 1\n     *
j.set(p, newValue)\n     * }\n     * ```\n     *\n     * will be generated:\n     *\n     * ```js\n     * function test(j, p, newValue)
{\n     *     j["prop"] = 1;\n     *     j[p] = newValue;\n     * }\n     * }\n     * ```\n     *\n     *\n     * operator fun
set(propertyName: String, value: Any?): Unit;\n     *\n     *\n     * Returns a simple JavaScript object (as [Json]) using
provided key-value pairs as names and values of its properties.\n     *\n     *\n     * public fun json(vararg pairs: Pair<String,
Any?>): Json {\n     *     val res: dynamic = js("{}")\n     *     for ((name, value) in pairs) {\n     *         res[name] = value\n     *
}\n     *     return res\n     * }\n     *\n     *\n     * Adds key-value pairs from [other] to [this].\n     * Returns the original receiver.\n     *\n     *\n     * public
fun Json.add(other: Json): Json {\n     *     val keys: Array<String> = js("Object").keys(other)\n     *     for (key in keys) {\n
     *         if (other.asDynamic().hasOwnProperty(key)) {\n     *             this[key] = other[key];\n     *         }\n     *     }\n     *
return this\n     * }\n     *\n     *\n     * Exposes the JavaScript [JSON object](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/JSON) to Kotlin.\n
*\n*\n@Suppress("NOT_DOCUMENTED")\npublic external object JSON {\n    public fun stringify(o: Any?):
String\n    public fun stringify(o: Any?, replacer: ((key: String, value: Any?) -> Any?)): String\n    public fun
stringify(o: Any?, replacer: ((key: String, value: Any?) -> Any?)? = definedExternally, space: Int): String\n    public
fun stringify(o: Any?, replacer: ((key: String, value: Any?) -> Any?)? = definedExternally, space: String): String\n    public
fun stringify(o: Any?, replacer: Array<String>): String\n    public fun stringify(o: Any?, replacer:
Array<String>, space: Int): String\n    public fun stringify(o: Any?, replacer: Array<String>, space: String):
String\n\n    public fun <T> parse(text: String): T\n    public fun <T> parse(text: String, reviver: ((key: String, value:

```

Any?) -> Any?): T\n}\n", /*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\npackage kotlin.math\n\nimport kotlin.internal.InlineOnly\nimport kotlin.js.JsMath as nativeMath\n\n// region ===== Double Math

===== \n\n/** Computes the sine of the angle [x] given in radians.\n * \n * Special cases:\n * - `sin(NaN|+Inf|-Inf)` is `NaN`\n */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun sin(x: Double): Double = nativeMath.sin(x)\n\n/** Computes the cosine of the angle [x] given in radians.\n * \n * Special cases:\n * - `cos(NaN|+Inf|-Inf)` is `NaN`\n */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun cos(x: Double): Double = nativeMath.cos(x)\n\n/** Computes the tangent of the angle [x] given in radians.\n * \n * Special cases:\n * - `tan(NaN|+Inf|-Inf)` is `NaN`\n */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun tan(x: Double): Double = nativeMath.tan(x)\n\n/** Computes the arc sine of the value [x];\n * the returned value is an angle in the range from $-\pi/2$ to $\pi/2$ radians.\n * \n * Special cases:\n * - `asin(x)` is `NaN`, when $abs(x) > 1$ or x is `NaN`\n */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun asin(x: Double): Double = nativeMath.asin(x)\n\n/** Computes the arc cosine of the value [x];\n * the returned value is an angle in the range from 0.0 to π radians.\n * \n * Special cases:\n * - `acos(x)` is `NaN`, when $abs(x) > 1$ or x is `NaN`\n */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun acos(x: Double): Double = nativeMath.acos(x)\n\n/** Computes the arc tangent of the value [x];\n * the returned value is an angle in the range from $-\pi/2$ to $\pi/2$ radians.\n * \n * Special cases:\n * - `atan(NaN)` is `NaN`\n */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun atan(x: Double): Double = nativeMath.atan(x)\n\n/** Returns the angle θ of the polar coordinates (r, θ) that correspond\n * to the rectangular coordinates (x, y) by computing the arc tangent of the value y / x ;\n * the returned value is an angle in the range from $-\pi$ to π radians.\n * \n * Special cases:\n * - `atan2(0.0, 0.0)` is 0.0 \n * - `atan2(0.0, x)` is 0.0 for $x > 0$ and π for $x < 0$ \n * - `atan2(-0.0, x)` is -0.0 for $x > 0$ and $-\pi$ for $x < 0$ \n * - `atan2(y, +Inf)` is 0.0 for $0 < y < +Inf$ and -0.0 for $-\infty < y < 0$ \n * - `atan2(y, -Inf)` is π for $0 < y < +Inf$ and $-\pi$ for $-\infty < y < 0$ \n * - `atan2(y, 0.0)` is $\pi/2$ for $y > 0$ and $-\pi/2$ for $y < 0$ \n * - `atan2(+Inf, x)` is $\pi/2$ for finite x \n * - `atan2(-Inf, x)` is $-\pi/2$ for finite x \n * - `atan2(NaN, x)` and `atan2(y, NaN)` is `NaN`\n */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun atan2(y: Double, x: Double): Double = nativeMath.atan2(y, x)\n\n/** Computes the hyperbolic sine of the value [x].\n * \n * Special cases:\n * - `sinh(NaN)` is `NaN`\n * - `sinh(+Inf)` is $+\infty$ \n * - `sinh(-Inf)` is $-\infty$ \n */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun sinh(x: Double): Double = nativeMath.sinh(x)\n\n/** Computes the hyperbolic cosine of the value [x].\n * \n * Special cases:\n * - `cosh(NaN)` is `NaN`\n * - `cosh(+Inf|-Inf)` is $+\infty$ \n */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun cosh(x: Double): Double = nativeMath.cosh(x)\n\n/** Computes the hyperbolic tangent of the value [x].\n * \n * Special cases:\n * - `tanh(NaN)` is `NaN`\n * - `tanh(+Inf)` is 1.0 \n * - `tanh(-Inf)` is -1.0 \n */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun tanh(x: Double): Double = nativeMath.tanh(x)\n\n/** Computes the inverse hyperbolic sine of the value [x].\n * The returned value is y such that $\sinh(y) == x$.\n * \n * Special cases:\n * - `asinh(NaN)` is `NaN`\n * - `asinh(+Inf)` is $+\infty$ \n * - `asinh(-Inf)` is $-\infty$ \n */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun asinh(x: Double): Double = nativeMath.asinh(x)\n\n/** Computes the inverse hyperbolic cosine of the value [x].\n * The returned value is positive y such that $\cosh(y) == x$.\n * \n * Special cases:\n * - `acosh(NaN)` is `NaN`\n * - `acosh(x)` is `NaN` when $x < 1$ \n * - `acosh(+Inf)` is $+\infty$ \n */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun acosh(x: Double): Double = nativeMath.acosh(x)\n\n/** Computes the inverse hyperbolic tangent of the value [x].\n * The returned value is y such that $\tanh(y) == x$.\n * \n * Special cases:\n * - `atanh(NaN)` is `NaN`\n * - `atanh(x)` is `NaN` when $x > 1$ or $x < -1$ \n * - `atanh(1.0)` is $+\infty$ \n * - `atanh(-1.0)` is $-\infty$ \n */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun atanh(x: Double): Double = nativeMath.atanh(x)\n\n/** Computes $\sqrt{x^2 + y^2}$ without intermediate overflow or underflow.\n * \n * Special cases:\n * - returns $+\infty$ if any of arguments is infinite\n * - returns `NaN` if any of arguments is `NaN`

and the other is not infinite

```

@SinceKotlin("1.2")@InlineOnly
public actual inline fun hypot(x: Double, y: Double): Double = nativeMath.hypot(x, y)
* Computes the positive square root of the value [x].
Special cases:
* - `sqrt(x)` is `NaN` when `x < 0` or `x` is `NaN`
*/
@SinceKotlin("1.2")@InlineOnly
public actual inline fun sqrt(x: Double): Double = nativeMath.sqrt(x)
* Computes Euler's number `e` raised to the power of the value [x].
Special cases:
* - `exp(NaN)` is `NaN`
* - `exp(+Inf)` is `+Inf`
* - `exp(-Inf)` is `0.0`
*/
@SinceKotlin("1.2")@InlineOnly
public actual inline fun exp(x: Double): Double = nativeMath.exp(x)
* Computes `exp(x) - 1`.
* This function can be implemented to produce more precise result for [x] near zero.
Special cases:
* - `expm1(NaN)` is `NaN`
* - `expm1(+Inf)` is `+Inf`
* - `expm1(-Inf)` is `-1.0`
* @see [exp] function.
*/
@SinceKotlin("1.2")@InlineOnly
public actual inline fun expm1(x: Double): Double = nativeMath.expm1(x)
* Computes the logarithm of the value [x] to the given [base].
Special cases:
* - `log(x, b)` is `NaN` if either `x` or `b` are `NaN`
* - `log(x, b)` is `NaN` when `x < 0` or `b <= 0` or `b == 1.0`
* - `log(+Inf, +Inf)` is `NaN`
* - `log(+Inf, b)` is `+Inf` for `b > 1` and `-Inf` for `b < 1`
* - `log(0.0, b)` is `-Inf` for `b > 1` and `+Inf` for `b > 1`
* See also logarithm functions for common fixed bases: [ln], [log10] and [log2].
*/
@SinceKotlin("1.2")@InlineOnly
public actual fun log(x: Double, base: Double): Double {
    if (base <= 0.0 || base == 1.0) return Double.NaN
    return nativeMath.log(x) / nativeMath.log(base)
}
* Computes the natural logarithm (base `E`) of the value [x].
Special cases:
* - `ln(NaN)` is `NaN`
* - `ln(x)` is `NaN` when `x < 0.0`
* - `ln(+Inf)` is `+Inf`
* - `ln(0.0)` is `-Inf`
*/
@SinceKotlin("1.2")@InlineOnly
public actual inline fun ln(x: Double): Double = nativeMath.log(x)
* Computes the common logarithm (base 10) of the value [x].
* @see [ln] function for special cases.
*/
@SinceKotlin("1.2")@InlineOnly
public actual inline fun log10(x: Double): Double = nativeMath.log10(x)
* Computes the binary logarithm (base 2) of the value [x].
* @see [ln] function for special cases.
*/
@SinceKotlin("1.2")@InlineOnly
public actual inline fun log2(x: Double): Double = nativeMath.log2(x)
* Computes `ln(x + 1)`.
* This function can be implemented to produce more precise result for [x] near zero.
Special cases:
* - `ln1p(NaN)` is `NaN`
* - `ln1p(x)` is `NaN` where `x < -1.0`
* - `ln1p(-1.0)` is `-Inf`
* - `ln1p(+Inf)` is `+Inf`
* @see [ln] function
* @see [expm1] function
*/
@SinceKotlin("1.2")@InlineOnly
public actual inline fun ln1p(x: Double): Double = nativeMath.log1p(x)
* Rounds the given value [x] to an integer towards positive infinity.
* @return the smallest double value that is greater than or equal to the given value [x] and is a mathematical integer.
Special cases:
* - `ceil(x)` is `x` where `x` is `NaN` or `+Inf` or `-Inf` or already a mathematical integer.
*/
@SinceKotlin("1.2")@InlineOnly
public actual inline fun ceil(x: Double): Double = nativeMath.ceil(x)
* Rounds the given value [x] to an integer towards negative infinity.
* @return the largest double value that is smaller than or equal to the given value [x] and is a mathematical integer.
Special cases:
* - `floor(x)` is `x` where `x` is `NaN` or `+Inf` or `-Inf` or already a mathematical integer.
*/
@SinceKotlin("1.2")@InlineOnly
public actual inline fun floor(x: Double): Double = nativeMath.floor(x)
* Rounds the given value [x] to an integer towards zero.
* @return the value [x] having its fractional part truncated.
Special cases:
* - `truncate(x)` is `x` where `x` is `NaN` or `+Inf` or `-Inf` or already a mathematical integer.
*/
@SinceKotlin("1.2")@InlineOnly
public actual inline fun truncate(x: Double): Double = nativeMath.trunc(x)
* Rounds the given value [x] towards the closest integer with ties rounded towards even integer.
Special cases:
* - `round(x)` is `x` where `x` is `NaN` or `+Inf` or `-Inf` or already a mathematical integer.
*/
@SinceKotlin("1.2")@InlineOnly
public actual fun round(x: Double): Double {
    if (x % 0.5 != 0.0) {
        return nativeMath.round(x)
    }
    val floor = floor(x)
    return if (floor % 2 == 0.0) floor else ceil(x)
}
* Returns the absolute value of the given value [x].
Special cases:
* - `abs(NaN)` is `NaN`
* @see absoluteValue extension property for [Double]
*/
@SinceKotlin("1.2")@InlineOnly
public actual inline fun abs(x: Double): Double = nativeMath.abs(x)
* Returns the sign of the given value [x]:
* - `-1.0` if the value is negative,
* - zero if the value is zero,
* - `1.0` if the value is positive
Special case:
* - `sign(NaN)` is `NaN`
*/
@SinceKotlin("1.2")@InlineOnly
public actual inline fun sign(x: Double): Double =

```

`nativeMath.sign(x)` Returns the smaller of two values. If either value is `NaN`, then the result is `NaN`.

`@SinceKotlin("1.2")@InlineOnly@public actual inline fun min(a: Double, b: Double): Double = nativeMath.min(a, b)` Returns the greater of two values. If either value is `NaN`, then the result is `NaN`.

`@SinceKotlin("1.2")@InlineOnly@public actual inline fun max(a: Double, b: Double): Double = nativeMath.max(a, b)` // extensions

`nativeMath.pow(x)` Raises this value to the power [x]. Special cases: `b.pow(0.0)` is `1.0`, `b.pow(1.0) == b`, `b.pow(NaN)` is `NaN`, `NaN.pow(x)` is `NaN` for `x != 0.0`, `b.pow(Inf)` is `NaN` for `abs(b) == 1.0`, `b.pow(x)` is `NaN` for `b < 0` and `x` is finite and not an integer.

`@SinceKotlin("1.2")@InlineOnly@public actual inline fun Double.pow(x: Double): Double = nativeMath.pow(this, x)` Raises this value to the integer power [n]. See the other overload of [pow] for details.

`@SinceKotlin("1.2")@InlineOnly@public actual inline fun Double.pow(n: Int): Double = nativeMath.pow(this, n.toDouble())` Returns the absolute value of this value. Special cases: `NaN.absoluteValue` is `NaN`.

`@see abs function`

`@SinceKotlin("1.2")@InlineOnly@public actual inline val Double.absoluteValue: Double get() = nativeMath.abs(this)` Returns the sign of this value: `-1.0` if the value is negative, `0` if the value is zero, `1.0` if the value is positive.

`Special case: NaN.sign` is `NaN`.

`@SinceKotlin("1.2")@InlineOnly@public actual inline val Double.sign: Double get() = nativeMath.sign(this)` Returns this value with the sign bit same as of the [sign] value.

`@SinceKotlin("1.2")@InlineOnly@public actual inline fun Double.withSign(sign: Int): Double = this.withSign(sign.toDouble())` Returns the ulp (unit in the last place) of this value. An ulp is a positive distance between this value and the next nearest [Double] value larger in magnitude.

`Special Cases: NaN.ulp` is `NaN`, `x.ulp` is `+Inf` when `x` is `+Inf` or `-Inf`, `0.0.ulp` is `Double.MIN_VALUE`.

`@SinceKotlin("1.2")@public actual val Double.ulp: Double get() = when { this < 0 -> (-this).ulp this.isNaN() || this == Double.POSITIVE_INFINITY -> this this == Double.MAX_VALUE -> this - this.nextDown() else -> this.nextUp() - this }` Returns the [Double] value nearest to this value in direction of positive infinity.

`@SinceKotlin("1.2")@public actual fun Double.nextUp(): Double = when { this.isNaN() || this == Double.POSITIVE_INFINITY -> this this == 0.0 -> Double.MIN_VALUE else -> Double.fromBits(this.toRawBits() + if (this > 0) 1 else -1) }` Returns the [Double] value nearest to this value in direction of negative infinity.

`@SinceKotlin("1.2")@public actual fun Double.nextDown(): Double = when { this.isNaN() || this == Double.NEGATIVE_INFINITY -> this this == 0.0 -> -Double.MIN_VALUE else -> Double.fromBits(this.toRawBits() + if (this > 0) -1 else 1) }` Returns the [Double] value nearest to this value in direction from this value towards the value [to].

`Special cases: x.nextTowards(y)` is `NaN` if either `x` or `y` are `NaN`.

`x.nextTowards(x) == x`

`@SinceKotlin("1.2")@public actual fun Double.nextTowards(to: Double): Double = when { this.isNaN() || to.isNaN() -> Double.NaN to == this -> to to > this -> this.nextUp() else /* to < this */ -> this.nextDown() }` Rounds this [Double] value to the nearest integer and converts the result to [Int]. Ties are rounded towards positive infinity.

`Special cases: x.roundToInt() == Int.MAX_VALUE` when `x > Int.MAX_VALUE`, `x.roundToInt() == Int.MIN_VALUE` when `x < Int.MIN_VALUE`.

`@throws IllegalArgumentException` when this value is `NaN`.

`@SinceKotlin("1.2")@public actual fun Double.roundToInt(): Int = when { this.isNaN() -> throw IllegalArgumentException("Cannot round NaN value.") this > Int.MAX_VALUE -> Int.MAX_VALUE this < Int.MIN_VALUE -> Int.MIN_VALUE else -> nativeMath.round(this).toInt() }` Rounds this [Double] value to the nearest integer and converts the result to [Long]. Ties are rounded towards positive infinity.

`Special cases: x.roundToLong() == Long.MAX_VALUE` when `x > Long.MAX_VALUE`, `x.roundToLong() == Long.MIN_VALUE` when `x < Long.MIN_VALUE`.

`@throws IllegalArgumentException` when this value is `NaN`.

`@SinceKotlin("1.2")@public actual fun Double.roundToLong(): Long = when { this.isNaN() -> throw IllegalArgumentException("Cannot round NaN value.") this > Long.MAX_VALUE -> Long.MAX_VALUE this < Long.MIN_VALUE -> Long.MIN_VALUE else -> nativeMath.round(this).toLong() }` // endregion

 ===== Float Math =====

 ===== Computes the

sine of the angle [x] given in radians.
`*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun sin(x: Float): Float = nativeMath.sin(x.toDouble()).toFloat()\n/** Computes the cosine of the angle [x] given in radians. Special cases: - cos(NaN|+Inf|-Inf) is NaN */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun cos(x: Float): Float = nativeMath.cos(x.toDouble()).toFloat()\n/** Computes the tangent of the angle [x] given in radians. Special cases: - tan(NaN|+Inf|-Inf) is NaN */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun tan(x: Float): Float = nativeMath.tan(x.toDouble()).toFloat()\n/** Computes the arc sine of the value [x]; the returned value is an angle in the range from -PI/2 to PI/2 radians. Special cases: - asin(x) is NaN, when abs(x) > 1 or x is NaN */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun asin(x: Float): Float = nativeMath.asin(x.toDouble()).toFloat()\n/** Computes the arc cosine of the value [x]; the returned value is an angle in the range from 0.0 to PI radians. Special cases: - acos(x) is NaN, when abs(x) > 1 or x is NaN */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun acos(x: Float): Float = nativeMath.acos(x.toDouble()).toFloat()\n/** Computes the arc tangent of the value [x]; the returned value is an angle in the range from -PI/2 to PI/2 radians. Special cases: - atan(NaN) is NaN */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun atan(x: Float): Float = nativeMath.atan(x.toDouble()).toFloat()\n/** Returns the angle theta of the polar coordinates (r, theta) that correspond to the rectangular coordinates (x, y) by computing the arc tangent of the value [y] / [x]; the returned value is an angle in the range from -PI to PI radians. Special cases: - atan2(0.0, 0.0) is 0.0 - atan2(0.0, x) is 0.0 for x > 0 and PI for x < 0 - atan2(-0.0, x) is -0.0 for x > 0 and -PI for x < 0 - atan2(y, +Inf) is 0.0 for 0 < y < +Inf and -0.0 for -Inf < y < 0 - atan2(y, -Inf) is PI for 0 < y < +Inf and -PI for -Inf < y < 0 - atan2(y, 0.0) is PI/2 for y > 0 and -PI/2 for y < 0 - atan2(+Inf, x) is PI/2 for finite x - atan2(-Inf, x) is -PI/2 for finite x - atan2(NaN, x) and atan2(y, NaN) is NaN */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun atan2(y: Float, x: Float): Float = nativeMath.atan2(y.toDouble(), x.toDouble()).toFloat()\n/** Computes the hyperbolic sine of the value [x]. Special cases: - sinh(NaN) is NaN - sinh(+Inf) is +Inf - sinh(-Inf) is -Inf */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun sinh(x: Float): Float = nativeMath.sinh(x.toDouble()).toFloat()\n/** Computes the hyperbolic cosine of the value [x]. Special cases: - cosh(NaN) is NaN - cosh(+Inf|-Inf) is +Inf */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun cosh(x: Float): Float = nativeMath.cosh(x.toDouble()).toFloat()\n/** Computes the hyperbolic tangent of the value [x]. Special cases: - tanh(NaN) is NaN - tanh(+Inf) is 1.0 - tanh(-Inf) is -1.0 */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun tanh(x: Float): Float = nativeMath.tanh(x.toDouble()).toFloat()\n/** Computes the inverse hyperbolic sine of the value [x]. The returned value is y such that sinh(y) == x. Special cases: - asinh(NaN) is NaN - asinh(+Inf) is +Inf - asinh(-Inf) is -Inf */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun asinh(x: Float): Float = nativeMath.asinh(x.toDouble()).toFloat()\n/** Computes the inverse hyperbolic cosine of the value [x]. The returned value is positive y such that cosh(y) == x. Special cases: - acosh(NaN) is NaN - acosh(x) is NaN when x < 1 - acosh(+Inf) is +Inf */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun acosh(x: Float): Float = nativeMath.acosh(x.toDouble()).toFloat()\n/** Computes the inverse hyperbolic tangent of the value [x]. The returned value is y such that tanh(y) == x. Special cases: - tanh(NaN) is NaN - tanh(x) is NaN when x > 1 or x < -1 - tanh(1.0) is +Inf - tanh(-1.0) is -Inf */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun atanh(x: Float): Float = nativeMath.atanh(x.toDouble()).toFloat()\n/** Computes sqrt(x^2 + y^2) without intermediate overflow or underflow. Special cases: - returns +Inf if any of arguments is infinite - returns NaN if any of arguments is NaN and the other is not infinite */\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline fun hypot(x: Float, y: Float): Float = nativeMath.hypot(x.toDouble(), y.toDouble()).toFloat()\n/** Computes the`

positive square root of the value [x].
Special cases: \sqrt{x} is NaN when $x < 0$ or x is NaN

```

@SinceKotlin("1.2")@InlineOnly\npublic actual inline fun sqrt(x: Float): Float =
nativeMath.sqrt(x.toDouble()).toFloat()

```

Computes Euler's number e raised to the power of the value [x].
Special cases: $\exp(\text{NaN})$ is NaN $\exp(+\text{Inf})$ is $+\text{Inf}$ $\exp(-\text{Inf})$ is 0.0

```

@SinceKotlin("1.2")@InlineOnly\npublic actual inline fun exp(x: Float): Float =
nativeMath.exp(x.toDouble()).toFloat()

```

Computes $\exp(x) - 1$.
This function can be implemented to produce more precise result for [x] near zero.
Special cases: $\text{expm1}(\text{NaN})$ is NaN $\text{expm1}(+\text{Inf})$ is $+\text{Inf}$ $\text{expm1}(-\text{Inf})$ is -1.0
@see [exp] function

```

@SinceKotlin("1.2")@InlineOnly\npublic actual inline fun expm1(x: Float): Float =
nativeMath.expm1(x.toDouble()).toFloat()

```

Computes the logarithm of the value [x] to the given [base].
Special cases: $\log(x, b)$ is NaN if either x or b are NaN $\log(x, b)$ is NaN when $x < 0$ or $b \leq 0$ or $b = 1.0$ $\log(+\text{Inf}, +\text{Inf})$ is NaN $\log(+\text{Inf}, b)$ is $+\text{Inf}$ for $b > 1$ and $-\text{Inf}$ for $b < 1$ $\log(0.0, b)$ is $-\text{Inf}$ for $b > 1$ and $+\text{Inf}$ for $b > 1$
See also logarithm functions for common fixed bases: [ln], [log10] and [log2].

```

@SinceKotlin("1.2")@InlineOnly\npublic actual inline fun log(x: Float, base: Float): Float = log(x.toDouble(), base.toDouble()).toFloat()

```

Computes the natural logarithm (base E) of the value [x].
Special cases: $\ln(\text{NaN})$ is NaN $\ln(x)$ is NaN when $x < 0.0$ $\ln(+\text{Inf})$ is $+\text{Inf}$ $\ln(0.0)$ is $-\text{Inf}$

```

@SinceKotlin("1.2")@InlineOnly\npublic actual inline fun ln(x: Float): Float = nativeMath.log(x.toDouble()).toFloat()

```

Computes the common logarithm (base 10) of the value [x].
@see [ln] function for special cases.

```

@SinceKotlin("1.2")@InlineOnly\npublic actual inline fun log10(x: Float): Float = nativeMath.log10(x.toDouble()).toFloat()

```

Computes the binary logarithm (base 2) of the value [x].
@see [ln] function for special cases.

```

@SinceKotlin("1.2")@InlineOnly\npublic actual inline fun log2(x: Float): Float =
nativeMath.log2(x.toDouble()).toFloat()

```

Computes $\ln(a + 1)$.
This function can be implemented to produce more precise result for [x] near zero.
Special cases: $\ln1p(\text{NaN})$ is NaN $\ln1p(x)$ is NaN where $x < -1.0$ $\ln1p(-1.0)$ is $-\text{Inf}$ $\ln1p(+\text{Inf})$ is $+\text{Inf}$
@see [ln] function
@see [expm1] function

```

@SinceKotlin("1.2")@InlineOnly\npublic actual inline fun ln1p(x: Float): Float =
nativeMath.log1p(x.toDouble()).toFloat()

```

Rounds the given value [x] to an integer towards positive infinity.
@return the smallest Float value that is greater than or equal to the given value [x] and is a mathematical integer.
Special cases: $\text{ceil}(x)$ is x where x is NaN or $+\text{Inf}$ or $-\text{Inf}$ or already a mathematical integer.

```

@SinceKotlin("1.2")@InlineOnly\npublic actual inline fun ceil(x: Float): Float =
nativeMath.ceil(x.toDouble()).toFloat()

```

Rounds the given value [x] to an integer towards negative infinity.
@return the largest Float value that is smaller than or equal to the given value [x] and is a mathematical integer.
Special cases: $\text{floor}(x)$ is x where x is NaN or $+\text{Inf}$ or $-\text{Inf}$ or already a mathematical integer.

```

@SinceKotlin("1.2")@InlineOnly\npublic actual inline fun floor(x: Float): Float =
nativeMath.floor(x.toDouble()).toFloat()

```

Rounds the given value [x] to an integer towards zero.
@return the value [x] having its fractional part truncated.
Special cases: $\text{truncate}(x)$ is x where x is NaN or $+\text{Inf}$ or $-\text{Inf}$ or already a mathematical integer.

```

@SinceKotlin("1.2")@InlineOnly\npublic actual inline fun truncate(x: Float): Float = truncate(x.toDouble()).toFloat()

```

Rounds the given value [x] towards the closest integer with ties rounded towards even integer.
Special cases: $\text{round}(x)$ is x where x is NaN or $+\text{Inf}$ or $-\text{Inf}$ or already a mathematical integer.

```

@SinceKotlin("1.2")@InlineOnly\npublic actual inline fun round(x: Float): Float =
round(x.toDouble()).toFloat()

```

Returns the absolute value of the given value [x].
Special cases: $\text{abs}(\text{NaN})$ is NaN
@see absoluteValue extension property for [Float]

```

@SinceKotlin("1.2")@InlineOnly\npublic actual inline fun abs(x: Float): Float =
nativeMath.abs(x.toDouble()).toFloat()

```

Returns the sign of the given value [x]: -1.0 if the value is negative, zero if the value is zero, 1.0 if the value is positive
Special case: $\text{sign}(\text{NaN})$ is NaN

```

@SinceKotlin("1.2")@InlineOnly\npublic actual inline fun sign(x: Float): Float =
nativeMath.sign(x.toDouble()).toFloat()

```

Returns the smaller of two values.
If either value is

`NaN`, then the result is `NaN`.
`SinceKotlin("1.2")@InlineOnly@public actual inline fun min(a: Float, b: Float): Float = nativeMath.min(a, b)`
`min(a, b)` Returns the greater of two values.
 If either value is `NaN`, then the result is `NaN`.
`SinceKotlin("1.2")@InlineOnly@public actual inline fun max(a: Float, b: Float): Float = nativeMath.max(a, b)`
`max(a, b)` Returns the greater of two values.
`pow(x)` Raises this value to the power [x].
 Special cases:
`b.pow(0.0)` is `1.0`
`b.pow(1.0)` is `b`
`b.pow(NaN)` is `NaN`
`NaN.pow(x)` is `NaN` for `x != 0.0`
`b.pow(Inf)` is `NaN` for `abs(b) == 1.0`
`b.pow(x)` is `NaN` for `b < 0` and `x` is finite and not an integer.
`SinceKotlin("1.2")@InlineOnly@public actual inline fun Float.pow(x: Float): Float = nativeMath.pow(this.toDouble(), x.toDouble()).toFloat()`
`pow(x)` Raises this value to the integer power [n].
 See the other overload of [pow] for details.
`SinceKotlin("1.2")@InlineOnly@public actual inline fun Float.pow(n: Int): Float = nativeMath.pow(this.toDouble(), n.toDouble()).toFloat()`
`pow(n)` Returns the absolute value of this value.
 Special cases:
`NaN.absoluteValue` is `NaN`
`@see abs function`
`SinceKotlin("1.2")@InlineOnly@public actual inline val Float.absoluteValue: Float get() = nativeMath.abs(this.toDouble()).toFloat()`
`absoluteValue` Returns the sign of this value:
`-1.0` if the value is negative,
`0` if the value is zero,
`1.0` if the value is positive.
 Special case:
`NaN.sign` is `NaN`.
`SinceKotlin("1.2")@InlineOnly@public actual inline val Float.sign: Float get() = nativeMath.sign(this.toDouble()).toFloat()`
`sign` Returns this value with the sign bit same as of the [sign] value.
 If [sign] is `NaN` the sign of the result is undefined.
`SinceKotlin("1.2")@InlineOnly@public actual inline fun Float.withSign(sign: Float): Float = this.toDouble().withSign(sign.toDouble()).toFloat()`
`withSign(sign)` Returns this value with the sign bit same as of the [sign] value.
`SinceKotlin("1.2")@InlineOnly@public actual inline fun Float.withSign(sign: Int): Float = this.toDouble().withSign(sign.toDouble()).toFloat()`
`withSign(sign)` Rounds this [Float] value to the nearest integer and converts the result to [Int].
 Ties are rounded towards positive infinity.
 Special cases:
`x.roundToInt() == Int.MAX_VALUE` when `x > Int.MAX_VALUE`
`x.roundToInt() == Int.MIN_VALUE` when `x < Int.MIN_VALUE`
`@throws IllegalArgumentException` when this value is `NaN`.
`SinceKotlin("1.2")@InlineOnly@public actual inline fun Float.roundToInt(): Int = toDouble().roundToInt()`
`roundToInt()` Rounds this [Float] value to the nearest integer and converts the result to [Long].
 Ties are rounded towards positive infinity.
 Special cases:
`x.roundToLong() == Long.MAX_VALUE` when `x > Long.MAX_VALUE`
`x.roundToLong() == Long.MIN_VALUE` when `x < Long.MIN_VALUE`
`@throws IllegalArgumentException` when this value is `NaN`.
`SinceKotlin("1.2")@InlineOnly@public actual inline fun Float.roundToLong(): Long = toDouble().roundToLong()`
`roundToLong()` Returns the absolute value of the given value [n].
 Special cases:
`abs(Int.MIN_VALUE)` is `Int.MIN_VALUE` due to an overflow
`@see absoluteValue extension property for [Int]`
`TODO: remove manual 'or' when KT-19290 is fixed`
`SinceKotlin("1.2")@public actual fun abs(n: Int): Int = if (n < 0) (-n or 0) else n`
`abs(n)` Returns the smaller of two values.
`SinceKotlin("1.2")@InlineOnly@public actual inline fun min(a: Int, b: Int): Int = nativeMath.min(a, b)`
`min(a, b)` Returns the greater of two values.
`SinceKotlin("1.2")@InlineOnly@public actual inline fun max(a: Int, b: Int): Int = nativeMath.max(a, b)`
`max(a, b)` Returns the absolute value of this value.
 Special cases:
`Int.MIN_VALUE.absoluteValue` is `Int.MIN_VALUE` due to an overflow
`@see abs function`
`SinceKotlin("1.2")@InlineOnly@public actual inline val Int.absoluteValue: Int get() = abs(this)`
`absoluteValue` Returns the sign of this value:
`-1` if the value is negative,
`0` if the value is zero,
`1` if the value is positive.
`SinceKotlin("1.2")@public actual val Int.sign: Int get() = when { this < 0 -> -1 this > 0 -> 1 else -> 0 }`
`sign` Returns the absolute value of the given value [n].
 Special cases:
`abs(Long.MIN_VALUE)` is `Long.MIN_VALUE` due to an overflow
`@see absoluteValue extension property for [Long]`
`SinceKotlin("1.2")@public actual fun abs(n: Long): Long = if (n < 0) -n else n`
`abs(n)` Returns the smaller of two values.
`SinceKotlin("1.2")@Suppress("NOTHING_TO_INLINE")@public actual inline fun min(a: Long, b:`

Long): Long = if (a <= b) a else b\n\n/**\n * Returns the greater of two values.\n

```

*\n@SinceKotlin("1.2")\n@Suppress("NOTHING_TO_INLINE")\npublic actual inline fun max(a: Long, b:
Long): Long = if (a >= b) a else b\n\n/**\n * Returns the absolute value of this value.\n * \n * Special cases:\n * -
`Long.MIN_VALUE.absoluteValue` is `Long.MIN_VALUE` due to an overflow\n * \n * @see abs function\n
*\n@SinceKotlin("1.2")\n@InlineOnly\npublic actual inline val Long.absoluteValue: Long get() =
abs(this)\n\n/**\n * Returns the sign of this value:\n * - `1` if the value is negative,\n * - `0` if the value is zero,\n
* - `1` if the value is positive\n *\n@SinceKotlin("1.2")\npublic actual val Long.sign: Int get() = when {\n this
< 0 -> -1\n this > 0 -> 1\n else -> 0\n}\n\n// endregion\n","/*\n * Copyright 2010-2021 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n *\n@npackage kotlin\n\n/**\n * Returns `true` if the specified
number is a\n * Not-a-Number (NaN) value, `false` otherwise.\n *\npublic actual fun Double.isNaN(): Boolean =
this != this\n\n/**\n * Returns `true` if the specified number is a\n * Not-a-Number (NaN) value, `false` otherwise.\n
*\npublic actual fun Float.isNaN(): Boolean = this != this\n\n/**\n * Returns `true` if this value is infinitely large in
magnitude.\n *\npublic actual fun Double.isInfinite(): Boolean = this == Double.POSITIVE_INFINITY || this ==
Double.NEGATIVE_INFINITY\n\n/**\n * Returns `true` if this value is infinitely large in magnitude.\n *\npublic
actual fun Float.isInfinite(): Boolean = this == Float.POSITIVE_INFINITY || this ==
Float.NEGATIVE_INFINITY\n\n/**\n * Returns `true` if the argument is a finite floating-point value; returns
`false` otherwise (for `NaN` and infinity arguments).\n *\npublic actual fun Double.isFinite(): Boolean =
!isInfinite() && !isNaN()\n\n/**\n * Returns `true` if the argument is a finite floating-point value; returns `false`
otherwise (for `NaN` and infinity arguments).\n *\npublic actual fun Float.isFinite(): Boolean = !isInfinite() &&
!isNaN()\n\n/**\n * Counts the number of set bits in the binary representation of this [Int] number.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Int.countOneBits(): Int {\n // Hacker's Delight 5-1 algorithm\n var v = this\n v = (v and 0x55555555) +
(v.ushr(1) and 0x55555555)\n v = (v and 0x33333333) + (v.ushr(2) and 0x33333333)\n v = (v and 0x0F0F0F0F)
+ (v.ushr(4) and 0x0F0F0F0F)\n v = (v and 0x00FF00FF) + (v.ushr(8) and 0x00FF00FF)\n v = (v and
0x0000FFFF) + (v.ushr(16))\n return v\n}\n\n/**\n * Counts the number of consecutive most significant bits that
are zero in the binary representation of this [Int] number.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npubli
c actual inline fun Int.countLeadingZeroBits(): Int = JsMath.clz32(this)\n\n/**\n * Counts the number of
consecutive least significant bits that are zero in the binary representation of this [Int] number.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Int.countTrailingZeroBits(): Int =\n // Hacker's Delight 5-4 algorithm for expressing countTrailingZeroBits with
countLeadingZeroBits\n Int.SIZE_BITS - (this or -this).inv().countLeadingZeroBits()\n\n/**\n * Returns a
number having a single bit set in the position of the most significant set bit of this [Int] number,\n * or zero, if this
number is zero.\n *\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Int.takeHighestOneBit(): Int =\n if (this == 0) 0 else 1.shl(Int.SIZE_BITS - 1 - countLeadingZeroBits())\n\n/**\n *
Returns a number having a single bit set in the position of the least significant set bit of this [Int] number,\n * or
zero, if this number is zero.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Int.takeLowestOneBit(): Int =\n // Hacker's Delight 2-1 algorithm for isolating rightmost 1-bit\n this and -
this\n\n/**\n * Rotates the binary representation of this [Int] number left by the specified [bitCount] number of
bits.\n * The most significant bits pushed out from the left side reenter the number as the least significant bits on the
right side.\n * \n * Rotating the number left by a negative bit count is the same as rotating it right by the negated bit
count:\n * `number.rotateLeft(-n) == number.rotateRight(n)`\n * \n * Rotating by a multiple of [Int.SIZE_BITS] (32)
returns the same number, or more generally\n * `number.rotateLeft(n) == number.rotateLeft(n % 32)`\n
*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Int.rotateLeft(bitCount: Int): Int =\n shl(bitCount) or ushr(Int.SIZE_BITS - bitCount)\n\n/**\n * Rotates the
binary representation of this [Int] number right by the specified [bitCount] number of bits.\n * The least significant

```



```

bits pushed out from the right side reenter the number as the most significant bits on the left side.\n * Rotating
the number right by a negative bit count is the same as rotating it left by the negated bit count:\n *
`number.rotateRight(-n) == number.rotateLeft(n)`\n * Rotating by a multiple of [Int.SIZE_BITS] (32) returns
the same number, or more generally\n * `number.rotateRight(n) == number.rotateRight(n % 32)`\n
*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Int.rotateRight(bitCount: Int): Int =\n    shl(Int.SIZE_BITS - bitCount) or ushr(bitCount)\n\n/>\n * Counts the
number of set bits in the binary representation of this [Long] number.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Long.countOneBits(): Int =\n    high.countOneBits() + low.countOneBits()\n\n/>\n * Counts the number of
consecutive most significant bits that are zero in the binary representation of this [Long] number.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Long.countLeadingZeroBits(): Int =\n    when (val high = this.high) {\n        0 -> Int.SIZE_BITS +
low.countLeadingZeroBits()\n        else -> high.countLeadingZeroBits()\n    }\n\n/>\n * Counts the number of
consecutive least significant bits that are zero in the binary representation of this [Long] number.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Long.countTrailingZeroBits(): Int =\n    when (val low = this.low) {\n        0 -> Int.SIZE_BITS +
high.countTrailingZeroBits()\n        else -> low.countTrailingZeroBits()\n    }\n\n/>\n * Returns a number having a
single bit set in the position of the most significant set bit of this [Long] number,\n * or zero, if this number is
zero.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Long.takeHighestOneBit(): Long =\n    when (val high = this.high) {\n        0 -> Long(low.takeHighestOneBit(),
0)\n        else -> Long(0, high.takeHighestOneBit())\n    }\n\n/>\n * Returns a number having a single bit set in the
position of the least significant set bit of this [Long] number,\n * or zero, if this number is zero.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Long.takeLowestOneBit(): Long =\n    when (val low = this.low) {\n        0 -> Long(0, high.takeLowestOneBit())\n
        else -> Long(low.takeLowestOneBit(), 0)\n    }\n\n/>\n * Rotates the binary representation of this [Long]
number left by the specified [bitCount] number of bits.\n * The most significant bits pushed out from the left side
reenter the number as the least significant bits on the right side.\n * Rotating the number left by a negative bit
count is the same as rotating it right by the negated bit count:\n * `number.rotateLeft(-n) ==
number.rotateRight(n)`\n * Rotating by a multiple of [Long.SIZE_BITS] (64) returns the same number, or more
generally\n * `number.rotateLeft(n) == number.rotateLeft(n % 64)`\n
*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic actual fun
Long.rotateLeft(bitCount: Int): Long {\n    if ((bitCount and 31) != 0) {\n        val low = this.low\n        val high =
this.high\n        val newLow = low.shl(bitCount) or high.ushr(-bitCount)\n        val newHigh = high.shl(bitCount) or
low.ushr(-bitCount)\n        return if ((bitCount and 32) == 0) Long(newLow, newHigh) else Long(newHigh,
newLow)\n    } else {\n        return if ((bitCount and 32) == 0) this else Long(high, low)\n    }\n\n/>\n *
Rotates the binary representation of this [Long] number right by the specified [bitCount] number of bits.\n * The
least significant bits pushed out from the right side reenter the number as the most significant bits on the left side.\n
*\n * Rotating the number right by a negative bit count is the same as rotating it left by the negated bit count:\n *
`number.rotateRight(-n) == number.rotateLeft(n)`\n * Rotating by a multiple of [Long.SIZE_BITS] (64) returns
the same number, or more generally\n * `number.rotateRight(n) == number.rotateRight(n % 64)`\n
*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic
inline fun Long.rotateRight(bitCount: Int): Long = rotateLeft(-bitCount)\n\n/>\n * Copyright 2010-2018
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*\n\npackage kotlin.js\nimport
kotlin.internal.LowPriorityInOverloadResolution\n\n/>\n * Exposes the JavaScript [Promise
object](https://developer.mozilla.org/en/docs/Web/JavaScript/Reference/Global_Objects/Promise) to Kotlin.\n
*\n@Suppress("NOT_DOCUMENTED")\npublic open external class Promise<out T>(executor: (resolve: (T) ->
Unit, reject: (Throwable) -> Unit) -> Unit) {\n    @LowPriorityInOverloadResolution\n    public open fun <S>

```

```

then(onFulfilled: ((T) -> S)?): Promise<S>\n\n @LowPriorityInOverloadResolution\n public open fun <S>
then(onFulfilled: ((T) -> S)?, onRejected: ((Throwable) -> S)?): Promise<S>\n\n public open fun <S>
catch(onRejected: (Throwable) -> S): Promise<S>\n\n companion object {\n public fun <S> all(promise:
Array<out Promise<S>>): Promise<Array<out S>>\n\n public fun <S> race(promise: Array<out
Promise<S>>): Promise<S>\n\n public fun reject(e: Throwable): Promise<Nothing>\n\n public fun <S>
resolve(e: S): Promise<S>\n\n public fun <S> resolve(e: Promise<S>): Promise<S>\n\n }\n}\n\n// It's workaround
for KT-19672 since we can fix it properly until KT-11265 isn't fixed.\n\ninline fun <T, S>
Promise<Promise<T>>.then(\n noinline onFulfilled: ((T) -> S)?\n): Promise<S> {\n return
this.unsafeCast<Promise<T>>().then(onFulfilled)\n}\n\n\ninline fun <T, S> Promise<Promise<T>>.then(\n noinline
onFulfilled: ((T) -> S)?,\n noinline onRejected: ((Throwable) -> S)?\n): Promise<S> {\n return
this.unsafeCast<Promise<T>>().then(onFulfilled, onRejected)\n}\n}\n\n"/*\n * Copyright 2010-2018 JetBrains s.r.o.
and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license
that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.random\n\nimport
kotlin.math.pow\n\ninternal actual fun defaultPlatformRandom(): Random =\n Random(js(\n(Math.random() *
Math.pow(2, 32)) | 0\)).unsafeCast<Int>())\n\nprivate val INV_2_26: Double = 2.0.pow(-26)\nprivate val
INV_2_53: Double = 2.0.pow(-53)\n\ninternal actual fun doubleFromParts(hi26: Int, low27: Int): Double =\n hi26 *
INV_2_26 + low27 * INV_2_53"/*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlin.reflect\n\nimport findAssociatedObject\n\n/**\n * The
experimental marker for associated objects API.\n * Any usage of a declaration annotated with
`@ExperimentalAssociatedObjects` must be accepted either by\n * annotating that usage with the [OptIn]
annotation, e.g. `@OptIn(ExperimentalAssociatedObjects::class)`,\n * or by using the compiler argument
`-Xopt-in=kotlin.reflect.ExperimentalAssociatedObjects`. \n */\n\n@RequiresOptIn(level =
RequiresOptIn.Level.ERROR)\n@Retention(value = AnnotationRetention.BINARY)\n\npublic annotation class
ExperimentalAssociatedObjects\n\n/**\n * Makes the annotated annotation class an associated object key.\n */\n *
An associated object key annotation should have single [KClass] parameter.\n * When applied to a class with
reference to an object declaration as an argument, it binds\n * the object to the class, making this binding
discoverable at runtime using [findAssociatedObject].\n\n */\n\n@ExperimentalAssociatedObjects\n@Retention(AnnotationRetention.BINARY)\n@Target(AnnotationTarget.A
NNOTATION_CLASS)\n\npublic annotation class AssociatedObjectKey\n\n/**\n * If [T] is an
@[AssociatedObjectKey]-annotated annotation class and [this] class is annotated with @[T] (`S::class`),\n * returns
object `S`. \n */\n * Otherwise returns `null`. \n */\n\n@ExperimentalAssociatedObjects\n\npublic inline fun <reified T :
Annotation> KClass<*>.findAssociatedObject(): Any? =\n this.findAssociatedObject(T::class)"/*\n * Copyright
2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed
by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.js\n\nimport
getKClass\n\nimport kotlin.reflect.KClass\n\nimport kotlin.reflect.js.internal.KClassImpl\n\n/**\n * Represents the
constructor of a class. Instances of `JsClass` can be passed to JavaScript APIs that expect a constructor reference.\n\n */\n\nexternal interface JsClass<T : Any> {\n /**\n * Returns the unqualified name of the class represented by
this instance.\n */\n val name: String\n}\n\n/**\n * Obtains a constructor reference for the given `KClass`. \n\n */\n\nnval <T : Any> KClass<T>.js: JsClass<T>\n get() = (this as KClassImpl<T>).jClass\n\n/**\n * Obtains a
`KClass` instance for the given constructor reference.\n */\n\nnval <T : Any> JsClass<T>.kotlin: KClass<T>\n get()
= getKClass(this)"/*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlin.reflect.js.internal\n\nimport kotlin.reflect.*\n\ninternal abstract
class KClassImpl<T : Any>(\n internal open val jClass: JsClass<T>\n) : KClass<T> {\n\n override val
qualifiedName: String?\n get() = TODO()\n\n override fun equals(other: Any?): Boolean {\n return other
is KClassImpl<*> && jClass == other.jClass\n }\n\n // TODO: use FQN\n override fun hashCode(): Int =
simpleName?.hashCode() ?: 0\n\n override fun toString(): String {\n // TODO: use FQN\n return `class`

```

```

$simpleName\n } \n\ninternal class SimpleKClassImpl<T : Any>(jClass: JsClass<T>) :
KClassImpl<T>(jClass) {\n  override val simpleName: String? =
jClass.asDynamic().`$metadata$`.simpleName.unsafeCast<String?>()\n\n  override fun isInstance(value: Any?):
Boolean {\n    return jsIsType(value, jClass)\n  } \n} \n\ninternal class PrimitiveKClassImpl<T : Any>(\n
jClass: JsClass<T>,\n  private val givenSimpleName: String,\n  private val isInstanceFunction: (Any?) ->
Boolean\n) : KClassImpl<T>(jClass) {\n  override fun equals(other: Any?): Boolean {\n    if (other !is
PrimitiveKClassImpl<*>) return false\n    return super.equals(other) && givenSimpleName ==
other.givenSimpleName\n  } \n\n  override val simpleName: String? get() = givenSimpleName\n\n  override fun
isInstance(value: Any?): Boolean {\n    return isInstanceFunction(value)\n  } \n} \n\ninternal object
NothingKClassImpl : KClassImpl<Nothing>(js("Object")) {\n  override val simpleName: String =
`"Nothing`\n\n  override fun isInstance(value: Any?): Boolean = false\n\n  override val jClass:
JsClass<Nothing>\n    get() = throw UnsupportedOperationException("There's no native JS class for Nothing
type")\n\n  override fun equals(other: Any?): Boolean = other === this\n\n  override fun hashCode(): Int =
0\n} \n\ninternal class ErrorKClass : KClass<Nothing> {\n  override val simpleName: String? get() =
error("Unknown simpleName for ErrorKClass")\n\n  override val qualifiedName: String? get() = error("Unknown
qualifiedName for ErrorKClass")\n\n  override fun isInstance(value: Any?): Boolean = error("Can't check
isInstance on ErrorKClass")\n\n  override fun equals(other: Any?): Boolean = other === this\n\n  override fun
hashCode(): Int = 0\n} \n", /*\n * Copyright 2010-2019 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */ \n\npackage kotlin.reflect\n\ninternal actual inline val
KClass<*>.qualifiedOrSimpleName: String?\n  get() = simpleName, /*\n * Copyright 2010-2018 JetBrains s.r.o.
and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license
that can be found in the license/LICENSE.txt file.\n */ \n\n// a package is omitted to get declarations directly under
the module\n\n// TODO: Remove once JsReflectionAPIChecker supports more reflection
types\n@file:Suppress("Unsupported")\n\nimport kotlin.reflect.*\nimport
kotlin.reflect.js.internal.*\n\n@JsName("createKType")\ninternal fun createKType(\n  classifier: KClassifier,\n
arguments: Array<KTypeProjection>,\n  isMarkedNullable: Boolean\n) =\n  KTypeImpl(classifier,
arguments.asList(), isMarkedNullable)\n\n@JsName("createDynamicKType")\ninternal fun
createDynamicKType(): KType = DynamicKType\n\n@JsName("markKTypeNullable")\ninternal fun
markKTypeNullable(kType: KType) = KTypeImpl(kType.classifier!!, kType.arguments,
true)\n\n@JsName("createKTypeParameter")\ninternal fun createKTypeParameter(\n  name: String,\n
upperBounds: Array<KType>,\n  variance: String\n): KTypeParameter {\n  val kVariance = when (variance) {\n
  "in" -> KVariance.IN\n  "out" -> KVariance.OUT\n  else -> KVariance.INVARIANT\n  }\n\n  return
KTypeParameterImpl(name, upperBounds.asList(), kVariance,
false)\n}\n\n@JsName("getStarKTypeProjection")\ninternal fun getStarKTypeProjection(): KTypeProjection =\n
KTypeProjection.STAR\n\n@JsName("createCovariantKTypeProjection")\ninternal fun
createCovariantKTypeProjection(type: KType): KTypeProjection =\n
KTypeProjection.covariant(type)\n\n@JsName("createInvariantKTypeProjection")\ninternal fun
createInvariantKTypeProjection(type: KType): KTypeProjection =\n
KTypeProjection.invariant(type)\n\n@JsName("createContravariantKTypeProjection")\ninternal fun
createContravariantKTypeProjection(type: KType): KTypeProjection =\n
KTypeProjection.contravariant(type)\n", /*\n * Copyright 2010-2019 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */ \n\npackage kotlin.reflect.js.internal\n\nimport kotlin.reflect.*\n\ninternal class
KTypeImpl(\n  override val classifier: KClassifier,\n  override val arguments: List<KTypeProjection>,\n
override val isMarkedNullable: Boolean\n) : KType {\n  override fun equals(other: Any?): Boolean =\n    other
is KTypeImpl &&\n      classifier == other.classifier && arguments == other.arguments &&
isMarkedNullable == other.isMarkedNullable\n\n  override fun hashCode(): Int =\n    (classifier.hashCode() * 31

```

```

+ arguments.hashCode()) * 31 + isMarkedNullable.hashCode()\n\n override fun toString(): String {\n    val
kClass = (classifier as? KClass<*>)\n    val classifierName = when {\n        kClass == null ->
classifier.toString()\n        kClass.simpleName != null -> kClass.simpleName\n        else -> \"(non-denotable
type)\"\n    }\n\n    val args =\n        if (arguments.isEmpty()) \"\"\n        else arguments.joinToString(\" \", \"
\", \"<\", \">\") { it.asString() }\n    val nullable = if (isMarkedNullable) \"?\" else \"\"\n\n    return classifierName
+ args + nullable\n }\n\n // TODO: this should be the implementation of KTypeProjection.toString, see KT-
30071\n private fun KTypeProjection.asString(): String {\n    if (variance == null) return \"*\n    return
variance.prefixString() + type.toString()\n }\n}\n\ninternal object DynamicKType : KType {\n override val
classifier: KClassifier? = null\n override val arguments: List<KTypeProjection> = emptyList()\n override val
isMarkedNullable: Boolean = false\n override fun toString(): String = \"dynamic\"\n}\n\ninternal fun
KVariance.prefixString() =\n when (this) {\n    KVariance.INVARIANT -> \"\"\n    KVariance.IN -> \"in \"\n
KVariance.OUT -> \"out \"\n }\n\", \"/*\n * Copyright 2010-2019 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlin.reflect.js.internal\n\nimport kotlin.reflect.*\n\ninternal data class
KTypeParameterImpl(\n override val name: String,\n override val upperBounds: List<KType>,\n override val
variance: KVariance,\n override val isReified: Boolean)\n) : KTypeParameter {\n override fun toString(): String
= name\n}, \"/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use
of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*/\n\npackage kotlin.reflect.js.internal\n\nimport kotlin.js.JsClass\n\n@JsName(\"PrimitiveClasses\")\n\ninternal
object PrimitiveClasses {\n @JsName(\"anyClass\")\n val anyClass =
PrimitiveKClassImpl(js(\"Object\").unsafeCast<JsClass<Any>>(), \"Any\", { it is Any })\n}\n\n
@JsName(\"numberClass\")\n val numberClass =
PrimitiveKClassImpl(js(\"Number\").unsafeCast<JsClass<Number>>(), \"Number\", { it is Number })\n}\n\n
@JsName(\"nothingClass\")\n val nothingClass = NothingKClassImpl\n\n @JsName(\"booleanClass\")\n val
booleanClass = PrimitiveKClassImpl(js(\"Boolean\").unsafeCast<JsClass<Boolean>>(), \"Boolean\", { it is Boolean
})\n}\n\n @JsName(\"byteClass\")\n val byteClass =
PrimitiveKClassImpl(js(\"Number\").unsafeCast<JsClass<Byte>>(), \"Byte\", { it is Byte })\n}\n\n
@JsName(\"shortClass\")\n val shortClass = PrimitiveKClassImpl(js(\"Number\").unsafeCast<JsClass<Short>>(),
\"Short\", { it is Short })\n}\n\n @JsName(\"intClass\")\n val intClass =
PrimitiveKClassImpl(js(\"Number\").unsafeCast<JsClass<Int>>(), \"Int\", { it is Int })\n}\n\n
@JsName(\"floatClass\")\n val floatClass = PrimitiveKClassImpl(js(\"Number\").unsafeCast<JsClass<Float>>(),
\"Float\", { it is Float })\n}\n\n @JsName(\"doubleClass\")\n val doubleClass =
PrimitiveKClassImpl(js(\"Number\").unsafeCast<JsClass<Double>>(), \"Double\", { it is Double })\n}\n\n
@JsName(\"arrayClass\")\n val arrayClass =
PrimitiveKClassImpl(js(\"Array\").unsafeCast<JsClass<Array<*>>>(), \"Array\", { it is Array<*> })\n}\n\n
@JsName(\"stringClass\")\n val stringClass = PrimitiveKClassImpl(js(\"String\").unsafeCast<JsClass<String>>(),
\"String\", { it is String })\n}\n\n @JsName(\"throwableClass\")\n val throwableClass =
PrimitiveKClassImpl(js(\"Error\").unsafeCast<JsClass<Throwable>>(), \"Throwable\", { it is Throwable })\n}\n\n
@JsName(\"booleanArrayClass\")\n val booleanArrayClass =
PrimitiveKClassImpl(js(\"Array\").unsafeCast<JsClass<BooleanArray>>(), \"BooleanArray\", { it is BooleanArray
})\n}\n\n @JsName(\"charArrayClass\")\n val charArrayClass =
PrimitiveKClassImpl(js(\"Uint16Array\").unsafeCast<JsClass<CharArray>>(), \"CharArray\", { it is CharArray
})\n}\n\n @JsName(\"byteArrayClass\")\n val byteArrayClass =
PrimitiveKClassImpl(js(\"Int8Array\").unsafeCast<JsClass<ByteArray>>(), \"ByteArray\", { it is ByteArray })\n}\n\n
@JsName(\"shortArrayClass\")\n val shortArrayClass =
PrimitiveKClassImpl(js(\"Int16Array\").unsafeCast<JsClass<ShortArray>>(), \"ShortArray\", { it is ShortArray
})\n}\n\n @JsName(\"intArrayClass\")\n val intArrayClass =
PrimitiveKClassImpl(js(\"Int32Array\").unsafeCast<JsClass<IntArray>>(), \"IntArray\", { it is IntArray })\n}\n\n

```

```

@JsName("longArrayClass")\n val longArrayClass =
PrimitiveKClassImpl(js("Array").unsafeCast<JsClass<LongArray>>(), "LongArray", { it is LongArray })\n\n
@JsName("floatArrayClass")\n val floatArrayClass =
PrimitiveKClassImpl(js("Float32Array").unsafeCast<JsClass<FloatArray>>(), "FloatArray", { it is FloatArray
})\n\n @JsName("doubleArrayClass")\n val doubleArrayClass =
PrimitiveKClassImpl(js("Float64Array").unsafeCast<JsClass<DoubleArray>>(), "DoubleArray", { it is
DoubleArray })\n\n @JsName("functionClass")\n fun functionClass(arity: Int): KClassImpl<Any> {\n
return functionClasses.get(arity) ?: run {\n val result =
PrimitiveKClassImpl(js("Function").unsafeCast<JsClass<Any>>(), "Function$arity",\n
{ jsTypeOf(it) === "function" && it.asDynamic().length === arity })\n functionClasses.asDynamic()[arity]
= result\n result\n }\n }\n\nprivate val functionClasses =
arrayOfNulls<KClassImpl<Any>>(0),"/*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\n a package is omitted to get declarations directly under the module\n\nimport
kotlin.reflect.*\nimport kotlin.reflect.js.internal.*\n\n@JsName("getKClass")\ninternal fun <T : Any>
getKClass(jClass: Any /* JsClass<T> | Array<JsClass<T>> */): KClass<T> {\n return if
(js("Array").isArray(jClass)) {\n getKClassM(jClass.unsafeCast<Array<JsClass<T>>>())\n } else {\n
getKClass1(jClass.unsafeCast<JsClass<T>>())\n }\n }\n\n@JsName("getKClassM")\ninternal fun <T : Any>
getKClassM(jClasses: Array<JsClass<T>>): KClass<T> = when (jClasses.size) {\n 1 ->
getKClass1(jClasses[0])\n 0 -> NothingKClassImpl.unsafeCast<KClass<T>>()\n else ->
ErrorKClass().unsafeCast<KClass<T>>()\n }\n\n@JsName("getKClassFromExpression")\ninternal fun <T : Any>
getKClassFromExpression(e: T): KClass<T> =\n when (jsTypeOf(e)) {\n "string" ->
PrimitiveClasses.stringClass\n "number" -> if (jsBitwiseOr(e, 0).asDynamic() === e)
PrimitiveClasses.intClass else PrimitiveClasses.doubleClass\n "boolean" -> PrimitiveClasses.booleanClass\n
"function" -> PrimitiveClasses.functionClass(e.asDynamic().length)\n else -> {\n when {\n e
is BooleanArray -> PrimitiveClasses.booleanArrayClass\n e is CharArray ->
PrimitiveClasses.charArrayClass\n e is ByteArray -> PrimitiveClasses.byteArrayClass\n e is
ShortArray -> PrimitiveClasses.shortArrayClass\n e is IntArray -> PrimitiveClasses.intArrayClass\n
e is LongArray -> PrimitiveClasses.longArrayClass\n e is FloatArray ->
PrimitiveClasses.floatArrayClass\n e is DoubleArray -> PrimitiveClasses.doubleArrayClass\n e is
KClass<*> -> KClass::class\n e is Array<*> -> PrimitiveClasses.arrayClass\n else -> {\n
val constructor = js("Object").getPrototypeOf(e).constructor\n when {\n constructor
=== js("Object") -> PrimitiveClasses.anyClass\n constructor === js("Error") ->
PrimitiveClasses.throwableClass\n else -> {\n val jsClass: JsClass<T> =
constructor\n getKClass1(jsClass)\n }\n }\n }\n }\n\n@JsName("getKClass1")\ninternal fun <T : Any> getKClass1(jClass:
JsClass<T>): KClass<T> {\n if (jClass === js("String")) return
PrimitiveClasses.stringClass.unsafeCast<KClass<T>>()\n val metadata = jClass.asDynamic().`$metadata$\`\n\n
return if (metadata != null) {\n if (metadata.`$kClass$` == null) {\n val kClass =
SimpleKClassImpl(jClass)\n metadata.`$kClass$` = kClass\n kClass\n } else {\n
metadata.`$kClass$`\n }\n } else {\n SimpleKClassImpl(jClass)\n }\n }"/*\n * Copyright 2010-2018
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.js\n\n/**\n * Exposes
the JavaScript [RegExp
object](https://developer.mozilla.org/en/docs/Web/JavaScript/Reference/Global_Objects/RegExp) to Kotlin.\n
*/\n\n@Suppress("NOT_DOCUMENTED")\npublic external class RegExp(pattern: String, flags: String? =
definedExternally) {\n\n public fun test(str: String): Boolean\n\n public fun exec(str: String): RegExpMatch?\n\n
public override fun toString(): String\n\n /**\n * The lastIndex is a read/write integer property of regular

```

```

expressions that specifies the index at which to start the next match.\n
 * \n public var lastIndex: Int\n\n public
val global: Boolean\n public val ignoreCase: Boolean\n public val multiline: Boolean\n}\n\n/**\n * Resets the
regular expression so that subsequent [RegExp.test] and [RegExp.exec] calls will match starting with the beginning
of the input string.\n
 * \n\npublic fun RegExp.reset() {\n    lastIndex = 0\n}\n\n// TODO: Inherit from array or
introduce asArray() extension\n\n/**\n * Represents the return value of [RegExp.exec].\n
 * \n\n@Suppress("NOT_DOCUMENTED")\n\npublic external interface RegExpMatch {\n    public val index: Int\n
public val input: String\n    public val length: Int\n}\n\n\n/**\n * Returns the entire text matched by [RegExp.exec] if
the [index] parameter is 0, or the text matched by the capturing parenthesis\n
 * \n\npublic inline
operator fun RegExpMatch.get(index: Int): String? = asDynamic()[index]\n\n\n/**\n * Converts the result of
[RegExp.exec] to an array where the first element contains the entire matched text and each subsequent\n
 * \n\n element
is the text matched by each capturing parenthesis.\n
 * \n\npublic inline fun RegExpMatch.asArray(): Array<out
String?> = unsafeCast<Array<out String?>>()\n", /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n
 * \n\n Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n
 * \n\n\npackage kotlin.sequences\n\n\ninternal actual class
ConstrainedOnceSequence<T> actual constructor(sequence: Sequence<T>) : Sequence<T> {\n    private var
sequenceRef: Sequence<T>? = sequence\n\n    actual override fun iterator(): Iterator<T> {\n        val sequence =
sequenceRef ?: throw IllegalStateException("This sequence can be consumed only once.")\n        sequenceRef =
null\n        return sequence.iterator()\n    }\n}\n", /*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n
 * \n\n Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n
 * \n\n\npackage kotlin.text\n\n\n@SinceKotlin("1.5")\n\npublic actual enum
class CharCategory(internal val value: Int, public actual val code: String) {\n    /**\n    * General category "\n\nCn\n" in
the Unicode specification.\n
    * \n\n    UNASSIGNED(0, "\n\nCn\n"),\n\n\n    /**\n    * General category "\n\nLu\n" in the
Unicode specification.\n
    * \n\n    UPPERCASE_LETTER(1, "\n\nLu\n"),\n\n\n    /**\n    * General category "\n\nLl\n" in the
Unicode specification.\n
    * \n\n    LOWERCASE_LETTER(2, "\n\nLl\n"),\n\n\n    /**\n    * General category "\n\nLt\n" in the
Unicode specification.\n
    * \n\n    TITLECASE_LETTER(3, "\n\nLt\n"),\n\n\n    /**\n    * General category "\n\nLm\n" in the
Unicode specification.\n
    * \n\n    MODIFIER_LETTER(4, "\n\nLm\n"),\n\n\n    /**\n    * General category "\n\nLo\n" in the
Unicode specification.\n
    * \n\n    OTHER_LETTER(5, "\n\nLo\n"),\n\n\n    /**\n    * General category "\n\nMn\n" in the
Unicode specification.\n
    * \n\n    NON_SPACING_MARK(6, "\n\nMn\n"),\n\n\n    /**\n    * General category "\n\nMe\n" in
the Unicode specification.\n
    * \n\n    ENCLOSING_MARK(7, "\n\nMe\n"),\n\n\n    /**\n    * General category "\n\nMc\n" in
the Unicode specification.\n
    * \n\n    COMBINING_SPACING_MARK(8, "\n\nMc\n"),\n\n\n    /**\n    * General
category "\n\nNd\n" in the Unicode specification.\n
    * \n\n    DECIMAL_DIGIT_NUMBER(9, "\n\nNd\n"),\n\n\n    /**\n    *
General category "\n\nNl\n" in the Unicode specification.\n
    * \n\n    LETTER_NUMBER(10, "\n\nNl\n"),\n\n\n    /**\n    *
General category "\n\nNo\n" in the Unicode specification.\n
    * \n\n    OTHER_NUMBER(11, "\n\nNo\n"),\n\n\n    /**\n    *
General category "\n\nZs\n" in the Unicode specification.\n
    * \n\n    SPACE_SEPARATOR(12, "\n\nZs\n"),\n\n\n    /**\n    *
General category "\n\nZl\n" in the Unicode specification.\n
    * \n\n    LINE_SEPARATOR(13, "\n\nZl\n"),\n\n\n    /**\n    *
General category "\n\nZp\n" in the Unicode specification.\n
    * \n\n    PARAGRAPH_SEPARATOR(14, "\n\nZp\n"),\n\n\n    /**\n    *
General category "\n\nCc\n" in the Unicode specification.\n
    * \n\n    CONTROL(15, "\n\nCc\n"),\n\n\n    /**\n    *
General category "\n\nCf\n" in the Unicode specification.\n
    * \n\n    FORMAT(16, "\n\nCf\n"),\n\n\n    /**\n    *
General category "\n\nCo\n" in the Unicode specification.\n
    * \n\n    PRIVATE_USE(18, "\n\nCo\n"),\n\n\n    /**\n    *
General category "\n\nCs\n" in the Unicode specification.\n
    * \n\n    SURROGATE(19, "\n\nCs\n"),\n\n\n    /**\n    *
General category "\n\nPd\n" in the Unicode specification.\n
    * \n\n    DASH_PUNCTUATION(20, "\n\nPd\n"),\n\n\n    /**\n    *
General category "\n\nPs\n" in the Unicode specification.\n
    * \n\n    START_PUNCTUATION(21, "\n\nPs\n"),\n\n\n    /**\n    *
General category "\n\nPe\n" in the Unicode specification.\n
    * \n\n    END_PUNCTUATION(22, "\n\nPe\n"),\n\n\n    /**\n    *
General category "\n\nPc\n" in the Unicode specification.\n
    * \n\n    CONNECTOR_PUNCTUATION(23, "\n\nPc\n"),\n\n\n    /**\n    *
General category "\n\nPo\n" in the Unicode specification.\n
    * \n\n    OTHER_PUNCTUATION(24,
"\n\nPo\n"),\n\n\n    /**\n    *
General category "\n\nSm\n" in the Unicode specification.\n
    * \n\n    MATH_SYMBOL(25,
"\n\nSm\n"),\n\n\n    /**\n    *
General category "\n\nSc\n" in the Unicode specification.\n
    * \n\n    CURRENCY_SYMBOL(26, "\n\nSc\n"),\n\n\n    /**\n    *
General category "\n\nSk\n" in the Unicode specification.\n
    * \n\n

```

```

MODIFIER_SYMBOL(27, \Sk),\n\n /**\n * General category \So in the Unicode specification.\n */\n
OTHER_SYMBOL(28, \So),\n\n /**\n * General category \Pi in the Unicode specification.\n */\n
INITIAL_QUOTE_PUNCTUATION(29, \Pi),\n\n /**\n * General category \Pf in the Unicode
specification.\n */\n
FINAL_QUOTE_PUNCTUATION(30, \Pf);\n\n /**\n * Returns `true` if [char]
character belongs to this category.\n */\n
public actual operator fun contains(char: Char): Boolean =
char.getCategoryValue() == this.value\n\n
companion object {\n
    internal fun valueOf(category: Int):
CharCategory =\n
        when (category) {\n
            in 0..16 -> values()[category]\n
            in 18..30 ->
values()[category - 1]\n
            else -> throw IllegalArgumentException("Category #\$category is not defined.")\n
        }\n
}\n\n
"/\n * Copyright 2010-2019 JetBrains s.r.o. and Kotlin Programming Language contributors.\n
* Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*/\n\n
package kotlin.text\n\n\n
/**\n * The exception thrown when a character encoding or decoding error occurs.\n
*/\n\n
@SinceKotlin("1.4")\n\n
@WasExperimental(ExperimentalStdlibApi::class)\n\n
public actual open class
CharacterCodingException(message: String?) : Exception(message) {\n
    actual constructor() : this(null)\n
}\n\n
"/\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n
* Use of this source code
is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*/\n\n
package
kotlin.text\n\n\n
/**\n * A mutable sequence of characters.\n
*/\n\n
/**\n * String builder can be used to efficiently perform
multiple string manipulation operations.\n
*/\n\n
public actual class StringBuilder actual constructor(content: String) :
Appendable, CharSequence {\n
    /**\n * Constructs an empty string builder with the specified initial [capacity].\n
*/\n
    /**\n * In Kotlin/JS implementation of StringBuilder the initial capacity has no effect on the further performance
of operations.\n
*/\n
    actual constructor(capacity: Int) : this() {\n
    }\n\n
    /**\n * Constructs a string builder that
contains the same characters as the specified [content] char sequence.\n
*/\n
    actual constructor(content:
CharSequence) : this(content.toString()) {\n
    }\n\n
    /**\n * Constructs an empty string builder.\n
*/\n
    actual constructor() :
this("")\n\n
    private var string: String = if (content != undefined) content else ""\n\n
    actual override val
length: Int\n
    get() = string.asDynamic().length\n\n
    actual override fun get(index: Int): Char =\n
string.getOrElse(index) { throw IndexOutOfBoundsException("index: \$index, length: \$length") }\n\n
    actual
override fun subSequence(startIndex: Int, endIndex: Int): CharSequence = string.substring(startIndex, endIndex)\n\n
    actual override fun append(value: Char): StringBuilder {\n
        string += value\n
        return this\n
    }\n\n
    actual
override fun append(value: CharSequence?): StringBuilder {\n
        string += value.toString()\n
        return this\n
    }\n\n
    actual override fun append(value: CharSequence?, startIndex: Int, endIndex: Int): StringBuilder =\n
this.appendRange(value?: "null", startIndex, endIndex)\n\n
    /**\n * Reverses the contents of this string builder
and returns this instance.\n
*/\n
    /**\n * Surrogate pairs included in this string builder are treated as single
characters.\n
*/\n
    /**\n * Therefore, the order of the high-low surrogates is never reversed.\n
*/\n
    /**\n * Note that the reverse
operation may produce new surrogate pairs that were unpaired low-surrogates and high-surrogates before the
operation.\n
*/\n
    /**\n * For example, reversing "\uD800\uD800" produces "\uD800\uDC00" which is a valid
surrogate pair.\n
*/\n
    actual fun reverse(): StringBuilder {\n
        var reversed = ""\n
        var index =
string.length - 1\n
        while (index >= 0) {\n
            val low = string[index--]\n
            if (low.isLowSurrogate() &&
index >= 0) {\n
                val high = string[index--]\n
                if (high.isHighSurrogate()) {\n
                    reversed =
reversed + high + low\n
                } else {\n
                    reversed = reversed + low + high\n
                }\n
            }
            else {\n
                reversed += low\n
            }\n
        }\n
        string = reversed\n
        return this\n
    }\n\n
    /**\n *
Appends the string representation of the specified object [value] to this string builder and returns this instance.\n
*/\n
    /**\n * The overall effect is exactly as if the [value] were converted to a string by the `value.toString()` method,\n
* and then that string was appended to this string builder.\n
*/\n
    actual fun append(value: Any?): StringBuilder
{\n
        string += value.toString()\n
        return this\n
    }\n\n
    /**\n * Appends the string representation of the
specified boolean [value] to this string builder and returns this instance.\n
*/\n
    /**\n * The overall effect is exactly as
if the [value] were converted to a string by the `value.toString()` method,\n
* and then that string was appended to
this string builder.\n
*/\n
    @SinceKotlin("1.3")\n
    actual fun append(value: Boolean): StringBuilder {\n
        string += value\n
        return this\n
    }\n\n
    /**\n * Appends characters in the specified character array [value] to
this string builder and returns this instance.\n
*/\n
    /**\n * Characters are appended in order, starting at the index 0.\n
*/\n
}

```

```

*^n @SinceKotlin("1.4")n @WasExperimental(ExperimentalStdlibApi::class)n actual fun append(value:
CharArray): StringBuilder {n string += value.concatToString()n return thisn }n
@Deprecated("Provided for binary compatibility.", level = DeprecationLevel.HIDDEN)n fun append(value:
String): StringBuilder = append(value)n /**n * Appends the specified string [value] to this string builder and
returns this instance.n *n * If [value] is `null`, then the four characters `"\null"` are appended.n */n
@SinceKotlin("1.3")n actual fun append(value: String?): StringBuilder {n this.string += value ?: "\null"n
return thisn }n /**n * Returns the current capacity of this string builder.n *n * The capacity is the
maximum length this string builder can have before an allocation occurs.n *n * In Kotlin/JS implementation
of StringBuilder the value returned from this method may not indicate the actual size of the backing storage.n
*/n @SinceKotlin("1.3")n// @ExperimentalStdlibApi @Deprecated("Obtaining StringBuilder capacity is
not supported in JS and common code.", level = DeprecationLevel.ERROR)n actual fun capacity(): Int =
lengthn /**n * Ensures that the capacity of this string builder is at least equal to the specified
[minimumCapacity].n *n * If the current capacity is less than the [minimumCapacity], a new backing storage
is allocated with greater capacity.n * Otherwise, this method takes no action and simply returns.n *n * In
Kotlin/JS implementation of StringBuilder the size of the backing storage is not extended to comply the given
[minimumCapacity],n * thus calling this method has no effect on the further performance of operations.n */n
@SinceKotlin("1.4")n @WasExperimental(ExperimentalStdlibApi::class)n actual fun
ensureCapacity(minimumCapacity: Int) {n }n /**n * Returns the index within this string builder of the
first occurrence of the specified [string].n *n * Returns `-1` if the specified [string] does not occur in this
string builder.n */n @SinceKotlin("1.4")n @WasExperimental(ExperimentalStdlibApi::class)n actual
fun indexOf(string: String): Int = this.string.asDynamic().indexOf(string)n /**n * Returns the index within
this string builder of the first occurrence of the specified [string],n * starting at the specified [startIndex].n */n
* Returns `-1` if the specified [string] does not occur in this string builder starting at the specified [startIndex].n
*/n @SinceKotlin("1.4")n @WasExperimental(ExperimentalStdlibApi::class)n actual fun indexOf(string:
String, startIndex: Int): Int = this.string.asDynamic().indexOf(string, startIndex)n /**n * Returns the index
within this string builder of the last occurrence of the specified [string].n * The last occurrence of empty string
`""` is considered to be at the index equal to `this.length`.n *n * Returns `-1` if the specified [string] does not
occur in this string builder.n */n @SinceKotlin("1.4")n
@WasExperimental(ExperimentalStdlibApi::class)n actual fun lastIndexOf(string: String): Int =
this.string.asDynamic().lastIndexOf(string)n /**n * Returns the index within this string builder of the last
occurrence of the specified [string],n * starting from the specified [startIndex] toward the beginning.n *n *
Returns `-1` if the specified [string] does not occur in this string builder starting at the specified [startIndex].n
*/n @SinceKotlin("1.4")n @WasExperimental(ExperimentalStdlibApi::class)n actual fun
lastIndexOf(string: String, startIndex: Int): Int {n if (string.isEmpty() && startIndex < 0) return -1n return
this.string.asDynamic().lastIndexOf(string, startIndex)n }n /**n * Inserts the string representation of the
specified boolean [value] into this string builder at the specified [index] and returns this instance.n *n * The
overall effect is exactly as if the [value] were converted to a string by the `value.toString()` method,n * and then
that string was inserted into this string builder at the specified [index].n *n * @throws
IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string builder.n */n
@SinceKotlin("1.4")n @WasExperimental(ExperimentalStdlibApi::class)n actual fun insert(index: Int, value:
Boolean): StringBuilder {n AbstractList.checkPositionIndex(index, length)n string = string.substring(0,
index) + value + string.substring(index)n return thisn }n /**n * Inserts the specified character [value]
into this string builder at the specified [index] and returns this instance.n *n * @throws
IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string builder.n */n
@SinceKotlin("1.4")n @WasExperimental(ExperimentalStdlibApi::class)n actual fun insert(index: Int, value:
Char): StringBuilder {n AbstractList.checkPositionIndex(index, length)n string = string.substring(0,
index) + value + string.substring(index)n return thisn }n /**n * Inserts characters in the specified
character array [value] into this string builder at the specified [index] and returns this instance.n *n * The

```



```

inserted characters go in same order as in the [value] character array, starting at [index].\n
 * \n * @throws IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string builder.\n
 * \n
@SinceKotlin("1.4")\n
 @WasExperimental(ExperimentalStdlibApi::class)\n
 actual fun insert(index: Int, value: CharArray): String {
    AbstractList.checkPositionIndex(index, length)\n
    string = string.substring(0, index) + value.concatToString() + string.substring(index)\n
    return this\n
 } \n \n /** \n
 * Inserts characters in the specified character sequence [value] into this string builder at the specified [index] and returns this instance.\n
 * \n * The inserted characters go in the same order as in the [value] character sequence, starting at [index].\n
 * \n * @param index the position in this string builder to insert at.\n
 * @param value the character sequence from which characters are inserted. If [value] is `null`, then the four characters `"\null"` are inserted.\n
 * \n * @throws IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string builder.\n
 * \n * \n
 @SinceKotlin("1.4")\n
 @WasExperimental(ExperimentalStdlibApi::class)\n
 actual fun insert(index: Int, value: CharSequence?): String {
    AbstractList.checkPositionIndex(index, length)\n
    string = string.substring(0, index) + value.toString() + string.substring(index)\n
    return this\n
 } \n \n /** \n
 * Inserts the string representation of the specified object [value] into this string builder at the specified [index] and returns this instance.\n
 * \n * The overall effect is exactly as if the [value] were converted to a string by the `value.toString()` method,\n
 * and then that string was inserted into this string builder at the specified [index].\n
 * \n * @throws IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string builder.\n
 * \n * \n
 @SinceKotlin("1.4")\n
 @WasExperimental(ExperimentalStdlibApi::class)\n
 actual fun insert(index: Int, value: Any?): String {
    AbstractList.checkPositionIndex(index, length)\n
    string = string.substring(0, index) + value.toString() + string.substring(index)\n
    return this\n
 } \n \n @Deprecated("Provided for binary compatibility.", level = DeprecationLevel.HIDDEN)\n
 fun insert(index: Int, value: String): String = insert(index, value)\n
 \n \n /** \n
 * Inserts the string [value] into this string builder at the specified [index] and returns this instance.\n
 * \n * If [value] is `null`, then the four characters `"\null"` are inserted.\n
 * \n * @throws IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string builder.\n
 * \n * \n
 @SinceKotlin("1.4")\n
 @WasExperimental(ExperimentalStdlibApi::class)\n
 actual fun insert(index: Int, value: String?): String {
    AbstractList.checkPositionIndex(index, length)\n
    val toInsert = value ?: "\null"\n
    this.string = this.string.substring(0, index) + toInsert + this.string.substring(index)\n
    return this\n
 } \n \n /** \n
 * Sets the length of this string builder to the specified [newLength].\n
 * \n * If the [newLength] is less than the current length, it is changed to the specified [newLength].\n
 * \n * Otherwise, null characters '\u0000' are appended to this string builder until its length is less than the [newLength].\n
 * \n * Note that in Kotlin/JS [set] operator function has non-constant execution time complexity.\n
 * \n * Therefore, increasing length of this string builder and then updating each character by index may slow down your program.\n
 * \n * @throws IndexOutOfBoundsException or [IllegalArgumentException] if [newLength] is less than zero.\n
 * \n * \n
 @SinceKotlin("1.4")\n
 @WasExperimental(ExperimentalStdlibApi::class)\n
 actual fun setLength(newLength: Int) {
    if (newLength < 0) {\n
        throw IllegalArgumentException("Negative new length: $newLength.")\n
    }\n
    if (newLength <= length) {\n
        string = string.substring(0, newLength)\n
    } else {\n
        for (i in length until newLength) {\n
            string += "\u0000"\n
        }\n
    }\n
 } \n \n /** \n
 * Returns a new [String] that contains characters in this string builder at [startIndex] (inclusive) and up to the [length] (exclusive).\n
 * \n * @throws IndexOutOfBoundsException if [startIndex] is less than zero or greater than the length of this string builder.\n
 * \n * \n
 @SinceKotlin("1.4")\n
 @WasExperimental(ExperimentalStdlibApi::class)\n
 actual fun substring(startIndex: Int): String {
    AbstractList.checkPositionIndex(startIndex, length)\n
    return string.substring(startIndex)\n
 } \n \n /** \n
 * Returns a new [String] that contains characters in this string builder at [startIndex] (inclusive) and up to the [endIndex] (exclusive).\n
 * \n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this string builder indices or when `startIndex > endIndex`.\n
 * \n * \n
 @SinceKotlin("1.4")\n
 @WasExperimental(ExperimentalStdlibApi::class)\n
 actual fun substring(startIndex: Int, endIndex: Int): String {
    AbstractList.checkBoundsIndexes(startIndex, endIndex, length)\n
    return

```

```

string.substring(startIndex, endIndex)\n } \n\n /**\n * Attempts to reduce storage used for this string builder.\n *\n * If the backing storage of this string builder is larger than necessary to hold its current contents,\n * then it may be resized to become more space efficient.\n * Calling this method may, but is not required to, affect the value of the [capacity] property.\n *\n * In Kotlin/JS implementation of StringBuilder the size of the backing storage is always equal to the length of the string builder.\n */\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n actual fun trimToSize() {\n }\n\n override fun toString(): String = string\n\n /**\n * Clears the content of this string builder making it empty and returns this instance.\n *\n * @sample samples.text.Strings.clearStringBuilder\n */\n @SinceKotlin("1.3")\n public fun clear(): StringBuilder {\n string = ""\n return this\n }\n\n /**\n * Sets the character at the specified [index] to the specified [value].\n *\n * @throws IndexOutOfBoundsException if [index] is out of bounds of this string builder.\n */\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n public operator fun set(index: Int, value: Char) {\n AbstractList.checkElementIndex(index, length)\n\n string = string.substring(0, index) + value + string.substring(index + 1)\n }\n\n /**\n * Replaces characters in the specified range of this string builder with characters in the specified string [value] and returns this instance.\n *\n * @param startIndex the beginning (inclusive) of the range to replace.\n * @param endIndex the end (exclusive) of the range to replace.\n * @param value the string to replace with.\n *\n * @throws IndexOutOfBoundsException or [IllegalArgumentException] if [startIndex] is less than zero, greater than the length of this string builder, or `startIndex > endIndex`.\n */\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n public fun setRange(startIndex: Int, endIndex: Int, value: String): StringBuilder {\n checkReplaceRange(startIndex, endIndex, length)\n\n this.string = this.string.substring(0, startIndex) + value + this.string.substring(endIndex)\n return this\n }\n\n private fun checkReplaceRange(startIndex: Int, endIndex: Int, length: Int) {\n if (startIndex < 0 || startIndex > length) {\n throw IndexOutOfBoundsException("`startIndex: $startIndex, length: $length`")\n }\n\n if (startIndex > endIndex) {\n throw IllegalArgumentException("`startIndex($startIndex) > endIndex($endIndex)`")\n }\n }\n\n /**\n * Removes the character at the specified [index] from this string builder and returns this instance.\n *\n * If the `Char` at the specified [index] is part of a supplementary code point, this method does not remove the entire supplementary character.\n *\n * @param index the index of `Char` to remove.\n *\n * @throws IndexOutOfBoundsException if [index] is out of bounds of this string builder.\n */\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n public fun deleteAt(index: Int): StringBuilder {\n AbstractList.checkElementIndex(index, length)\n\n string = string.substring(0, index) + string.substring(index + 1)\n return this\n }\n\n /**\n * Removes characters in the specified range from this string builder and returns this instance.\n *\n * @param startIndex the beginning (inclusive) of the range to remove.\n * @param endIndex the end (exclusive) of the range to remove.\n *\n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] is out of range of this string builder indices or when `startIndex > endIndex`.\n */\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n public fun deleteRange(startIndex: Int, endIndex: Int): StringBuilder {\n checkReplaceRange(startIndex, endIndex, length)\n\n string = string.substring(0, startIndex) + string.substring(endIndex)\n return this\n }\n\n /**\n * Copies characters from this string builder into the [destination] character array.\n *\n * @param destination the array to copy to.\n * @param destinationOffset the position in the array to copy to, 0 by default.\n * @param startIndex the beginning (inclusive) of the range to copy, 0 by default.\n * @param endIndex the end (exclusive) of the range to copy, length of this string builder by default.\n *\n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this string builder indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n * or when that index is out of the [destination] array indices range.\n */\n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n public fun toCharArray(destination: CharArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = this.length) {\n AbstractList.checkBoundsIndexes(startIndex, endIndex, length)\n

```

```

AbstractList.checkBoundsIndexes(destinationOffset, destinationOffset + endIndex - startIndex, destination.size)\n\n
    var dstIndex = destinationOffset\n    for (index in startIndex until endIndex) {\n        destination[dstIndex++]
= string[index]\n    }\n\n    /**\n     * Appends characters in a subarray of the specified character array
[value] to this string builder and returns this instance.\n     *\n     * Characters are appended in order, starting at
specified [startIndex].\n     *\n     * @param value the array from which characters are appended.\n     * @param
startIndex the beginning (inclusive) of the subarray to append.\n     * @param endIndex the end (exclusive) of the
subarray to append.\n     *\n     * @throws IndexOutOfBoundsException or [IllegalArgumentException] when
[startIndex] or [endIndex] is out of range of the [value] array indices or when `startIndex > endIndex`.\n     */\n
@SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n public fun appendRange(value:
CharArray, startIndex: Int, endIndex: Int): String Builder {\n    string += value.concatToString(startIndex,
endIndex)\n    return this\n }\n\n /**\n     * Appends a subsequence of the specified character sequence [value]
to this string builder and returns this instance.\n     *\n     * @param value the character sequence from which a
subsequence is appended.\n     * @param startIndex the beginning (inclusive) of the subsequence to append.\n     *
@param endIndex the end (exclusive) of the subsequence to append.\n     *\n     * @throws
IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of the
[value] character sequence indices or when `startIndex > endIndex`.\n     */\n
@SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n public fun appendRange(value: CharSequence,
startIndex: Int, endIndex: Int): String Builder {\n    val stringCsq = value.toString()\n
AbstractList.checkBoundsIndexes(startIndex, endIndex, stringCsq.length)\n    string +=
stringCsq.substring(startIndex, endIndex)\n    return this\n }\n\n /**\n     * Inserts characters in a subarray of
the specified character array [value] into this string builder at the specified [index] and returns this instance.\n     *
*\n     * The inserted characters go in same order as in the [value] array, starting at [index].\n     *\n     * @param
index the position in this string builder to insert at.\n     * @param value the array from which characters are
inserted.\n     * @param startIndex the beginning (inclusive) of the subarray to insert.\n     * @param endIndex
the end (exclusive) of the subarray to insert.\n     *\n     * @throws IndexOutOfBoundsException or [IllegalArgumentException]
when [startIndex] or [endIndex] is out of range of the [value] array indices or when `startIndex > endIndex`.\n     *
*\n     * @throws IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string
builder.\n     */\n
@SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n public fun
insertRange(index: Int, value: CharArray, startIndex: Int, endIndex: Int): String Builder {\n
AbstractList.checkPositionIndex(index, this.length)\n    string = string.substring(0, index) +
value.concatToString(startIndex, endIndex) + string.substring(index)\n    return this\n }\n\n /**\n     * Inserts
characters in a subsequence of the specified character sequence [value] into this string builder at the specified
[index] and returns this instance.\n     *\n     * The inserted characters go in the same order as in the [value]
character sequence, starting at [index].\n     *\n     * @param index the position in this string builder to insert
at.\n     * @param value the character sequence from which a subsequence is inserted.\n     * @param startIndex
the beginning (inclusive) of the subsequence to insert.\n     * @param endIndex the end (exclusive) of the
subsequence to insert.\n     *\n     * @throws IndexOutOfBoundsException or [IllegalArgumentException] when
[startIndex] or [endIndex] is out of range of the [value] character sequence indices or when `startIndex >
endIndex`.\n     * @throws
IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string builder.\n     */\n
@SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n public fun insertRange(index: Int,
value: CharSequence, startIndex: Int, endIndex: Int): String Builder {\n    AbstractList.checkPositionIndex(index,
length)\n\n    val stringCsq = value.toString()\n    AbstractList.checkBoundsIndexes(startIndex, endIndex,
stringCsq.length)\n\n    string = string.substring(0, index) + stringCsq.substring(startIndex, endIndex) +
string.substring(index)\n    return this\n }\n\n /**\n     * Clears the content of this string builder making it
empty and returns this instance.\n     *\n     * @sample samples.text.Strings.clearStringBuilder\n     */\n
@SinceKotlin("1.3")\n @Suppress("EXTENSION_SHADOWED_BY_MEMBER",
"NOTHING_TO_INLINE")\n public actual inline fun String Builder.clear(): String Builder = this.clear()\n\n /**\n     *
Sets the character at the specified [index] to the specified [value].\n     *\n     * @throws IndexOutOfBoundsException
if

```

[index] is out of bounds of this string builder.\n

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@Suppress("EXTENSION_SHA  
DOWED_BY_MEMBER", "NOTHING_TO_INLINE")\npublic actual inline operator fun  
StringBuilder.set(index: Int, value: Char) = this.set(index, value)\n\n/**\n * Replaces characters in the specified  
range of this string builder with characters in the specified string [value] and returns this instance.\n *\n * @param  
startIndex the beginning (inclusive) of the range to replace.\n *\n * @param endIndex the end (exclusive) of the range to  
replace.\n *\n * @param value the string to replace with.\n *\n * @throws IndexOutOfBoundsException or  
[IllegalArgumentException] if [startIndex] is less than zero, greater than the length of this string builder, or  
`startIndex > endIndex`.\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@Suppress("EXTENSION_SHA  
DOWED_BY_MEMBER", "NOTHING_TO_INLINE")\npublic actual inline fun  
StringBuilder.setRange(startIndex: Int, endIndex: Int, value: String): StringBuilder =\n    this.setRange(startIndex,  
endIndex, value)\n\n/**\n * Removes the character at the specified [index] from this string builder and returns this  
instance.\n *\n * If the `Char` at the specified [index] is part of a supplementary code point, this method does not  
remove the entire supplementary character.\n *\n * @param index the index of `Char` to remove.\n *\n * @throws  
IndexOutOfBoundsException if [index] is out of bounds of this string builder.\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@Suppress("EXTENSION_SHA  
DOWED_BY_MEMBER", "NOTHING_TO_INLINE")\npublic actual inline fun StringBuilder.deleteAt(index:  
Int): StringBuilder = this.deleteAt(index)\n\n/**\n * Removes characters in the specified range from this string  
builder and returns this instance.\n *\n * @param startIndex the beginning (inclusive) of the range to remove.\n *\n * @param endIndex the end (exclusive) of the range to remove.\n *\n * @throws IndexOutOfBoundsException or  
[IllegalArgumentException] when [startIndex] is out of range of this string builder indices or when `startIndex >  
endIndex`.\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@Suppress("EXTENSION_SHA  
DOWED_BY_MEMBER", "NOTHING_TO_INLINE")\npublic actual inline fun  
StringBuilder.deleteRange(startIndex: Int, endIndex: Int): StringBuilder = this.deleteRange(startIndex,  
endIndex)\n\n/**\n * Copies characters from this string builder into the [destination] character array.\n *\n * @param destination the array to copy to.\n *\n * @param destinationOffset the position in the array to copy to, 0 by  
default.\n *\n * @param startIndex the beginning (inclusive) of the range to copy, 0 by default.\n *\n * @param endIndex  
the end (exclusive) of the range to copy, length of this string builder by default.\n *\n * @throws  
IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this  
string builder indices or when `startIndex > endIndex`.\n *\n * @throws IndexOutOfBoundsException when the  
subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],\n *\n * or when that index is  
out of the [destination] array indices range.\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@Suppress("EXTENSION_SHA  
DOWED_BY_MEMBER", "NOTHING_TO_INLINE",  
"ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual inline fun  
StringBuilder.toCharArray(destination: CharArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int =  
this.length) =\n    this.toCharArray(destination, destinationOffset, startIndex, endIndex)\n\n/**\n * Appends  
characters in a subarray of the specified character array [value] to this string builder and returns this instance.\n *\n * Characters are appended in order, starting at specified [startIndex].\n *\n * @param value the array from which  
characters are appended.\n *\n * @param startIndex the beginning (inclusive) of the subarray to append.\n *\n * @param  
endIndex the end (exclusive) of the subarray to append.\n *\n * @throws IndexOutOfBoundsException or  
[IllegalArgumentException] when [startIndex] or [endIndex] is out of range of the [value] array indices or when  
`startIndex > endIndex`.\n
```

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@Suppress("EXTENSION_SHA  
DOWED_BY_MEMBER", "NOTHING_TO_INLINE")\npublic actual inline fun  
StringBuilder.appendRange(value: CharArray, startIndex: Int, endIndex: Int): StringBuilder =\n
```

```

this.appendRange(value, startIndex, endIndex)\n\n/**\n * Appends a subsequence of the specified character
sequence [value] to this string builder and returns this instance.\n *\n * @param value the character sequence from
which a subsequence is appended.\n * @param startIndex the beginning (inclusive) of the subsequence to append.\n
* @param endIndex the end (exclusive) of the subsequence to append.\n *\n * @throws
IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of the
[value] character sequence indices or when `startIndex > endIndex`.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@Suppress("EXTENSION_SHA
DOWED_BY_MEMBER", "NOTHING_TO_INLINE")\npublic actual inline fun
StringBuilder.appendRange(value: CharSequence, startIndex: Int, endIndex: Int): StringBuilder =\n
this.appendRange(value, startIndex, endIndex)\n\n/**\n * Inserts characters in a subarray of the specified character
array [value] into this string builder at the specified [index] and returns this instance.\n *\n * The inserted characters
go in same order as in the [value] array, starting at [index].\n *\n * @param index the position in this string builder
to insert at.\n * @param value the array from which characters are inserted.\n * @param startIndex the beginning
(inclusive) of the subarray to insert.\n * @param endIndex the end (exclusive) of the subarray to insert.\n *\n *
@throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of
range of the [value] array indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException if
[index] is less than zero or greater than the length of this string builder.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@Suppress("EXTENSION_SHA
DOWED_BY_MEMBER", "NOTHING_TO_INLINE")\npublic actual inline fun
StringBuilder.insertRange(index: Int, value: CharArray, startIndex: Int, endIndex: Int): StringBuilder =\n
this.insertRange(index, value, startIndex, endIndex)\n\n/**\n * Inserts characters in a subsequence of the specified
character sequence [value] into this string builder at the specified [index] and returns this instance.\n *\n * The
inserted characters go in the same order as in the [value] character sequence, starting at [index].\n *\n * @param
index the position in this string builder to insert at.\n * @param value the character sequence from which a
subsequence is inserted.\n * @param startIndex the beginning (inclusive) of the subsequence to insert.\n * @param
endIndex the end (exclusive) of the subsequence to insert.\n *\n * @throws IndexOutOfBoundsException or
[IllegalArgumentException] when [startIndex] or [endIndex] is out of range of the [value] character sequence
indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException if [index] is less than zero or
greater than the length of this string builder.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@Suppress("EXTENSION_SHA
DOWED_BY_MEMBER", "NOTHING_TO_INLINE")\npublic actual inline fun
StringBuilder.insertRange(index: Int, value: CharSequence, startIndex: Int, endIndex: Int): StringBuilder =\n
this.insertRange(index, value, startIndex, endIndex)\n\n"/**\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n *\n@package kotlin.text\n\n/**\n * Returns `true` if the content of this
string is equal to the word `true`, ignoring case, and `false` otherwise.\n *\n@Deprecated("Use Kotlin compiler
1.4 to avoid deprecation warning.")\n@DeprecatedSinceKotlin(hiddenSince =
"1.4")\n@kotlin.internal.InlineOnly\npublic actual inline fun String.toBoolean(): Boolean =
this.toBoolean()\n\n/**\n * Returns `true` if this string is not `null` and its content is equal to the word `true`,
ignoring case, and `false` otherwise.\n *\n * There are also strict versions of the function available on non-nullable
String, [toBooleanStrict] and [toBooleanStrictOrNull].\n *\n@SinceKotlin("1.4")\npublic actual fun
String?.toBoolean(): Boolean = this != null && this.lowercase() == "true"\n\n/**\n * Parses the string as a signed
[Byte] number and returns the result.\n * @throws NumberFormatException if the string is not a valid
representation of a number.\n *\n@public actual fun String.toByte(): Byte = toByteOrNull() ?:
numberFormatError(this)\n\n/**\n * Parses the string as a signed [Byte] number and returns the result.\n * @throws
NumberFormatException if the string is not a valid representation of a number.\n * @throws
IllegalArgumentException when [radix] is not a valid radix for string to number conversion.\n *\n@public actual fun
String.toByte(radix: Int): Byte = toByteOrNull(radix) ?: numberFormatError(this)\n\n\n/**\n * Parses the string as a

```

```

[Short] number and returns the result.\n * @throws NumberFormatException if the string is not a valid
representation of a number.\n */\npublic actual fun String.toShort(): Short = toShortOrNull() ?:
numberFormatError(this)\n\n/**\n * Parses the string as a [Short] number and returns the result.\n * @throws
NumberFormatException if the string is not a valid representation of a number.\n * @throws
IllegalArgumentException when [radix] is not a valid radix for string to number conversion.\n */\npublic actual fun
String.toShort(radix: Int): Short = toShortOrNull(radix) ?: numberFormatError(this)\n\n/**\n * Parses the string as
an [Int] number and returns the result.\n * @throws NumberFormatException if the string is not a valid
representation of a number.\n */\npublic actual fun String.toInt(): Int = toIntOrNull() ?:
numberFormatError(this)\n\n/**\n * Parses the string as an [Int] number and returns the result.\n * @throws
NumberFormatException if the string is not a valid representation of a number.\n * @throws
IllegalArgumentException when [radix] is not a valid radix for string to number conversion.\n */\npublic actual fun
String.toInt(radix: Int): Int = toIntOrNull(radix) ?: numberFormatError(this)\n\n/**\n * Parses the string as a [Long]
number and returns the result.\n * @throws NumberFormatException if the string is not a valid representation of a
number.\n */\npublic actual fun String.toLong(): Long = toLongOrNull() ?: numberFormatError(this)\n\n/**\n *
Parses the string as a [Long] number and returns the result.\n * @throws NumberFormatException if the string is not
a valid representation of a number.\n * @throws IllegalArgumentException when [radix] is not a valid radix for
string to number conversion.\n */\npublic actual fun String.toLong(radix: Int): Long = toLongOrNull(radix) ?:
numberFormatError(this)\n\n/**\n * Parses the string as a [Double] number and returns the result.\n * @throws
NumberFormatException if the string is not a valid representation of a number.\n */\npublic actual fun
String.toDouble(): Double = (+this.asDynamic()).unsafeCast<Double>().also {\n    if (it.isNaN() && !this.isNaN())
|| it == 0.0 && this.isBlank())\n        numberFormatError(this)\n}\n\n/**\n * Parses the string as a [Float] number
and returns the result.\n * @throws NumberFormatException if the string is not a valid representation of a
number.\n */\n@kotlin.internal.InlineOnly\npublic actual inline fun String.toFloat(): Float =
toDouble().unsafeCast<Float>()\n\n/**\n * Parses the string as a [Double] number and returns the result\n * or `null`
if the string is not a valid representation of a number.\n */\npublic actual fun String.toDoubleOrNull(): Double? =
(+this.asDynamic()).unsafeCast<Double>().takeIf {\n    !(it.isNaN() && !this.isNaN() || it == 0.0 &&
this.isBlank())\n}\n\n/**\n * Parses the string as a [Float] number and returns the result\n * or `null` if the string is
not a valid representation of a number.\n */\n@kotlin.internal.InlineOnly\npublic actual inline fun
String.toFloatOrNull(): Float? = toDoubleOrNull().unsafeCast<Float?>()\n\n/**\n * Returns a string representation
of this [Byte] value in the specified [radix].\n * @throws IllegalArgumentException when [radix] is not a valid
radix for number to string conversion.\n */\n@SinceKotlin("1.2")\n@kotlin.internal.InlineOnly\npublic actual
inline fun Byte.toString(radix: Int): String = this.toInt().toString(radix)\n\n/**\n * Returns a string representation of
this [Short] value in the specified [radix].\n * @throws IllegalArgumentException when [radix] is not a valid
radix for number to string conversion.\n */\n@SinceKotlin("1.2")\n@kotlin.internal.InlineOnly\npublic actual
inline fun Short.toString(radix: Int): String = this.toInt().toString(radix)\n\n/**\n * Returns a string representation of
this [Int] value in the specified [radix].\n * @throws IllegalArgumentException when [radix] is not a valid radix
for number to string conversion.\n */\n@SinceKotlin("1.2")\npublic actual fun Int.toString(radix: Int): String =
asDynamic().toString(checkRadix(radix))\n\nprivate fun String.isNaN(): Boolean = when (this.lowercase()) {\n
"nan", "+nan", "-nan" -> true\n    else -> false\n}\n\n/**\n * Checks whether the given [radix] is valid radix for
string to number and number to string conversion.\n */\n@PublishedApi\ninternal actual fun checkRadix(radix: Int):
Int {\n    if (radix !in 2..36) {\n        throw IllegalArgumentException("radix $radix was not in valid range 2..36")\n
    }\n    return radix\n}\n\ninternal actual fun digitOf(char: Char, radix: Int): Int = when {\n    char >= '0' && char <=
'9' -> char - '0'\n    char >= 'A' && char <= 'Z' -> char - 'A' + 10\n    char >= 'a' && char <= 'z' -> char - 'a' + 10\n
char < "\u0080" -> -1\n    char >= "\uFF21" && char <= "\uFF3A" -> char - "\uFF21" + 10 // full-width latin capital
letter\n    char >= "\uFF41" && char <= "\uFF5A" -> char - "\uFF41" + 10 // full-width latin small letter\n    else ->
char.digitToIntImpl()\n}.let { if (it >= radix) -1 else it }\n\n", "/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n */\n\npackage kotlin.text\n\nimport kotlin.js.RegExp\n\n/**\n * Provides

```

enumeration values to use to set regular expression options.

```

public actual enum class RegexOptions(val value:
String) {
    /** Enables case-insensitive matching. */
    IGNORE_CASE("i"),
    /** Enables multiline
mode.
    * In multiline mode the expressions `^` and `$` match just after or just before,
    * respectively, a
line terminator or the end of the input sequence. */
    MULTILINE("m")}
private fun
Iterable<RegexOption>.toFlags(prepend: String): String = joinToString("\", prefix = prepend) { it.value
}
/** Represents the results from a single capturing group within a [MatchResult] of [Regex].
    *
    * @param value The value of captured group. */
public actual data class MatchGroup(actual val value:
String) {
    /** Represents a compiled regular expression.
    * Provides functions to match strings in text with a
pattern, replace the found occurrences and split text around matches.
    * For pattern syntax reference see [MDN
RegExp](https://developer.mozilla.org/en-
US/docs/Web/JavaScript/Reference/Global_Objects/RegExp#Special_characters_meaning_in_regular_expressions)
    * and
[http://www.w3schools.com/jsref/jsref_obj_regexp.asp](https://www.w3schools.com/jsref/jsref_obj_regexp.asp).
    * Note that `RegExp` objects under the hood are constructed with [the `u`
flag](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/RegExp/unicode)
    * that
enables Unicode-related features in regular expressions. This also makes the pattern syntax more strict,
    * for
example, prohibiting unnecessary escape sequences.
    *
    * @constructor Creates a regular expression from the
specified [pattern] string and the specified set of [options].
    */
public actual class Regex actual
constructor(pattern: String, options: Set<RegexOption>) {
    /** Creates a regular expression from the specified
[pattern] string and the specified single [option].
    */
    public actual constructor(pattern: String, option:
RegexOption) : this(pattern, setOf(option))
    /** Creates a regular expression from the specified [pattern] string
and the default options.
    */
    public actual constructor(pattern: String) : this(pattern, emptySet())
    /** The
pattern string of this regular expression.
    */
    public actual val pattern: String = pattern
    /** The set of options
that were used to create this regular expression.
    */
    public actual val options: Set<RegexOption> =
options.toSet()
    private val nativePattern: RegExp = RegExp(pattern, options.toFlags("gu"))
    private var
nativeStickyPattern: RegExp? = null
    private fun initStickyPattern(): RegExp =
nativeStickyPattern ?:
RegExp(pattern, options.toFlags("yu")).also { nativeStickyPattern = it }
    private var
nativeMatchesEntirePattern: RegExp? = null
    private fun initMatchesEntirePattern(): RegExp =
nativeMatchesEntirePattern ?: run {
        if (pattern.startsWith('^') && pattern.endsWith('$'))
nativePattern
        else
return RegExp("^${pattern.trimStart('^').trimEnd('$')}\$"),
options.toFlags("gu"))
    }.also { nativeMatchesEntirePattern = it }
    /** Indicates whether the regular
expression matches the entire [input].
    */
    public actual infix fun matches(input: CharSequence): Boolean {
nativePattern.reset()
        val match = nativePattern.exec(input.toString())
        return match != null &&
match.index == 0 && nativePattern.lastIndex == input.length
    }
    /** Indicates whether the regular
expression can find at least one match in the specified [input].
    */
    public actual fun containsMatchIn(input:
CharSequence): Boolean {
nativePattern.reset()
        return nativePattern.test(input.toString())
    }
    @SinceKotlin("1.5")
    @ExperimentalStdlibApi
    public actual fun matchesAt(input: CharSequence, index:
Int): Boolean {
        if (index < 0 || index > input.length)
throw IndexOutOfBoundsException("index
out of bounds: $index, input length: ${input.length}")
        val pattern = initStickyPattern()
pattern.lastIndex = index
        return pattern.test(input.toString())
    }
    /** Returns the first match of a
regular expression in the [input], beginning at the specified [startIndex].
    *
    * @param startIndex An index to
start search with, by default 0. Must be not less than zero and not greater than `input.length()`.
    * @return An
instance of [MatchResult] if match was found or `null` otherwise.
    * @throws IndexOutOfBoundsException if
[startIndex] is less than zero or greater than the length of the [input] char sequence.
    * @sample
samples.text.Regexp.find
    */
    @Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")
    public actual fun find(input:
CharSequence, startIndex: Int = 0): MatchResult? {
        if (startIndex < 0 || startIndex > input.length)
throw IndexOutOfBoundsException("Start index out of bounds: $startIndex, input length: ${input.length}")

```

```

}\n    return nativePattern.findNext(input.toString(), startIndex, nativePattern)\n }\n\n /**\n  * Returns a
sequence of all occurrences of a regular expression within the [input] string, beginning at the specified
[startIndex].\n  *\n  * @throws IndexOutOfBoundsException if [startIndex] is less than zero or greater than the
length of the [input] char sequence.\n  *\n  * @sample samples.text.Regexp.findAll\n  */\n
@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\n public actual fun findAll(input:
CharSequence, startIndex: Int = 0): Sequence<MatchResult> {\n    if (startIndex < 0 || startIndex > input.length)
{\n        throw IndexOutOfBoundsException("Start index out of bounds: $startIndex, input length:
${input.length}")\n    }\n    return generateSequence({ find(input, startIndex) }, { match -> match.next() })\n
}\n\n /**\n  * Attempts to match the entire [input] CharSequence against the pattern.\n  *\n  * @return An
instance of [MatchResult] if the entire input matches or `null` otherwise.\n  */\n public actual fun
matchEntire(input: CharSequence): MatchResult? =\n    initMatchesEntirePattern().findNext(input.toString(), 0,
nativePattern)\n\n @SinceKotlin("1.5")\n @ExperimentalStdlibApi\n public actual fun matchAt(input:
CharSequence, index: Int): MatchResult? {\n    if (index < 0 || index > input.length) {\n        throw
IndexOutOfBoundsException("index out of bounds: $index, input length: ${input.length}")\n    }\n    return
initStickyPattern().findNext(input.toString(), index, nativePattern)\n }\n\n\n /**\n  * Replaces all occurrences
of this regular expression in the specified [input] string with specified [replacement] expression.\n  *\n  * The
replacement string may contain references to the captured groups during a match. Occurrences of `index`\n  * in
the replacement string will be substituted with the subsequences corresponding to the captured groups with the
specified index.\n  * The first digit after '$' is always treated as part of group reference. Subsequent digits are
incorporated\n  * into `index` only if they would form a valid group reference. Only the digits '0'..'9' are considered
as potential components\n  * of the group reference. Note that indexes of captured groups start from 1, and the
group with index 0 is the whole match.\n  *\n  * Backslash character '\\' can be used to include the succeeding
character as a literal in the replacement string, e.g. `\\$` or `\\\\`. \n  * [Regex.escapeReplacement] can be used if
[replacement] have to be treated as a literal string.\n  *\n  * Note that referring named capturing groups by name
is currently not supported in Kotlin/JS.\n  * However, you can still refer them by index.\n  *\n  * @param input
the char sequence to find matches of this regular expression in\n  * @param replacement the expression to replace
found matches with\n  * @return the result of replacing each occurrence of this regular expression in [input] with
the result of evaluating the [replacement] expression\n  * @throws RuntimeException if [replacement] expression
is malformed, or capturing group with specified `name` or `index` does not exist\n  */\n public actual fun
replace(input: CharSequence, replacement: String): String {\n    if (!replacement.contains("\\\\") &&
!replacement.contains('$')) {\n        return input.toString().nativeReplace(nativePattern, replacement)\n    }\n
return replace(input) { substituteGroupRefs(it, replacement) }\n }\n\n\n /**\n  * Replaces all occurrences of this
regular expression in the specified [input] string with the result of\n  * the given function [transform] that takes
[MatchResult] and returns a string to be used as a\n  * replacement for that match.\n  */\n public actual fun
replace(input: CharSequence, transform: (MatchResult) -> CharSequence): String {\n    var match = find(input)\n
    if (match == null) return input.toString()\n    var lastStart = 0\n    val length = input.length\n    val sb =
StringBuilder(length)\n    do {\n        val foundMatch = match!!\n        sb.append(input, lastStart,
foundMatch.range.start)\n        sb.append(transform(foundMatch))\n        lastStart =
foundMatch.range.endInclusive + 1\n        match = foundMatch.next()\n    } while (lastStart < length && match
!= null)\n    if (lastStart < length) {\n        sb.append(input, lastStart, length)\n    }\n    return
sb.toString()\n }\n\n\n /**\n  * Replaces the first occurrence of this regular expression in the specified [input]
string with specified [replacement] expression.\n  *\n  * The replacement string may contain references to the
captured groups during a match. Occurrences of `index`\n  * in the replacement string will be substituted with the
subsequences corresponding to the captured groups with the specified index.\n  * The first digit after '$' is always
treated as part of group reference. Subsequent digits are incorporated\n  * into `index` only if they would form a
valid group reference. Only the digits '0'..'9' are considered as potential components\n  * of the group reference.
Note that indexes of captured groups start from 1, and the group with index 0 is the whole match.\n  *\n  *
Backslash character '\\' can be used to include the succeeding character as a literal in the replacement string, e.g. `\\$`

```



```

or `\\`.\n * [Regex.escapeReplacement] can be used if [replacement] have to be treated as a literal string.\n *\n
* Note that referring named capturing groups by name is not supported currently in Kotlin/JS.\n * However, you
can still refer them by index.\n *\n * @param input the char sequence to find a match of this regular expression
in\n * @param replacement the expression to replace the found match with\n * @return the result of replacing
the first occurrence of this regular expression in [input] with the result of evaluating the [replacement] expression\n
* @throws RuntimeException if [replacement] expression is malformed, or capturing group with specified `name`
or `index` does not exist\n *\n public actual fun replaceFirst(input: CharSequence, replacement: String): String
{\n if (!replacement.contains("\\\\") && !replacement.contains('$')) {\n val nonGlobalOptions =
options.toFlags("\\u")\n return input.toString().nativeReplace(RegExp(pattern, nonGlobalOptions),
replacement)\n }\n val match = find(input) ?: return input.toString()\n return buildString {\n
append(input.substring(0, match.range.first))\n append(substituteGroupRefs(match, replacement))\n
append(input.substring(match.range.last + 1, input.length))\n }\n }\n\n /**\n * Splits the [input]
CharSequence to a list of strings around matches of this regular expression.\n *\n * @param limit Non-negative
value specifying the maximum number of substrings the string can be split to.\n * Zero by default means no limit
is set.\n *\n @Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\n public actual fun
split(input: CharSequence, limit: Int = 0): List<String> {\n requireNonNegativeLimit(limit)\n val matches =
findAll(input).let { if (limit == 0) it else it.take(limit - 1) }\n val result = mutableListOf<String>()\n var
lastStart = 0\n for (match in matches) {\n result.add(input.subSequence(lastStart,
match.range.start).toString())\n lastStart = match.range.endInclusive + 1\n }\n
result.add(input.subSequence(lastStart, input.length).toString())\n return result\n }\n\n /**\n * Splits the
[input] CharSequence to a sequence of strings around matches of this regular expression.\n *\n * @param limit
Non-negative value specifying the maximum number of substrings the string can be split to.\n * Zero by default
means no limit is set.\n * @sample samples.text.Regexps.splitToSequence\n *\n @SinceKotlin("1.6")\n
@WasExperimental(ExperimentalStdlibApi::class)\n
@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\n public actual fun
splitToSequence(input: CharSequence, limit: Int = 0): Sequence<String> {\n
requireNonNegativeLimit(limit)\n\n return sequence {\n var match = find(input)\n if (match ==
null || limit == 1) {\n yield(input.toString())\n return@sequence\n }\n\n var
nextStart = 0\n var splitCount = 0\n do {\n val foundMatch = match!!\n
yield(input.substring(nextStart, foundMatch.range.first))\n nextStart = foundMatch.range.endInclusive +
1\n match = foundMatch.next()\n } while (++splitCount != limit - 1 && match != null)\n\n
yield(input.substring(nextStart, input.length))\n }\n }\n\n /**\n * Returns the string representation of
this regular expression, namely the [pattern] of this regular expression.\n *\n * Note that another regular
expression constructed from the same pattern string may have different [options]\n * and may match strings
differently.\n *\n public override fun toString(): String = nativePattern.toString()\n\n actual companion object
{\n /**\n * Returns a regular expression that matches the specified [literal] string literally.\n * No
characters of that string will have special meaning when searching for an occurrence of the regular expression.\n
*\n *\n public actual fun fromLiteral(literal: String): Regex = Regex(escape(literal))\n\n /**\n * Returns a
regular expression pattern string that matches the specified [literal] string literally.\n * No characters of that
string will have special meaning when searching for an occurrence of the regular expression.\n *\n *\n public
actual fun escape(literal: String): String = literal.nativeReplace(patternEscape, "\\\\\$&")\n\n /**\n *
Returns a literal replacement expression for the specified [literal] string.\n * No characters of that string will
have special meaning when it is used as a replacement string in [Regex.replace] function.\n *\n *\n public
actual fun escapeReplacement(literal: String): String = literal.nativeReplace(replacementEscape, "\\\\\$&")\n\n
private val patternEscape = RegExp("\\\\\\"[\\\\^$*+?.()|\\{\\}]"\\", "\\g")\n private val replacementEscape =
RegExp("\\\\\\"[\\$]"\\", "\\g")\n internal fun nativeEscapeReplacement(literal: String): String =
literal.nativeReplace(nativeReplacementEscape, "\\$$$")\n private val nativeReplacementEscape =
RegExp("\\\\\\"[\\$]"\\", "\\g")\n }\n\n private fun RegExp.findNext(input: String, from: Int, nextPattern:

```

```

RegExp): MatchResult? {\n  this.lastIndex = from\n  val match = exec(input)\n  if (match == null) return null\n  val range = match.index..lastIndex - 1\n  return object : MatchResult {\n    override val range: IntRange = range\n    override val value: String\n    get() = match[0]!\n    override val groups: MatchGroupCollection = object : MatchGroupCollection, AbstractCollection<MatchGroup?>() {\n      override val size: Int get() = match.length\n      override fun iterator(): Iterator<MatchGroup?> = indices.asSequence().map { this[it] }.iterator()\n      override fun get(index: Int): MatchGroup? = match[index]?.let { MatchGroup(it) }\n    }\n    private var groupValues_: List<String>? = null\n    override val groupValues: List<String>\n    get() {\n      if (groupValues_ == null) {\n        groupValues_ = object : AbstractList<String>() {\n          override val size: Int get() = match.length\n          override fun get(index: Int): String = match[index] ?:""\n        }\n      }\n      return groupValues_!\n    }\n    override fun next(): MatchResult? =\n      nextPattern.findNext(input, if (range.isEmpty()) range.start + 1 else range.endInclusive + 1, nextPattern)\n  }\n}\n\n// The same code from K/N Regex.kt\nprivate fun substituteGroupRefs(match: MatchResult, replacement: String): String {\n  var index = 0\n  val result = StringBuilder(replacement.length)\n  while (index < replacement.length) {\n    val char = replacement[index++]\n    if (char == "\\") {\n      if (index == replacement.length)\n        throw IllegalArgumentException("The Char to be escaped is missing")\n      result.append(replacement[index++])\n    } else if (char == '$') {\n      if (index == replacement.length)\n        throw IllegalArgumentException("Capturing group index is missing")\n      if (replacement[index] == '{')\n        throw IllegalArgumentException("Named capturing group reference currently is not supported")\n      if (replacement[index] !in '0'..'9')\n        throw IllegalArgumentException("Invalid capturing group reference")\n      val endIndex = replacement.readGroupIndex(index, match.groupValues.size)\n      val groupIndex = replacement.substring(index, endIndex).toInt()\n      if (groupIndex >= match.groupValues.size)\n        throw IndexOutOfBoundsException("Group with index $groupIndex does not exist")\n      result.append(match.groupValues[groupIndex])\n      index = endIndex\n    } else {\n      result.append(char)\n    }\n  }\n  return result.toString()\n}\n\nprivate fun String.readGroupIndex(startIndex: Int, groupCount: Int): Int {\n  // at least one digit after '$' is always captured\n  var index = startIndex + 1\n  var groupIndex = this[startIndex] - '0'\n  // capture the largest valid group index\n  while (index < length && this[index] in '0'..'9') {\n    val newGroupIndex = (groupIndex * 10) + (this[index] - '0')\n    if (newGroupIndex in 0 until groupCount) {\n      groupIndex = newGroupIndex\n      index++\n    } else {\n      break\n    }\n  }\n  return index\n}\n\n/*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("StringsKt")\n@file:Suppress("EXTENSION_SHADOWED_BY_MEMBER")\npackage kotlin.text\nimport kotlin.contracts.*\n\n * A mutable sequence of characters.\n * String builder can be used to efficiently perform multiple string manipulation operations.\n *\n * expect class StringBuilder : Appendable, CharSequence {\n *   /** Constructs an empty string builder. */\n *   constructor()\n *   /** Constructs an empty string builder with the specified initial [capacity]. */\n *   constructor(capacity: Int)\n *   /** Constructs a string builder that contains the same characters as the specified [content] char sequence. */\n *   constructor(content: CharSequence)\n *   /** Constructs a string builder that contains the same characters as the specified [content] string. */\n *   @SinceKotlin("1.3")\n *   @ExperimentalStdlibApi\n *   constructor(content: String)\n *   override val length: Int\n *   override operator fun get(index: Int): Char\n *   override fun subSequence(startIndex: Int, endIndex: Int): CharSequence\n *   override fun append(value: Char): StringBuilder\n *   override fun append(value: CharSequence?): StringBuilder\n *   override fun append(value: CharSequence?, startIndex: Int, endIndex: Int): StringBuilder\n *   /**\n *    * Reverses the contents of this string builder and returns this instance.\n *    * Surrogate pairs included in this string builder are treated as single characters.\n *    * Therefore, the order of the high-low surrogates is never reversed.\n *    * Note that the reverse operation may produce new surrogate pairs that were unpaired low-surrogates and high-surrogates before the operation.\n *    * For example, reversing "\uDC00\uD800" produces "\uD800\uDC00"

```

which is a valid surrogate pair.

```

fun reverse(): StringBuilder {
    /** Appends the string representation of the specified object [value] to this string builder and returns this instance.
    * The overall effect is exactly as if the [value] were converted to a string by the `value.toString()` method,
    * and then that string was appended to this string builder.
    */
    fun append(value: Any?): StringBuilder {
        /** Appends the string representation of the specified boolean [value] to this string builder and returns this instance.
        * The overall effect is exactly as if the [value] were converted to a string by the `value.toString()` method,
        * and then that string was appended to this string builder.
        */
        @SinceKotlin("1.3") fun append(value: Boolean): StringBuilder {
            /** Appends characters in the specified character array [value] to this string builder and returns this instance.
            * Characters are appended in order, starting at the index 0.
            */
            @SinceKotlin("1.4") @WasExperimental(ExperimentalStdlibApi::class) fun append(value: CharArray):
            StringBuilder {
                /** Appends the specified string [value] to this string builder and returns this instance.
                * If [value] is `null`, then the four characters `"\u0000\u0000\u0000\u0000"` are appended.
                */
                @SinceKotlin("1.3") fun append(value: String?): StringBuilder {
                    /** Returns the current capacity of this string builder.
                    * The capacity is the maximum length this string builder can have before an allocation occurs.
                    */
                    @SinceKotlin("1.3") // @ExperimentalStdlibApi @Deprecated("Obtaining StringBuilder capacity is not supported in JS and common code.", level = DeprecationLevel.ERROR) fun capacity(): Int {
                        /** Ensures that the capacity of this string builder is at least equal to the specified [minimumCapacity].
                        * If the current capacity is less than the [minimumCapacity], a new backing storage is allocated with greater capacity.
                        * Otherwise, this method takes no action and simply returns.
                        */
                        @SinceKotlin("1.4") @WasExperimental(ExperimentalStdlibApi::class) fun ensureCapacity(minimumCapacity: Int) {
                            /** Returns the index within this string builder of the first occurrence of the specified [string].
                            * Returns -1 if the specified [string] does not occur in this string builder.
                            */
                            @SinceKotlin("1.4") @WasExperimental(ExperimentalStdlibApi::class) fun indexOf(string: String): Int {
                                /** Returns the index within this string builder of the first occurrence of the specified [string],
                                * starting at the specified [startIndex].
                                * Returns -1 if the specified [string] does not occur in this string builder starting at the specified [startIndex].
                                */
                                @SinceKotlin("1.4") @WasExperimental(ExperimentalStdlibApi::class) fun indexOf(string: String, startIndex: Int): Int {
                                    /** Returns the index within this string builder of the last occurrence of the specified [string].
                                    * The last occurrence of empty string `""` is considered to be at the index equal to `this.length`.
                                    * Returns -1 if the specified [string] does not occur in this string builder.
                                    */
                                    @SinceKotlin("1.4") @WasExperimental(ExperimentalStdlibApi::class) fun lastIndexOf(string: String): Int {
                                        /** Returns the index within this string builder of the last occurrence of the specified [string],
                                        * starting from the specified [startIndex] toward the beginning.
                                        * Returns -1 if the specified [string] does not occur in this string builder starting at the specified [startIndex].
                                        */
                                        @SinceKotlin("1.4") @WasExperimental(ExperimentalStdlibApi::class) fun lastIndexOf(string: String, startIndex: Int): Int {
                                            /** Inserts the string representation of the specified boolean [value] into this string builder at the specified [index] and returns this instance.
                                            * The overall effect is exactly as if the [value] were converted to a string by the `value.toString()` method,
                                            * and then that string was inserted into this string builder at the specified [index].
                                            * @throws IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string builder.
                                            */
                                            @SinceKotlin("1.4") @WasExperimental(ExperimentalStdlibApi::class) fun insert(index: Int, value: Boolean): StringBuilder {
                                                /** Inserts the specified character [value] into this string builder at the specified [index] and returns this instance.
                                                * @throws IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string builder.
                                                */
                                                @SinceKotlin("1.4") @WasExperimental(ExperimentalStdlibApi::class) fun insert(index: Int, value: Char): StringBuilder {
                                                    /** Inserts characters in the specified character array [value] into this string builder at the specified [index] and returns this instance.
                                                    * The inserted characters go in same order as in the [value] character array, starting at [index].
                                                    * @throws IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string builder.
                                                    */
                                                    @SinceKotlin("1.4") @WasExperimental(ExperimentalStdlibApi::class) fun insert(index: Int, value: CharArray): StringBuilder {
                                                        /** Inserts characters in the specified character

```

sequence [value] into this string builder at the specified [index] and returns this instance.\n * \n * The inserted characters go in the same order as in the [value] character sequence, starting at [index].\n * \n * @param index the position in this string builder to insert at.\n * @param value the character sequence from which characters are inserted. If [value] is `null`, then the four characters `"\null"` are inserted.\n * \n * @throws IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string builder.\n * \n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun insert(index: Int, value: CharSequence?): StringBuilder\n\n /**\n * Inserts the string representation of the specified object [value] into this string builder at the specified [index] and returns this instance.\n * \n * The overall effect is exactly as if the [value] were converted to a string by the `value.toString()` method,\n * and then that string was inserted into this string builder at the specified [index].\n * \n * @throws IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string builder.\n * \n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun insert(index: Int, value: Any?): StringBuilder\n\n /**\n * Inserts the string [value] into this string builder at the specified [index] and returns this instance.\n * \n * If [value] is `null`, then the four characters `"\null"` are inserted.\n * \n * @throws IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string builder.\n * \n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun insert(index: Int, value: String?): StringBuilder\n\n /**\n * Sets the length of this string builder to the specified [newLength].\n * \n * If the [newLength] is less than the current length, it is changed to the specified [newLength].\n * \n * Otherwise, null characters `'\u0000'` are appended to this string builder until its length is less than the [newLength].\n * \n * Note that in Kotlin/JS [set] operator function has non-constant execution time complexity.\n * \n * Therefore, increasing length of this string builder and then updating each character by index may slow down your program.\n * \n * @throws IndexOutOfBoundsException or [IllegalArgumentException] if [newLength] is less than zero.\n * \n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun setLength(newLength: Int)\n\n /**\n * Returns a new [String] that contains characters in this string builder at [startIndex] (inclusive) and up to the [length] (exclusive).\n * \n * @throws IndexOutOfBoundsException if [startIndex] is less than zero or greater than the length of this string builder.\n * \n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun substring(startIndex: Int): String\n\n /**\n * Returns a new [String] that contains characters in this string builder at [startIndex] (inclusive) and up to the [endIndex] (exclusive).\n * \n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this string builder indices or when `startIndex > endIndex`.\n * \n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun substring(startIndex: Int, endIndex: Int): String\n\n /**\n * Attempts to reduce storage used for this string builder.\n * \n * If the backing storage of this string builder is larger than necessary to hold its current contents,\n * then it may be resized to become more space efficient.\n * \n * Calling this method may, but is not required to, affect the value of the [capacity] property.\n * \n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n fun trimToSize()\n\n /**\n * Clears the content of this string builder making it empty and returns this instance.\n * \n * @sample samples.text.Strings.clearStringBuilder\n * \n @SinceKotlin("1.3")\n public expect fun StringBuilder.clear(): StringBuilder\n\n /**\n * Sets the character at the specified [index] to the specified [value].\n * \n * @throws IndexOutOfBoundsException if [index] is out of bounds of this string builder.\n * \n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n public expect operator fun StringBuilder.set(index: Int, value: Char)\n\n /**\n * Replaces characters in the specified range of this string builder with characters in the specified string [value] and returns this instance.\n * \n * @param startIndex the beginning (inclusive) of the range to replace.\n * @param endIndex the end (exclusive) of the range to replace.\n * @param value the string to replace with.\n * \n * @throws IndexOutOfBoundsException or [IllegalArgumentException] if [startIndex] is less than zero, greater than the length of this string builder, or `startIndex > endIndex`.\n * \n @SinceKotlin("1.4")\n @WasExperimental(ExperimentalStdlibApi::class)\n public expect fun StringBuilder.setRange(startIndex: Int, endIndex: Int, value: String): StringBuilder\n\n /**\n * Removes the character at the specified [index] from this string builder and returns this instance.\n * \n * If the `Char` at the

specified [index] is part of a supplementary code point, this method does not remove the entire supplementary character.
@param index the index of `Char` to remove.
@throws IndexOutOfBoundsException if [index] is out of bounds of this string builder.

```
@SinceKotlin("1.4")@WasExperimental(ExperimentalStdlibApi::class)public expect fun  
StringBuilder.deleteAt(index: Int): StringBuilder  
Removes characters in the specified range from this string builder and returns this instance.  
@param startIndex the beginning (inclusive) of the range to remove.  
@param endIndex the end (exclusive) of the range to remove.  
@throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] is out of range of this string builder indices or when `startIndex > endIndex`.
```

```
@SinceKotlin("1.4")@WasExperimental(ExperimentalStdlibApi::class)public expect fun  
StringBuilder.deleteRange(startIndex: Int, endIndex: Int): StringBuilder  
Copies characters from this string builder into the [destination] character array.  
@param destination the array to copy to.  
@param destinationOffset the position in the array to copy to, 0 by default.  
@param startIndex the beginning (inclusive) of the range to copy, 0 by default.  
@param endIndex the end (exclusive) of the range to copy, length of this string builder by default.  
@throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of this string builder indices or when `startIndex > endIndex`.  
@throws IndexOutOfBoundsException when the subrange doesn't fit into the [destination] array starting at the specified [destinationOffset],  
or when that index is out of the [destination] array indices range.
```

```
@SinceKotlin("1.4")@WasExperimental(ExperimentalStdlibApi::class)public expect fun  
StringBuilder.toCharArray(destination: CharArray, destinationOffset: Int = 0, startIndex: Int = 0, endIndex: Int = this.length)  
Appends characters in a subarray of the specified character array [value] to this string builder and returns this instance.  
Characters are appended in order, starting at specified [startIndex].  
@param value the array from which characters are appended.  
@param startIndex the beginning (inclusive) of the subarray to append.  
@param endIndex the end (exclusive) of the subarray to append.  
@throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of the [value] array indices or when `startIndex > endIndex`.
```

```
@SinceKotlin("1.4")@WasExperimental(ExperimentalStdlibApi::class)public expect fun  
StringBuilder.appendRange(value: CharArray, startIndex: Int, endIndex: Int): StringBuilder  
Appends a subsequence of the specified character sequence [value] to this string builder and returns this instance.  
@param value the character sequence from which a subsequence is appended.  
@param startIndex the beginning (inclusive) of the subsequence to append.  
@param endIndex the end (exclusive) of the subsequence to append.  
@throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of the [value] character sequence indices or when `startIndex > endIndex`.
```

```
@SinceKotlin("1.4")@WasExperimental(ExperimentalStdlibApi::class)public expect fun  
StringBuilder.appendRange(value: CharSequence, startIndex: Int, endIndex: Int): StringBuilder  
Inserts characters in a subarray of the specified character array [value] into this string builder at the specified [index] and returns this instance.  
The inserted characters go in same order as in the [value] array, starting at [index].  
@param index the position in this string builder to insert at.  
@param value the array from which characters are inserted.  
@param startIndex the beginning (inclusive) of the subarray to insert.  
@param endIndex the end (exclusive) of the subarray to insert.  
@throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of the [value] array indices or when `startIndex > endIndex`.  
@throws IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string builder.
```

```
@SinceKotlin("1.4")@WasExperimental(ExperimentalStdlibApi::class)public expect fun  
StringBuilder.insertRange(index: Int, value: CharArray, startIndex: Int, endIndex: Int): StringBuilder  
Inserts characters in a subsequence of the specified character sequence [value] into this string builder at the specified [index] and returns this instance.  
The inserted characters go in the same order as in the [value] character sequence, starting at [index].  
@param index the position in this string builder to insert at.  
@param value
```

the character sequence from which a subsequence is inserted.\n * @param startIndex the beginning (inclusive) of the subsequence to insert.\n * @param endIndex the end (exclusive) of the subsequence to insert.\n * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of the [value] character sequence indices or when `startIndex > endIndex`.\n * @throws IndexOutOfBoundsException if [index] is less than zero or greater than the length of this string builder.\n

```
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun
```

```
StringBuilder.insertRange(index: Int, value: CharSequence, startIndex: Int, endIndex: Int):
```

```
StringBuilder\n\n@Suppress("EXTENSION_SHADOWED_BY_MEMBER")\n@Deprecated("Use\nappend(value: Any?) instead", ReplaceWith("append(value = obj)"),
```

```
DeprecationLevel.WARNING)\n@kotlin.internal.InlineOnly\npublic inline fun StringBuilder.append(obj: Any?):
```

```
StringBuilder = this.append(obj)\n\n/**\n * Builds new string by populating newly created [StringBuilder] using\n provided [builderAction]\n * and then converting it to [String].\n */\n@kotlin.internal.InlineOnly\npublic inline fun
```

```
buildString(builderAction: StringBuilder.() -> Unit): String {\n    contract { callsInPlace(builderAction,
```

```
InvocationKind.EXACTLY_ONCE) }\n    return StringBuilder().apply(builderAction).toString()\n}\n\n/**\n * Builds new string by populating newly created [StringBuilder] initialized with the given [capacity]\n * using
```

```
provided [builderAction] and then converting it to [String].\n */\n@kotlin.internal.InlineOnly\npublic inline fun buildString(capacity: Int, builderAction:
```

```
StringBuilder.() -> Unit): String {\n    contract { callsInPlace(builderAction, InvocationKind.EXACTLY_ONCE)\n }\n    return StringBuilder(capacity).apply(builderAction).toString()\n}\n\n/**\n * Appends all arguments to the
```

```
given StringBuilder.\n */\npublic fun StringBuilder.append(vararg value: String?): StringBuilder {\n    for (item in
```

```
value)\n        append(item)\n    return this\n}\n\n/**\n * Appends all arguments to the given StringBuilder.\n */\npublic fun StringBuilder.append(vararg value: Any?): StringBuilder {\n    for (item in value)\n        append(item)\n    return this\n}\n\n/**\n * Appends a line feed character (`\n`) to this StringBuilder.
```

```
 */\n@kotlin.internal.InlineOnly\npublic inline fun StringBuilder.appendLine():
```

```
StringBuilder = append("\n")\n\n/**\n * Appends [value] to this [StringBuilder], followed by a line feed character
```

```
(`\n`).\n */\n@kotlin.internal.InlineOnly\npublic inline fun StringBuilder.appendLine(value:
```

```
CharSequence?): StringBuilder = append(value).appendLine()\n\n/**\n * Appends [value] to this [StringBuilder],\n followed by a line feed character (`\n`).\n */\n@kotlin.internal.InlineOnly\npublic inline fun
```

```
StringBuilder.appendLine(value: String?): StringBuilder = append(value).appendLine()\n\n/**\n * Appends [value] to
```

```
this [StringBuilder], followed by a line feed character (`\n`).\n */\n@kotlin.internal.InlineOnly\npublic inline fun StringBuilder.appendLine(value: Any?):
```

```
StringBuilder = append(value).appendLine()\n\n/**\n * Appends [value] to this [StringBuilder], followed by a line feed
```

```
character (`\n`).\n */\n@kotlin.internal.InlineOnly\npublic inline fun
```

```
StringBuilder.appendLine(value: CharArray): StringBuilder = append(value).appendLine()\n\n/**\n * Appends [value]
```

```
to this [StringBuilder], followed by a line feed character (`\n`).\n */\n@kotlin.internal.InlineOnly\npublic inline fun StringBuilder.appendLine(value: Char):
```

```
StringBuilder = append(value).appendLine()\n\n/**\n * Appends [value] to this [StringBuilder], followed by a line feed
```

```
character (`\n`).\n */\n@kotlin.internal.InlineOnly\npublic inline fun
```

```
StringBuilder.appendLine(value: Boolean): StringBuilder = append(value).appendLine()\n\n/*\n * Copyright 2010-
```

```
2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the\n Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.text\n\nimport
```

```
kotlin.js.RegExp\n\n@kotlin.internal.InlineOnly\ninternal actual inline fun String.nativeIndexOf(ch: Char,
```

```
fromIndex: Int): Int = nativeIndexOf(ch.toString(), fromIndex)\n\n@kotlin.internal.InlineOnly\ninternal actual
```

```
inline fun String.nativeLastIndexOf(ch: Char, fromIndex: Int): Int = nativeLastIndexOf(ch.toString(),
```

```
fromIndex)\n\n/**\n * Returns `true` if this string starts with the specified prefix.\n */\n@kotlin.internal.InlineOnly\npublic actual fun
```

```
String.startsWith(prefix: String, ignoreCase: Boolean = false): Boolean {\n    if (!ignoreCase)\n        return
```

```
nativeStartsWith(prefix, 0)\n    else\n        return regionMatches(0, prefix, 0, prefix.length, ignoreCase)\n}\n\n/**\n * Returns `true` if this string starts with the specified prefix.
```

```
 */\n@kotlin.internal.InlineOnly\npublic actual fun String.startsWith(prefix: String, ignoreCase: Boolean = false): Boolean {\n    if (!ignoreCase)\n        return
```

```
nativeStartsWith(prefix, 0)\n    else\n        return regionMatches(0, prefix, 0, prefix.length, ignoreCase)\n}\n\n/**\n * Returns `true` if this string starts with the specified prefix.
```

Returns `true` if a substring of this string starting at the specified offset [startIndex] starts with the specified prefix.

```

*\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual fun
String.startsWith(prefix: String, startIndex: Int, ignoreCase: Boolean = false): Boolean {\n    if (!ignoreCase)\n        return nativeStartsWith(prefix, startIndex)\n    else\n        return regionMatches(startIndex, prefix, 0, prefix.length,
ignoreCase)\n}\n\n/**\n * Returns `true` if this string ends with the specified suffix.\n */\n*\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual fun
String.endsWith(suffix: String, ignoreCase: Boolean = false): Boolean {\n    if (!ignoreCase)\n        return
nativeEndsWith(suffix)\n    else\n        return regionMatches(length - suffix.length, suffix, 0, suffix.length,
ignoreCase)\n}\n\n@Deprecated("Use Regex.matches() instead",
ReplaceWith("regex.toRegex().matches(this)"))\n@DeprecatedSinceKotlin(warningSince = "1.6")\npublic fun
String.matches(regex: String): Boolean {\n    @Suppress("DEPRECATION")\n    val result = this.match(regex)\n    return result != null && result.size != 0\n}\n\n/**\n * Returns `true` if this string is empty or consists solely of
whitespace characters.\n */\n*\n * @sample samples.text.Strings.stringIsBlank\n */\npublic actual fun
CharSequence.isBlank(): Boolean = length == 0 || indices.all { this[it].isWhitespace() }\n\n/**\n * Returns `true` if
this string is equal to [other], optionally ignoring character case.\n */\n*\n * Two strings are considered to be equal if
they have the same length and the same character at the same index.\n */\n*\n * If [ignoreCase] is true, the result of
`Char.toUpperCaseChar().toLowerCaseChar()` on each character is compared.\n */\n*\n * @param ignoreCase `true` to ignore
character case when comparing strings. By default `false`.\n */\n*\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual fun
String?.equals(other: String?, ignoreCase: Boolean = false): Boolean {\n    if (this == null) return other == null\n    if
(other == null) return false\n    if (!ignoreCase) return this == other\n    if (this.length != other.length) return
false\n\n    for (index in 0 until this.length) {\n        val thisChar = this[index]\n        val otherChar = other[index]\n
        if (!thisChar.equals(otherChar, ignoreCase)) {\n            return false\n        }\n    }\n\n    return
true\n}\n\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual fun
CharSequence.regionMatches(thisOffset: Int, other: CharSequence, otherOffset: Int, length: Int, ignoreCase:
Boolean = false): Boolean =\n    regionMatchesImpl(thisOffset, other, otherOffset, length, ignoreCase)\n\n/**\n * Returns a copy of this string having its first letter titlecased using the rules of the default locale,\n */\n*\n * or the original
string if it's empty or already starts with a title case letter.\n */\n*\n * The title case of a character is usually the same as
its upper case with several exceptions.\n */\n*\n * The particular list of characters with the special title case form depends
on the underlying platform.\n */\n*\n * @sample samples.text.Strings.capitalize\n */\n@Deprecated("Use
replaceFirstChar instead.", ReplaceWith("replaceFirstChar { if (it.isLowerCase()) it.titlecase() else it.toString()
}"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic actual fun String.capitalize(): String {\n    return if
(isNotEmpty()) substring(0, 1).uppercase() + substring(1) else this\n}\n\n/**\n * Returns a copy of this string having
its first letter lowercased using the rules of the default locale,\n */\n*\n * or the original string if it's empty or already
starts with a lower case letter.\n */\n*\n * @sample samples.text.Strings.decapsialize\n */\n@Deprecated("Use
replaceFirstChar instead.", ReplaceWith("replaceFirstChar { it.lowercase()
}"))\n@DeprecatedSinceKotlin(warningSince = "1.5")\npublic actual fun String.decapsialize(): String {\n    return
if (isNotEmpty()) substring(0, 1).lowercase() + substring(1) else this\n}\n\n/**\n * Returns a string containing this
char sequence repeated [n] times.\n */\n*\n * @throws [IllegalArgumentException] when n < 0.\n */\n*\n * @sample
samples.text.Strings.repeat\n */\npublic actual fun CharSequence.repeat(n: Int): String {\n    require(n >= 0) {\n
"Count 'n' must be non-negative, but was $n.\n"}\n    return when (n) {\n        0 -> ""\n        1 -> this.toString()\n
        else -> {\n            var result = ""\n            if (!isEmpty()) {\n                var s = this.toString()\n                var count =
n\n                while (true) {\n                    if ((count and 1) == 1) {\n                        result += s\n                    }\n
                    count = count ushr 1\n                    if (count == 0) {\n                        break\n                    }\n
                    s +=
s\n                }\n                return result\n            }\n        }\n}\n\n/**\n * Returns a new string obtained by
replacing all occurrences of the [oldValue] substring in this string\n */\n*\n * with the specified [newValue] string.\n */\n*\n *
@sample samples.text.Strings.replace\n */\n*\n@Suppress("ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS")\npublic actual fun

```

```

String.replace(oldValue: String, newValue: String, ignoreCase: Boolean = false): String =\n
nativeReplace(RegExp(Regex.escape(oldValue), if (ignoreCase) \"gui\" else \"gu\"),\n
Regex.nativeEscapeReplacement(newValue))\n\n/*\n * Returns a new string with all occurrences of [oldChar]\n
replaced with [newChar].\n\n * @sample samples.text.Strings.replace\n
*\n\n@Suppress(\"ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS\")\n\npublic actual fun\n
String.replace(oldChar: Char, newChar: Char, ignoreCase: Boolean = false): String =\n
nativeReplace(RegExp(Regex.escape(oldChar.toString()), if (ignoreCase) \"gui\" else \"gu\"),\n
newChar.toString())\n\n@Suppress(\"ACTUAL_FUNCTION_WITH_DEFAULT_ARGUMENTS\")\n\npublic actual\n
fun String.replaceFirst(oldValue: String, newValue: String, ignoreCase: Boolean = false): String =\n
nativeReplace(RegExp(Regex.escape(oldValue), if (ignoreCase) \"ui\" else \"u\"),\n
Regex.nativeEscapeReplacement(newValue))\n\n@Suppress(\"ACTUAL_FUNCTION_WITH_DEFAULT_ARGU\n
MENTS\")\n\npublic actual fun String.replaceFirst(oldChar: Char, newChar: Char, ignoreCase: Boolean = false):\n
String =\n\n nativeReplace(RegExp(Regex.escape(oldChar.toString()), if (ignoreCase) \"ui\" else \"u\"),\n
newChar.toString())\n\n,\"/*\n\n * Copyright 2010-2019 JetBrains s.r.o. and Kotlin Programming Language\n
contributors.\n\n * Use of this source code is governed by the Apache 2.0 license that can be found in the\n
license/LICENSE.txt file.\n\n */\n\npackage kotlin.text\n\n\n/** Returns the negative [size] if [throwOnMalformed] is\n
false, throws [CharacterCodingException] otherwise. *\n\nprivate fun malformed(size: Int, index: Int,\n
throwOnMalformed: Boolean): Int {\n\n if (throwOnMalformed) throw CharacterCodingException(\"Malformed\n
sequence starting at ${index - 1}\")\n\n return -size\n}\n\n\n/** Returns code point corresponding to UTF-16\n
surrogate pair,\n\n * where the first of the pair is the [high] and the second is in the [string] at the [index].\n\n * Returns\n
zero if the pair is malformed and [throwOnMalformed] is false.\n\n *\n\n * @throws CharacterCodingException if the\n
pair is malformed and [throwOnMalformed] is true.\n\n *\n\nprivate fun codePointFromSurrogate(string: String, high:\n
Int, index: Int, endIndex: Int, throwOnMalformed: Boolean): Int {\n\n if (high !in 0xD800..0xDBFF || index >=\n
endIndex) {\n\n return malformed(0, index, throwOnMalformed)\n\n }\n\n val low = string[index].code\n\n if\n
(low !in 0xDC00..0xDFFF) {\n\n return malformed(0, index, throwOnMalformed)\n\n }\n\n return 0x10000 +\n
((high and 0x3FF) shl 10) or (low and 0x3FF)\n}\n\n\n\n/** Returns code point corresponding to UTF-8 sequence of\n
two bytes,\n\n * where the first byte of the sequence is the [byte1] and the second byte is in the [bytes] array at the\n
[index].\n\n * Returns zero if the sequence is malformed and [throwOnMalformed] is false.\n\n *\n\n * @throws\n
CharacterCodingException if the sequence of two bytes is malformed and [throwOnMalformed] is true.\n\n *\n\nprivate fun codePointFrom2(bytes: ByteArray, byte1: Int, index: Int, endIndex: Int, throwOnMalformed:\n
Boolean): Int {\n\n if (byte1 and 0x1E == 0 || index >= endIndex) {\n\n return malformed(0, index,\n
throwOnMalformed)\n\n }\n\n val byte2 = bytes[index].toInt()\n\n if (byte2 and 0xC0 != 0x80) {\n\n return\n
malformed(0, index, throwOnMalformed)\n\n }\n\n return (byte1 shl 6) xor byte2 xor 0xF8\n}\n\n\n\n/** Returns\n
code point corresponding to UTF-8 sequence of three bytes,\n\n * where the first byte of the sequence is the [byte1]\n
and the others are in the [bytes] array starting from the [index].\n\n * Returns a non-positive value indicating number\n
of bytes from [bytes] included in malformed sequence\n\n * if the sequence is malformed and [throwOnMalformed] is\n
false.\n\n *\n\n * @throws CharacterCodingException if the sequence of three bytes is malformed and\n
[throwOnMalformed] is true.\n\n *\n\nprivate fun codePointFrom3(bytes: ByteArray, byte1: Int, index: Int, endIndex:\n
Int, throwOnMalformed: Boolean): Int {\n\n if (index >= endIndex) {\n\n return malformed(0, index,\n
throwOnMalformed)\n\n }\n\n\n val byte2 = bytes[index].toInt()\n\n if (byte1 and 0xF == 0) {\n\n if (byte2 and\n
0xE0 != 0xA0) {\n\n // Non-shortest form\n\n return malformed(0, index, throwOnMalformed)\n\n }\n\n\n }\n
else if (byte1 and 0xF == 0xD) {\n\n if (byte2 and 0xE0 != 0x80) {\n\n // Surrogate code point\n\n\n return\n
malformed(0, index, throwOnMalformed)\n\n }\n\n }\n\n else if (byte2 and 0xC0 != 0x80) {\n\n return\n
malformed(0, index, throwOnMalformed)\n\n }\n\n\n if (index + 1 == endIndex) {\n\n return malformed(1, index,\n
throwOnMalformed)\n\n }\n\n\n val byte3 = bytes[index + 1].toInt()\n\n if (byte3 and 0xC0 != 0x80) {\n\n return\n
malformed(1, index, throwOnMalformed)\n\n }\n\n\n return (byte1 shl 12) xor (byte2 shl 6) xor byte3 xor -\n
0x1E08\n}\n\n\n\n\n/** Returns code point corresponding to UTF-8 sequence of four bytes,\n\n * where the first byte\n
of the sequence is the [byte1] and the others are in the [bytes] array starting from the [index].\n\n * Returns a non-

```



```

positive value indicating number of bytes from [bytes] included in malformed sequence\n * if the sequence is
malformed and [throwOnMalformed] is false.\n *\n * @throws CharacterCodingException if the sequence of four
bytes is malformed and [throwOnMalformed] is true.\n *\nprivate fun codePointFrom4(bytes: ByteArray, byte1:
Int, index: Int, endIndex: Int, throwOnMalformed: Boolean): Int {\n    if (index >= endIndex) {\n        malformed(0,
index, throwOnMalformed)\n    }\n    val byte2 = bytes[index].toInt()\n    if (byte1 and 0xF == 0x0) {\n        if
(byte2 and 0xF0 <= 0x80) {\n            // Non-shortest form\n            return malformed(0, index,
throwOnMalformed)\n        }\n    } else if (byte1 and 0xF == 0x4) {\n        if (byte2 and 0xF0 != 0x80) {\n            //
Out of Unicode code points domain (larger than U+10FFFF)\n            return malformed(0, index,
throwOnMalformed)\n        }\n    } else if (byte1 and 0xF > 0x4) {\n        return malformed(0, index,
throwOnMalformed)\n    } else if (byte2 and 0xC0 != 0x80) {\n        return malformed(0, index,
throwOnMalformed)\n    }\n    if (index + 1 == endIndex) {\n        return malformed(1, index,
throwOnMalformed)\n    }\n    val byte3 = bytes[index + 1].toInt()\n    if (byte3 and 0xC0 != 0x80) {\n        return
malformed(1, index, throwOnMalformed)\n    }\n    if (index + 2 == endIndex) {\n        return malformed(2, index,
throwOnMalformed)\n    }\n    val byte4 = bytes[index + 2].toInt()\n    if (byte4 and 0xC0 != 0x80) {\n        return
malformed(2, index, throwOnMalformed)\n    }\n    return (byte1 shl 18) xor (byte2 shl 12) xor (byte3 shl 6) xor
byte4 xor 0x381F80)\n}\n\n/**\n * Maximum number of bytes needed to encode a single char.\n *\n * Code points in
`0..0x7F` are encoded in a single byte.\n * Code points in `0x80..0x7FF` are encoded in two bytes.\n * Code points
in `0x800..0xD7FF` or in `0xE000..0xFFFF` are encoded in three bytes.\n * Surrogate code points in
`0xD800..0xDFFF` are not Unicode scalar values, therefore aren't encoded.\n * Code points in
`0x10000..0x10FFFF` are represented by a pair of surrogate `Char`s and are encoded in four bytes.\n *\nprivate
const val MAX_BYTES_PER_CHAR = 3\n\n/**\n * The byte sequence a malformed UTF-16 char sequence is
replaced by.\n *\nprivate val REPLACEMENT_BYTE_SEQUENCE: ByteArray = byteArrayOf(0xEF.toByte(),
0xBF.toByte(), 0xBD.toByte())\n\n/**\n * Encodes the [string] using UTF-8 and returns the resulting [ByteArray].\n
*\n * @param string the string to encode.\n * @param startIndex the start offset (inclusive) of the substring to
encode.\n * @param endIndex the end offset (exclusive) of the substring to encode.\n * @param
throwOnMalformed whether to throw on malformed char sequence or replace by the
[REPLACEMENT_BYTE_SEQUENCE].\n *\n * @throws CharacterCodingException if the char sequence is
malformed and [throwOnMalformed] is true.\n *\ninternal fun encodeUtf8(string: String, startIndex: Int, endIndex:
Int, throwOnMalformed: Boolean): ByteArray {\n    require(startIndex >= 0 && endIndex <= string.length &&
startIndex <= endIndex)\n    val bytes = ByteArray((endIndex - startIndex) * MAX_BYTES_PER_CHAR)\n    var
byteIndex = 0\n    var charIndex = startIndex\n    while (charIndex < endIndex) {\n        val code =
string[charIndex++].code\n        when {\n            code < 0x80 -> bytes[byteIndex++] = code.toByte()\n
            code < 0x800 -> {\n                bytes[byteIndex++] = ((code shr 6) or 0xC0).toByte()\n
                bytes[byteIndex++] = ((code and 0x3F) or 0x80).toByte()\n            }\n            code < 0xD800 || code >= 0xE000 ->
{\n                bytes[byteIndex++] = ((code shr 12) or 0xE0).toByte()\n                bytes[byteIndex++] = (((code shr 6)
and 0x3F) or 0x80).toByte()\n                bytes[byteIndex++] = ((code and 0x3F) or 0x80).toByte()\n            }\n
            else -> { // Surrogate char value\n                val codePoint = codePointFromSurrogate(string, code, charIndex,
endIndex, throwOnMalformed)\n                if (codePoint <= 0) {\n                    bytes[byteIndex++] =
REPLACEMENT_BYTE_SEQUENCE[0]\n                    bytes[byteIndex++] =
REPLACEMENT_BYTE_SEQUENCE[1]\n                    bytes[byteIndex++] =
REPLACEMENT_BYTE_SEQUENCE[2]\n                } else {\n                    bytes[byteIndex++] = ((codePoint shr
18) or 0xF0).toByte()\n                    bytes[byteIndex++] = (((codePoint shr 12) and 0x3F) or 0x80).toByte()\n
                    bytes[byteIndex++] = (((codePoint shr 6) and 0x3F) or 0x80).toByte()\n                    bytes[byteIndex++] =
(((codePoint and 0x3F) or 0x80).toByte()\n                    charIndex++\n                }\n            }\n        }\n    }\n    return if (bytes.size == byteIndex) bytes else bytes.copyOf(byteIndex)\n}\n\n/**\n * The character a malformed
UTF-8 byte sequence is replaced by.\n *\nprivate const val REPLACEMENT_CHAR = "\\uFFFF"\n\n/**\n * Decodes the UTF-8 [bytes] array and returns the resulting [String].\n *\n * @param bytes the byte array to decode.\n
* @param startIndex the start offset (inclusive) of the array to be decoded.\n * @param endIndex the end offset

```

```

(exclusive) of the array to be encoded.\n * @param throwOnMalformed whether to throw on malformed byte
sequence or replace by the [REPLACEMENT_CHAR].\n *\n * @throws CharacterCodingException if the array is
malformed UTF-8 byte sequence and [throwOnMalformed] is true.\n */\ninternal fun decodeUtf8(bytes: ByteArray,
startIndex: Int, endIndex: Int, throwOnMalformed: Boolean): String {\n    require(startIndex >= 0 && endIndex <=
bytes.size && startIndex <= endIndex)\n    var byteIndex = startIndex\n    val stringBuilder = StringBuilder()\n    while (byteIndex < endIndex) {\n        val byte = bytes[byteIndex++].toInt()\n        when {\n            byte >= 0 ->{\n                stringBuilder.append(byte.toChar())\n                byte shr 5 == -2 -> {\n                    val code =
codePointFrom2(bytes, byte, byteIndex, endIndex, throwOnMalformed)\n                    if (code <= 0) {\n
stringBuilder.append(REPLACEMENT_CHAR)\n                    byteIndex += -code\n                    } else {\n
stringBuilder.append(code.toChar())\n                    byteIndex += 1\n                    }\n                }\n                byte shr 4 == -2 -
> {\n                    val code = codePointFrom3(bytes, byte, byteIndex, endIndex, throwOnMalformed)\n                    if
(code <= 0) {\n                        stringBuilder.append(REPLACEMENT_CHAR)\n                        byteIndex += -code\n
                    } else {\n                        stringBuilder.append(code.toChar())\n                        byteIndex += 2\n                    }\n
                }\n                byte shr 3 == -2 -> {\n                    val code = codePointFrom4(bytes, byte, byteIndex, endIndex,
throwOnMalformed)\n                    if (code <= 0) {\n                        stringBuilder.append(REPLACEMENT_CHAR)\n
byteIndex += -code\n                    } else {\n                        val high = (code - 0x10000) shr 10 or 0xD800\n
val low = (code and 0x3FF) or 0xDC00\n                        stringBuilder.append(high.toChar())\n
stringBuilder.append(low.toChar())\n                        byteIndex += 3\n                    }\n                }\n                else -> {\n
malformed(0, byteIndex, throwOnMalformed)\n                stringBuilder.append(REPLACEMENT_CHAR)\n
            }\n        }\n    }\n    return stringBuilder.toString()\n}"/**\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n */\npackage kotlin\n/**\n * Returns the detailed description of this
throwable with its stack trace.\n * The detailed description includes:\n * - the short description (see
[Throwable.toString]) of this throwable;\n * - the complete stack trace;\n * - detailed descriptions of the exceptions
that were [suppressed][suppressedExceptions] in order to deliver this exception;\n * - the detailed description of
each throwable in the [Throwable.cause] chain.\n */\n@SinceKotlin("1.4")\npublic actual fun
Throwable.stackTraceToString(): String = ExceptionTraceBuilder().buildFor(this)\n/**\n * Prints the [detailed
description][Throwable.stackTraceToString] of this throwable to console error output.\n
*/\n@SinceKotlin("1.4")\npublic actual fun Throwable.printStackTrace() {\n
console.error(this.stackTraceToString())\n}\n/**\n * Adds the specified exception to the list of exceptions that
were\n * suppressed in order to deliver this exception.\n */\n@SinceKotlin("1.4")\npublic actual fun
Throwable.addSuppressed(exception: Throwable) {\n    if (this !== exception) {\n        val suppressed =
this.asDynamic()._suppressed.unsafeCast<MutableList<Throwable>?>()\n        if (suppressed == null) {\n
this.asDynamic()._suppressed = mutableListOf(exception)\n        } else {\n            suppressed.add(exception)\n
        }\n    }\n}\n/**\n * Returns a list of all exceptions that were suppressed in order to deliver this exception.\n
*/\n@SinceKotlin("1.4")\npublic actual val Throwable.suppressedExceptions: List<Throwable>\n    get() {\n
return this.asDynamic()._suppressed?.unsafeCast<List<Throwable>>() ?: emptyList()\n    }\n\nprivate class
ExceptionTraceBuilder {\n    private val target = StringBuilder()\n    private val visited = arrayOf<Throwable>()\n
private var topStack: String = ""\n    private var topStackStart: Int = 0\n    fun buildFor(exception: Throwable):
String {\n        exception.dumpFullTrace("", "")\n        return target.toString()\n    }\n    private fun
hasSeen(exception: Throwable): Boolean = visited.any { it === exception }\n    private fun
Throwable.dumpFullTrace(indent: String, qualifier: String) {\n        this.dumpSelfTrace(indent, qualifier) ||
return\n        var cause = this.cause\n        while (cause != null) {\n            cause.dumpSelfTrace(indent, "Caused
by: ") || return\n            cause = cause.cause\n        }\n    }\n    private fun Throwable.dumpSelfTrace(indent:
String, qualifier: String): Boolean {\n        target.append(indent).append(qualifier)\n        val shortInfo =
this.toString()\n        if (hasSeen(this)) {\n            target.append("[CIRCULAR REFERENCE, SEE ABOVE:
").append(shortInfo).append("\\n")\n            return false\n        }\n        visited.asDynamic().push(this)\n        var
stack = this.asDynamic().stack as String?\n        if (stack != null) {\n            val stackStart =

```

```

stack.indexOf(shortInfo).let { if (it < 0) 0 else it + shortInfo.length } \n      if (stackStart == 0)
target.append(shortInfo).append("\\n") \n      if (topStack.isEmpty()) { \n          topStack = stack \n
topStackStart = stackStart \n          } else { \n          stack = dropCommonFrames(stack, stackStart) \n          } \n
    if (indent.isNotEmpty()) { \n          // indent stack, but avoid indenting exception message lines \n          val
messageLines = if (stackStart == 0) 0 else 1 + shortInfo.count { c -> c == '\\n' } \n
stack.lineSequence().forEachIndexed { index: Int, line: String -> \n          if (index >= messageLines)
target.append(indent) \n          target.append(line).append("\\n") \n          } \n          } else { \n
target.append(stack).append("\\n") \n          } \n          } else { \n          target.append(shortInfo).append("\\n") \n
} \n          val suppressed = suppressedExceptions \n          if (suppressed.isNotEmpty()) { \n          val
suppressedIndent = indent + \"  \" \n          for (s in suppressed) { \n          s.dumpFullTrace(suppressedIndent,
\"Suppressed: \") \n          } \n          } \n          return true \n          } \n          private fun dropCommonFrames(stack: String,
stackStart: Int): String { \n          var commonFrames: Int = 0 \n          var lastBreak: Int = 0 \n          var preLastBreak: Int
= 0 \n          for (pos in 0 until minOf(topStack.length - topStackStart, stack.length - stackStart)) { \n          val c =
stack[stack.lastIndex - pos] \n          if (c != topStack[topStack.lastIndex - pos]) break \n          if (c == '\\n') { \n
commonFrames += 1 \n          preLastBreak = lastBreak \n          lastBreak = pos \n          } \n          } \n
if (commonFrames <= 1) return stack \n          while (preLastBreak > 0 && stack[stack.lastIndex - (preLastBreak - 1)]
== ' ') \n          preLastBreak -= 1 \n          // leave 1 common frame to ease matching with the top exception stack \n
return stack.dropLast(preLastBreak) + \"... and ${commonFrames - 1} more common stack frames skipped\" \n
} \n          }, /* \n          * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors. \n          * Use of this
source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file. \n
*/ \n          \n          package kotlin.time \n          \n          import kotlin.js.json \n          \n          import kotlin.math.* \n          \n          internal actual inline val
durationAssertionsEnabled: Boolean get() = true \n          \n          internal actual fun formatToExactDecimals(value: Double,
decimals: Int): String { \n          val rounded = if (decimals == 0) { \n          value \n          } else { \n          val pow =
10.0.pow(decimals) \n          JsMath.round(abs(value) * pow) / pow * sign(value) \n          } \n          return if (abs(rounded) <
1e21) { \n          // toFixed switches to scientific format after 1e21 \n
rounded.asDynamic().toFixed(decimals).unsafeCast<String>() \n          } else { \n          // toPrecision outputs the specified
number of digits, but only for positive numbers \n          val positive = abs(rounded) \n          val positiveString =
positive.asDynamic().toPrecision(ceil(log10(positive)) + decimals).unsafeCast<String>() \n          if (rounded < 0) \"-
$positiveString\" else positiveString \n          } \n          } \n          \n          internal actual fun formatUpToDecimals(value: Double, decimals:
Int): String { \n          return value.asDynamic().toLocaleString(\"en-us\", json(\"maximumFractionDigits\" to
decimals)).unsafeCast<String>() \n          } \n          }, /* \n          * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming
Language contributors. \n          * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file. \n          */ \n          \n          package
kotlin.time \n          \n          @SinceKotlin(\"1.6\") \n          @WasExperimental(ExperimentalTime::class) \n          public actual enum class
DurationUnit(internal val scale: Double) { \n          /** \n          * Time unit representing one nanosecond, which is 1/1000
of a microsecond. \n          * \n          * NANOSECONDS(1e0), \n          /** \n          * Time unit representing one microsecond, which is
1/1000 of a millisecond. \n          * \n          * MICROSECONDS(1e3), \n          /** \n          * Time unit representing one millisecond,
which is 1/1000 of a second. \n          * \n          * MILLISECONDS(1e6), \n          /** \n          * Time unit representing one second. \n
* \n          * SECONDS(1e9), \n          /** \n          * Time unit representing one minute. \n          * \n          * MINUTES(60e9), \n          /** \n
* Time unit representing one hour. \n          * \n          * HOURS(3600e9), \n          /** \n          * Time unit representing one day,
which is always equal to 24 hours. \n          * \n          * DAYS(86400e9); \n          } \n          } \n          \n          @SinceKotlin(\"1.3\") \n          internal actual fun
convertDurationUnit(value: Double, sourceUnit: DurationUnit, targetUnit: DurationUnit): Double { \n          val
sourceCompareTarget = sourceUnit.scale.compareTo(targetUnit.scale) \n          return when { \n
sourceCompareTarget > 0 -> value * (sourceUnit.scale / targetUnit.scale) \n          sourceCompareTarget < 0 -> value /
(targetUnit.scale / sourceUnit.scale) \n          else -> value \n          } \n          } \n          } \n          \n          @SinceKotlin(\"1.5\") \n          internal actual fun
convertDurationUnitOverflow(value: Long, sourceUnit: DurationUnit, targetUnit: DurationUnit): Long { \n          val
sourceCompareTarget = sourceUnit.scale.compareTo(targetUnit.scale) \n          return when { \n
sourceCompareTarget > 0 -> value * (sourceUnit.scale / targetUnit.scale).toLong() \n          sourceCompareTarget < 0

```

```

-> value / (targetUnit.scale / sourceUnit.scale).toLong()\n    else -> value\n
}\n}\n\n@SinceKotlin("1.5")\n\ninternal actual fun convertDurationUnit(value: Long, sourceUnit: DurationUnit,
targetUnit: DurationUnit): Long {\n    val sourceCompareTarget = sourceUnit.scale.compareTo(targetUnit.scale)\n
return when {\n    sourceCompareTarget > 0 -> {\n        val scale = (sourceUnit.scale /
targetUnit.scale).toLong()\n        val result = value * scale\n        when {\n            result / scale == value ->
result\n            value > 0 -> Long.MAX_VALUE\n            else -> Long.MIN_VALUE\n        }\n    }\n
sourceCompareTarget < 0 -> value / (targetUnit.scale / sourceUnit.scale).toLong()\n    else -> value\n
}\n}\n\n\n"/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of
this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*/\n\npackage kotlin.time\n\nimport org.w3c.performance.GlobalPerformance\nimport
org.w3c.performance.Performance\n\n@SinceKotlin("1.3")\n\n@ExperimentalTime\n\ninternal actual object
MonotonicTimeSource : TimeSource {\n    private val actualSource: TimeSource = run {\n        val isNode:
Boolean = js("typeof process !== 'undefined' && process.versions && !process.versions.node")\n        if
(isNode)\n            HrTimeSource(js("process").unsafeCast<Process>())\n        else\n
js("self").unsafeCast<GlobalPerformance?>()?.performance?.let(::PerformanceTimeSource)\n        ?:\n
DateNowTimeSource\n    }\n    override fun markNow(): TimeMark = actualSource.markNow()\n}\n\n\ninternal
external interface Process {\n    fun hrtime(time: Array<Double> = definedExternally):
Array<Double>\n}\n\n@SinceKotlin("1.3")\n\n@ExperimentalTime\n\ninternal class HrTimeSource(val process:
Process) : TimeSource {\n    override fun markNow(): TimeMark = object : TimeMark() {\n        val startedAt =
process.hrtime()\n        override fun elapsedNow(): Duration =\n            process.hrtime(startedAt).let { (seconds,
nanos) -> seconds.toDuration(DurationUnit.SECONDS) + nanos.toDuration(DurationUnit.NANOSECONDS) }\n
}\n    override fun toString(): String =
\n"TimeSource(process.hrtime())"\n}\n\n@SinceKotlin("1.3")\n\n@ExperimentalTime\n\ninternal class
PerformanceTimeSource(val performance: Performance) : AbstractDoubleTimeSource(unit =
DurationUnit.MILLISECONDS) {\n    override fun read(): Double = performance.now()\n    override fun toString():
String = \n"TimeSource(self.performance.now())"\n}\n\n@SinceKotlin("1.3")\n\n@ExperimentalTime\n\ninternal
object DateNowTimeSource : AbstractDoubleTimeSource(unit = DurationUnit.MILLISECONDS) {\n    override
fun read(): Double = kotlin.js.Date.now()\n    override fun toString(): String = \n"TimeSource(Date.now())"\n}"/*\n
* Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code
is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage
kotlinx.dom\n\nimport org.w3c.dom.*\nimport kotlin.contracts.*\n\n/**\n * Creates a new element with the
specified [name].\n * The element is initialized with the specified [init] function.\n
*/\n\n@SinceKotlin("1.4")\n\npublic fun Document.createElement(name: String, init: Element.() -> Unit): Element {\n
    contract { callsInPlace(init, InvocationKind.EXACTLY_ONCE) }\n    return
createElement(name).apply(init)\n}\n\n/**\n * Appends a newly created element with the specified [name] to this
element.\n * The element is initialized with the specified [init] function.\n
*/\n\n@SinceKotlin("1.4")\n\npublic fun
Element.appendChild(name: String, init: Element.() -> Unit): Element {\n    contract { callsInPlace(init,
InvocationKind.EXACTLY_ONCE) }\n    return ownerDocument!!.createElement(name, init).also {
appendChild(it) }\n}\n\n"/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlinx.dom\n\nimport org.w3c.dom.*\n\n/**\n * Returns true if the element
has the given CSS class style in its 'class' attribute\n
*/\n\n@SinceKotlin("1.4")\n\nfun Element.hasClass(cssClass:
String): Boolean = className.matches("\\s*(^|\\s+)$cssClass(\\s+|\\s*$)"\\.toRegex())\n\n/**\n * Adds CSS class
to element. Has no effect if all specified classes are already in class attribute of the element\n
*/\n\n@return true if at least one class has been added\n\n@SinceKotlin("1.4")\n\nfun Element.addClass(vararg cssClasses: String):
Boolean {\n    val missingClasses = cssClasses.filterNot { hasClass(it) }\n    if (missingClasses.isNotEmpty()) {\n
val presentClasses = className.trim()\n        className = buildString {\n            append(presentClasses)\n            if
(!presentClasses.isEmpty()) {\n                append(" ")\n            }\n            missingClasses.joinTo(this, " ")
}\n    }\n}

```

```

    } return true
  } return false
}

/** Removes all [cssClasses] from element. Has no effect if all
specified classes are missing in class attribute of the element
 */
@SinceKotlin("1.4")
fun Element.removeClass(vararg cssClasses: String): Boolean {
  if (cssClasses.any { hasClass(it) }) {
    val toBeRemoved = cssClasses.toSet()
    className =
      className.trim().split("\\s+").toRegex().filter { it !in toBeRemoved }.joinToString(" ")
    return true
  }
  return false
}

"/

/* Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
contributors.
 * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.

*/

@file:kotlin.jvm.JvmMultifileClass
@file:kotlin.jvm.JvmName("StringsKt")
package
kotlin.text

/** Converts the string into a regular expression [Regex] with the default options.
 */
@kotlin.internal.InlineOnly
public inline fun String.toRegex(): Regex = Regex(this)

/** Converts the
string into a regular expression [Regex] with the specified single [option].
 */
@kotlin.internal.InlineOnly
public
inline fun String.toRegex(option: RegexOption): Regex = Regex(this, option)

/** Converts the string into a
regular expression [Regex] with the specified set of [options].
 */
@kotlin.internal.InlineOnly
public inline fun
String.toRegex(options: Set<RegexOption>): Regex = Regex(this, options)

"/

/* Copyright 2010-2018
JetBrains s.r.o. and Kotlin Programming Language contributors.
 * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.
 */
package kotlinx.dom
import org.w3c.dom.*

/** Gets a value indicating whether this node is a TEXT_NODE or a
CDATA_SECTION_NODE.
 */
@SinceKotlin("1.4")
public val Node.isText: Boolean
  get() = nodeType == Node.TEXT_NODE || nodeType == Node.CDATA_SECTION_NODE

/** Gets a value indicating
whether this node is an [Element].
 */
@SinceKotlin("1.4")
public val Node.isElement: Boolean
  get() =
nodeType == Node.ELEMENT_NODE

"/

/* Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming
Language contributors.
 * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.
 */
package kotlinx.dom
import org.w3c.dom.*

/** Removes all the children
from this node.
 */
@SinceKotlin("1.4")
public fun Node.clear() {
  while (hasChildNodes()) {
    removeChild(firstChild!)
  }
}

/** Creates text node and append it to the element.
 */
@return this
element
 */
@SinceKotlin("1.4")
fun Element.appendText(text: String): Element {
  appendChild(ownerDocument!.createTextNode(text))
  return this
}

"/

/* Copyright 2010-2019 JetBrains
s.r.o. and Kotlin Programming Language contributors.
 * Use of this source code is governed by the Apache 2.0
license that can be found in the license/LICENSE.txt file.
 */
package org.w3c.dom
@Deprecated("Use
UnionMessagePortOrWindowProxy instead.", ReplaceWith("UnionMessagePortOrWindowProxy"))
typealias
UnionMessagePortOrWindow = UnionMessagePortOrWindowProxy

@Deprecated("Use `as` instead.",
ReplaceWith("`as`"))
nvar HTMLLinkElement.as_
  get() = `as`
  set(value) {
    `as` = value
  }

@Deprecated("Use `is` instead.", ReplaceWith("`is`"))
nvar ElementCreationOptions.is_
  get() = `is`
  set(value) {
    `is` = value
  }

"/

/* Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming
Language contributors.
 * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.
 */
// NOTE: THIS FILE IS AUTO-GENERATED, DO NOT EDIT!
// See
github.com/kotlin/dukat for details
package org.khronos.webgl
import kotlin.js.*
import
org.w3c.dom.*
import org.w3c.dom.events.*

public external interface WebGLContextAttributes {
  var
alpha: Boolean? /* = true */
  get() = definedExternally
  set(value) = definedExternally
  var depth:
Boolean? /* = true */
  get() = definedExternally
  set(value) = definedExternally
  var stencil: Boolean?
/* = false */
  get() = definedExternally
  set(value) = definedExternally
  var antialias: Boolean? /* =
true */
  get() = definedExternally
  set(value) = definedExternally
  var premultipliedAlpha: Boolean?
/* = true */
  get() = definedExternally
  set(value) = definedExternally
  var preservedDrawingBuffer:
Boolean? /* = false */
  get() = definedExternally
  set(value) = definedExternally
  var
preferLowPowerToHighPerformance: Boolean? /* = false */
  get() = definedExternally
  set(value) =
definedExternally
  var failIfMajorPerformanceCaveat: Boolean? /* = false */
  get() = definedExternally
  set(value) = definedExternally
}

@Suppress("INVISIBLE_REFERENCE"),

```

```

\ "INVISIBLE_MEMBER" )\n@kotlin.internal.InlineOnly\npublic inline fun WebGLContextAttributes(alpha: Boolean? = true, depth: Boolean? = true, stencil: Boolean? = false, antialias: Boolean? = true, premultipliedAlpha: Boolean? = true, preserveDrawingBuffer: Boolean? = false, preferLowPowerToHighPerformance: Boolean? = false, failIfMajorPerformanceCaveat: Boolean? = false): WebGLContextAttributes {\n    val o = js("{}")\n    o["alpha"] = alpha\n    o["depth"] = depth\n    o["stencil"] = stencil\n    o["antialias"] = antialias\n    o["premultipliedAlpha"] = premultipliedAlpha\n    o["preserveDrawingBuffer"] = preserveDrawingBuffer\n    o["preferLowPowerToHighPerformance"] = preferLowPowerToHighPerformance\n    o["failIfMajorPerformanceCaveat"] = failIfMajorPerformanceCaveat\n    return o\n}\n\npublic external abstract class WebGLObject\n\n\n**\n * Exposes the JavaScript [WebGLBuffer](https://developer.mozilla.org/en/docs/Web/API/WebGLBuffer) to Kotlin\n */\npublic external abstract class WebGLBuffer : WebGLObject\n\n\n**\n * Exposes the JavaScript [WebGLFramebuffer](https://developer.mozilla.org/en/docs/Web/API/WebGLFramebuffer) to Kotlin\n */\npublic external abstract class WebGLFramebuffer : WebGLObject\n\n\n**\n * Exposes the JavaScript [WebGLProgram](https://developer.mozilla.org/en/docs/Web/API/WebGLProgram) to Kotlin\n */\npublic external abstract class WebGLProgram : WebGLObject\n\n\n**\n * Exposes the JavaScript [WebGLRenderbuffer](https://developer.mozilla.org/en/docs/Web/API/WebGLRenderbuffer) to Kotlin\n */\npublic external abstract class WebGLRenderbuffer : WebGLObject\n\n\n**\n * Exposes the JavaScript [WebGLShader](https://developer.mozilla.org/en/docs/Web/API/WebGLShader) to Kotlin\n */\npublic external abstract class WebGLShader : WebGLObject\n\n\n**\n * Exposes the JavaScript [WebGLTexture](https://developer.mozilla.org/en/docs/Web/API/WebGLTexture) to Kotlin\n */\npublic external abstract class WebGLTexture : WebGLObject\n\n\n**\n * Exposes the JavaScript [WebGLUniformLocation](https://developer.mozilla.org/en/docs/Web/API/WebGLUniformLocation) to Kotlin\n */\npublic external abstract class WebGLUniformLocation\n\n\n**\n * Exposes the JavaScript [WebGLActiveInfo](https://developer.mozilla.org/en/docs/Web/API/WebGLActiveInfo) to Kotlin\n */\npublic external abstract class WebGLActiveInfo {\n    open val size: Int\n    open val type: Int\n    open val name: String\n}\n\n\n**\n * Exposes the JavaScript [WebGLShaderPrecisionFormat](https://developer.mozilla.org/en/docs/Web/API/WebGLShaderPrecisionFormat) to Kotlin\n */\npublic external abstract class WebGLShaderPrecisionFormat {\n    open val rangeMin: Int\n    open val rangeMax: Int\n    open val precision: Int\n}\n\n\n\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic external interface WebGLRenderingContextBase {\n    val canvas: HTMLCanvasElement\n    val drawingBufferWidth: Int\n    val drawingBufferHeight: Int\n    fun getContextAttributes(): WebGLContextAttributes?\n    fun isContextLost(): Boolean\n    fun getSupportedExtensions(): Array<String>?\n    fun getExtension(name: String): dynamic\n    fun activeTexture(texture: Int)\n    fun attachShader(program: WebGLProgram?, shader: WebGLShader?)\n    fun bindAttribLocation(program: WebGLProgram?, index: Int, name: String)\n    fun bindBuffer(target: Int, buffer: WebGLBuffer?)\n    fun bindFramebuffer(target: Int, framebuffer: WebGLFramebuffer?)\n    fun bindRenderbuffer(target: Int, renderbuffer: WebGLRenderbuffer?)\n    fun bindTexture(target: Int, texture: WebGLTexture?)\n    fun blendColor(red: Float, green: Float, blue: Float, alpha: Float)\n    fun blendEquation(mode: Int)\n    fun blendEquationSeparate(modeRGB: Int, modeAlpha: Int)\n    fun blendFunc(sfactor: Int, dfactor: Int)\n    fun blendFuncSeparate(srcRGB: Int, dstRGB: Int, srcAlpha: Int, dstAlpha: Int)\n    fun bufferData(target: Int, size: Int, usage: Int)\n    fun bufferData(target: Int, data: BufferDataSource?, usage: Int)\n    fun bufferSubData(target: Int, offset: Int, data: BufferDataSource?)\n    fun checkFramebufferStatus(target: Int): Int\n    fun clear(mask: Int)\n    fun clearColor(red: Float, green: Float, blue: Float, alpha: Float)\n    fun clearDepth(depth: Float)\n    fun clearStencil(s: Int)\n    fun colorMask(red: Boolean, green: Boolean, blue: Boolean, alpha: Boolean)\n    fun compileShader(shader: WebGLShader?)\n    fun compressedTexImage2D(target: Int, level: Int, internalformat: Int, width: Int, height: Int, border: Int, data: ArrayBufferView)\n    fun compressedTexSubImage2D(target: Int, level: Int, xoffset: Int, yoffset: Int, width: Int, height: Int, format: Int, data: ArrayBufferView)\n    fun copyTexImage2D(target: Int, level: Int, internalformat: Int,

```

x: Int, y: Int, width: Int, height: Int, border: Int)\n fun copyTexSubImage2D(target: Int, level: Int, xoffset: Int, yoffset: Int, x: Int, y: Int, width: Int, height: Int)\n fun createBuffer(): WebGLBuffer?\n fun createFramebuffer(): WebGLFramebuffer?\n fun createProgram(): WebGLProgram?\n fun createRenderbuffer(): WebGLRenderbuffer?\n fun createShader(type: Int): WebGLShader?\n fun createTexture(): WebGLTexture?\n fun cullFace(mode: Int)\n fun deleteBuffer(buffer: WebGLBuffer?)\n fun deleteFramebuffer(framebuffer: WebGLFramebuffer?)\n fun deleteProgram(program: WebGLProgram?)\n fun deleteRenderbuffer(renderbuffer: WebGLRenderbuffer?)\n fun deleteShader(shader: WebGLShader?)\n fun deleteTexture(texture: WebGLTexture?)\n fun depthFunc(func: Int)\n fun depthMask(flag: Boolean)\n fun depthRange(zNear: Float, zFar: Float)\n fun detachShader(program: WebGLProgram?, shader: WebGLShader?)\n fun disable(cap: Int)\n fun disableVertexArray(index: Int)\n fun drawArrays(mode: Int, first: Int, count: Int)\n fun drawElements(mode: Int, count: Int, type: Int, offset: Int)\n fun enable(cap: Int)\n fun enableVertexArray(index: Int)\n fun finish()\n fun flush()\n fun framebufferRenderbuffer(target: Int, attachment: Int, renderbuffertarget: Int, renderbuffer: WebGLRenderbuffer?)\n fun framebufferTexture2D(target: Int, attachment: Int, textarget: Int, texture: WebGLTexture?, level: Int)\n fun frontFace(mode: Int)\n fun generateMipmap(target: Int)\n fun getActiveAttrib(program: WebGLProgram?, index: Int): WebGLActiveInfo?\n fun getActiveUniform(program: WebGLProgram?, index: Int): WebGLActiveInfo?\n fun getAttachedShaders(program: WebGLProgram?): Array<WebGLShader>?\n fun getAttribLocation(program: WebGLProgram?, name: String): Int\n fun getBufferParameter(target: Int, pname: Int): Any?\n fun getParameter(pname: Int): Any?\n fun getError(): Int\n fun getFramebufferAttachmentParameter(target: Int, attachment: Int, pname: Int): Any?\n fun getProgramParameter(program: WebGLProgram?, pname: Int): Any?\n fun getProgramInfoLog(program: WebGLProgram?): String?\n fun getRenderbufferParameter(target: Int, pname: Int): Any?\n fun getShaderParameter(shader: WebGLShader?, pname: Int): Any?\n fun getShaderPrecisionFormat(shadertype: Int, precisiontype: Int): WebGLShaderPrecisionFormat?\n fun getShaderInfoLog(shader: WebGLShader?): String?\n fun getShaderSource(shader: WebGLShader?): String?\n fun getTexParameter(target: Int, pname: Int): Any?\n fun getUniform(program: WebGLProgram?, location: WebGLUniformLocation?): Any?\n fun getUniformLocation(program: WebGLProgram?, name: String): WebGLUniformLocation?\n fun getVertexAttrib(index: Int, pname: Int): Any?\n fun getVertexAttribOffset(index: Int, pname: Int): Int\n fun hint(target: Int, mode: Int)\n fun isBuffer(buffer: WebGLBuffer?): Boolean\n fun isEnabled(cap: Int): Boolean\n fun isFramebuffer(framebuffer: WebGLFramebuffer?): Boolean\n fun isProgram(program: WebGLProgram?): Boolean\n fun isRenderbuffer(renderbuffer: WebGLRenderbuffer?): Boolean\n fun isShader(shader: WebGLShader?): Boolean\n fun isTexture(texture: WebGLTexture?): Boolean\n fun lineWidth(width: Float)\n fun linkProgram(program: WebGLProgram?)\n fun pixelStorei(pname: Int, param: Int)\n fun polygonOffset(factor: Float, units: Float)\n fun readPixels(x: Int, y: Int, width: Int, height: Int, format: Int, type: Int, pixels: ArrayBufferView?)\n fun renderbufferStorage(target: Int, internalformat: Int, width: Int, height: Int)\n fun sampleCoverage(value: Float, invert: Boolean)\n fun scissor(x: Int, y: Int, width: Int, height: Int)\n fun shaderSource(shader: WebGLShader?, source: String)\n fun stencilFunc(func: Int, ref: Int, mask: Int)\n fun stencilFuncSeparate(face: Int, func: Int, ref: Int, mask: Int)\n fun stencilMask(mask: Int)\n fun stencilMaskSeparate(face: Int, mask: Int)\n fun stencilOp(fail: Int, zfail: Int, zpass: Int)\n fun stencilOpSeparate(face: Int, fail: Int, zfail: Int, zpass: Int)\n fun texImage2D(target: Int, level: Int, internalformat: Int, width: Int, height: Int, border: Int, format: Int, type: Int, pixels: ArrayBufferView?)\n fun texImage2D(target: Int, level: Int, internalformat: Int, format: Int, type: Int, source: TexImageSource?)\n fun texParameterf(target: Int, pname: Int, param: Float)\n fun texParameteri(target: Int, pname: Int, param: Int)\n fun texSubImage2D(target: Int, level: Int, xoffset: Int, yoffset: Int, width: Int, height: Int, format: Int, type: Int, pixels: ArrayBufferView?)\n fun texSubImage2D(target: Int, level: Int, xoffset: Int, yoffset: Int, format: Int, type: Int, source: TexImageSource?)\n fun uniform1f(location: WebGLUniformLocation?, x: Float)\n fun uniform1fv(location: WebGLUniformLocation?, v: Float32Array)\n fun uniform1fv(location: WebGLUniformLocation?, v: Array<Float>)\n fun uniform1i(location: WebGLUniformLocation?, x: Int)\n fun uniform1iv(location: WebGLUniformLocation?, v: Int32Array)\n fun uniform1iv(location:

```

WebGLUniformLocation?, v: Array<Int>)\n  fun uniform2f(location: WebGLUniformLocation?, x: Float, y:
Float)\n  fun uniform2fv(location: WebGLUniformLocation?, v: Float32Array)\n  fun uniform2fv(location:
WebGLUniformLocation?, v: Array<Float>)\n  fun uniform2i(location: WebGLUniformLocation?, x: Int, y: Int)\n
  fun uniform2iv(location: WebGLUniformLocation?, v: Int32Array)\n  fun uniform2iv(location:
WebGLUniformLocation?, v: Array<Int>)\n  fun uniform3f(location: WebGLUniformLocation?, x: Float, y: Float,
z: Float)\n  fun uniform3fv(location: WebGLUniformLocation?, v: Float32Array)\n  fun uniform3fv(location:
WebGLUniformLocation?, v: Array<Float>)\n  fun uniform3i(location: WebGLUniformLocation?, x: Int, y: Int, z:
Int)\n  fun uniform3iv(location: WebGLUniformLocation?, v: Int32Array)\n  fun uniform3iv(location:
WebGLUniformLocation?, v: Array<Int>)\n  fun uniform4f(location: WebGLUniformLocation?, x: Float, y: Float,
z: Float, w: Float)\n  fun uniform4fv(location: WebGLUniformLocation?, v: Float32Array)\n  fun
uniform4fv(location: WebGLUniformLocation?, v: Array<Float>)\n  fun uniform4i(location:
WebGLUniformLocation?, x: Int, y: Int, z: Int, w: Int)\n  fun uniform4iv(location: WebGLUniformLocation?, v:
Int32Array)\n  fun uniform4iv(location: WebGLUniformLocation?, v: Array<Int>)\n  fun
uniformMatrix2fv(location: WebGLUniformLocation?, transpose: Boolean, value: Float32Array)\n  fun
uniformMatrix2fv(location: WebGLUniformLocation?, transpose: Boolean, value: Array<Float>)\n  fun
uniformMatrix3fv(location: WebGLUniformLocation?, transpose: Boolean, value: Float32Array)\n  fun
uniformMatrix3fv(location: WebGLUniformLocation?, transpose: Boolean, value: Array<Float>)\n  fun
uniformMatrix4fv(location: WebGLUniformLocation?, transpose: Boolean, value: Float32Array)\n  fun
uniformMatrix4fv(location: WebGLUniformLocation?, transpose: Boolean, value: Array<Float>)\n  fun
useProgram(program: WebGLProgram?)\n  fun validateProgram(program: WebGLProgram?)\n  fun
vertexAttrib1f(index: Int, x: Float)\n  fun vertexAttrib1fv(index: Int, values: dynamic)\n  fun
vertexAttrib2f(index: Int, x: Float, y: Float)\n  fun vertexAttrib2fv(index: Int, values: dynamic)\n  fun
vertexAttrib3f(index: Int, x: Float, y: Float, z: Float)\n  fun vertexAttrib3fv(index: Int, values: dynamic)\n  fun
vertexAttrib4f(index: Int, x: Float, y: Float, z: Float, w: Float)\n  fun vertexAttrib4fv(index: Int, values: dynamic)\n
  fun vertexAttribPointer(index: Int, size: Int, type: Int, normalized: Boolean, stride: Int, offset: Int)\n  fun
viewport(x: Int, y: Int, width: Int, height: Int)\n\n  companion object {\n    val DEPTH_BUFFER_BIT: Int\n    val STENCIL_BUFFER_BIT: Int\n    val COLOR_BUFFER_BIT: Int\n    val POINTS: Int\n    val LINES:
Int\n    val LINE_LOOP: Int\n    val LINE_STRIP: Int\n    val TRIANGLES: Int\n    val
TRIANGLE_STRIP: Int\n    val TRIANGLE_FAN: Int\n    val ZERO: Int\n    val ONE: Int\n    val
SRC_COLOR: Int\n    val ONE_MINUS_SRC_COLOR: Int\n    val SRC_ALPHA: Int\n    val
ONE_MINUS_SRC_ALPHA: Int\n    val DST_ALPHA: Int\n    val ONE_MINUS_DST_ALPHA: Int\n
val DST_COLOR: Int\n    val ONE_MINUS_DST_COLOR: Int\n    val SRC_ALPHA_SATURATE: Int\n
val FUNC_ADD: Int\n    val BLEND_EQUATION: Int\n    val BLEND_EQUATION_RGB: Int\n    val
BLEND_EQUATION_ALPHA: Int\n    val FUNC_SUBTRACT: Int\n    val FUNC_REVERSE_SUBTRACT:
Int\n    val BLEND_DST_RGB: Int\n    val BLEND_SRC_RGB: Int\n    val BLEND_DST_ALPHA: Int\n
val BLEND_SRC_ALPHA: Int\n    val CONSTANT_COLOR: Int\n    val
ONE_MINUS_CONSTANT_COLOR: Int\n    val CONSTANT_ALPHA: Int\n    val
ONE_MINUS_CONSTANT_ALPHA: Int\n    val BLEND_COLOR: Int\n    val ARRAY_BUFFER: Int\n
val ELEMENT_ARRAY_BUFFER: Int\n    val ARRAY_BUFFER_BINDING: Int\n    val
ELEMENT_ARRAY_BUFFER_BINDING: Int\n    val STREAM_DRAW: Int\n    val STATIC_DRAW: Int\n
val DYNAMIC_DRAW: Int\n    val BUFFER_SIZE: Int\n    val BUFFER_USAGE: Int\n    val
CURRENT_VERTEX_ATTRIB: Int\n    val FRONT: Int\n    val BACK: Int\n    val FRONT_AND_BACK:
Int\n    val CULL_FACE: Int\n    val BLEND: Int\n    val DITHER: Int\n    val STENCIL_TEST: Int\n
val DEPTH_TEST: Int\n    val SCISSOR_TEST: Int\n    val POLYGON_OFFSET_FILL: Int\n    val
SAMPLE_ALPHA_TO_COVERAGE: Int\n    val SAMPLE_COVERAGE: Int\n    val NO_ERROR: Int\n
val INVALID_ENUM: Int\n    val INVALID_VALUE: Int\n    val INVALID_OPERATION: Int\n    val
OUT_OF_MEMORY: Int\n    val CW: Int\n    val CCW: Int\n    val LINE_WIDTH: Int\n    val
ALIASED_POINT_SIZE_RANGE: Int\n    val ALIASED_LINE_WIDTH_RANGE: Int\n    val

```


CULL_FACE_MODE: Int\n val FRONT_FACE: Int\n val DEPTH_RANGE: Int\n val
 DEPTH_WRITEMASK: Int\n val DEPTH_CLEAR_VALUE: Int\n val DEPTH_FUNC: Int\n val
 STENCIL_CLEAR_VALUE: Int\n val STENCIL_FUNC: Int\n val STENCIL_FAIL: Int\n val
 STENCIL_PASS_DEPTH_FAIL: Int\n val STENCIL_PASS_DEPTH_PASS: Int\n val STENCIL_REF:
 Int\n val STENCIL_VALUE_MASK: Int\n val STENCIL_WRITEMASK: Int\n val
 STENCIL_BACK_FUNC: Int\n val STENCIL_BACK_FAIL: Int\n val
 STENCIL_BACK_PASS_DEPTH_FAIL: Int\n val STENCIL_BACK_PASS_DEPTH_PASS: Int\n val
 STENCIL_BACK_REF: Int\n val STENCIL_BACK_VALUE_MASK: Int\n val
 STENCIL_BACK_WRITEMASK: Int\n val VIEWPORT: Int\n val SCISSOR_BOX: Int\n val
 COLOR_CLEAR_VALUE: Int\n val COLOR_WRITEMASK: Int\n val UNPACK_ALIGNMENT: Int\n
 val PACK_ALIGNMENT: Int\n val MAX_TEXTURE_SIZE: Int\n val MAX_VIEWPORT_DIMS: Int\n
 val SUBPIXEL_BITS: Int\n val RED_BITS: Int\n val GREEN_BITS: Int\n val BLUE_BITS: Int\n
 val ALPHA_BITS: Int\n val DEPTH_BITS: Int\n val STENCIL_BITS: Int\n val
 POLYGON_OFFSET_UNITS: Int\n val POLYGON_OFFSET_FACTOR: Int\n val
 TEXTURE_BINDING_2D: Int\n val SAMPLE_BUFFERS: Int\n val SAMPLES: Int\n val
 SAMPLE_COVERAGE_VALUE: Int\n val SAMPLE_COVERAGE_INVERT: Int\n val
 COMPRESSED_TEXTURE_FORMATS: Int\n val DONT_CARE: Int\n val FASTEST: Int\n val
 NICEST: Int\n val GENERATE_MIPMAP_HINT: Int\n val BYTE: Int\n val UNSIGNED_BYTE:
 Int\n val SHORT: Int\n val UNSIGNED_SHORT: Int\n val INT: Int\n val UNSIGNED_INT: Int\n
 val FLOAT: Int\n val DEPTH_COMPONENT: Int\n val ALPHA: Int\n val RGB: Int\n val
 RGBA: Int\n val LUMINANCE: Int\n val LUMINANCE_ALPHA: Int\n val
 UNSIGNED_SHORT_4_4_4_4: Int\n val UNSIGNED_SHORT_5_5_5_1: Int\n val
 UNSIGNED_SHORT_5_6_5: Int\n val FRAGMENT_SHADER: Int\n val VERTEX_SHADER: Int\n
 val MAX_VERTEX_ATTRIBS: Int\n val MAX_VERTEX_UNIFORM_VECTORS: Int\n val
 MAX_VARYING_VECTORS: Int\n val MAX_COMBINED_TEXTURE_IMAGE_UNITS: Int\n val
 MAX_VERTEX_TEXTURE_IMAGE_UNITS: Int\n val MAX_TEXTURE_IMAGE_UNITS: Int\n val
 MAX_FRAGMENT_UNIFORM_VECTORS: Int\n val SHADER_TYPE: Int\n val DELETE_STATUS:
 Int\n val LINK_STATUS: Int\n val VALIDATE_STATUS: Int\n val ATTACHED_SHADERS: Int\n
 val ACTIVE_UNIFORMS: Int\n val ACTIVE_ATTRIBUTES: Int\n val
 SHADING_LANGUAGE_VERSION: Int\n val CURRENT_PROGRAM: Int\n val NEVER: Int\n val
 LESS: Int\n val EQUAL: Int\n val LEQUAL: Int\n val GREATER: Int\n val NOTEQUAL: Int\n
 val GEQUAL: Int\n val ALWAYS: Int\n val KEEP: Int\n val REPLACE: Int\n val INCR: Int\n
 val DECR: Int\n val INVERT: Int\n val INCR_WRAP: Int\n val DECR_WRAP: Int\n val
 VENDOR: Int\n val RENDERER: Int\n val VERSION: Int\n val NEAREST: Int\n val LINEAR:
 Int\n val NEAREST_MIPMAP_NEAREST: Int\n val LINEAR_MIPMAP_NEAREST: Int\n val
 NEAREST_MIPMAP_LINEAR: Int\n val LINEAR_MIPMAP_LINEAR: Int\n val
 TEXTURE_MAG_FILTER: Int\n val TEXTURE_MIN_FILTER: Int\n val TEXTURE_WRAP_S: Int\n
 val TEXTURE_WRAP_T: Int\n val TEXTURE_2D: Int\n val TEXTURE: Int\n val
 TEXTURE_CUBE_MAP: Int\n val TEXTURE_BINDING_CUBE_MAP: Int\n val
 TEXTURE_CUBE_MAP_POSITIVE_X: Int\n val TEXTURE_CUBE_MAP_NEGATIVE_X: Int\n val
 TEXTURE_CUBE_MAP_POSITIVE_Y: Int\n val TEXTURE_CUBE_MAP_NEGATIVE_Y: Int\n val
 TEXTURE_CUBE_MAP_POSITIVE_Z: Int\n val TEXTURE_CUBE_MAP_NEGATIVE_Z: Int\n val
 MAX_CUBE_MAP_TEXTURE_SIZE: Int\n val TEXTURE0: Int\n val TEXTURE1: Int\n val
 TEXTURE2: Int\n val TEXTURE3: Int\n val TEXTURE4: Int\n val TEXTURE5: Int\n val
 TEXTURE6: Int\n val TEXTURE7: Int\n val TEXTURE8: Int\n val TEXTURE9: Int\n val
 TEXTURE10: Int\n val TEXTURE11: Int\n val TEXTURE12: Int\n val TEXTURE13: Int\n val
 TEXTURE14: Int\n val TEXTURE15: Int\n val TEXTURE16: Int\n val TEXTURE17: Int\n val
 TEXTURE18: Int\n val TEXTURE19: Int\n val TEXTURE20: Int\n val TEXTURE21: Int\n val

TEXTURE22: Int\n val TEXTURE23: Int\n val TEXTURE24: Int\n val TEXTURE25: Int\n val
 TEXTURE26: Int\n val TEXTURE27: Int\n val TEXTURE28: Int\n val TEXTURE29: Int\n val
 TEXTURE30: Int\n val TEXTURE31: Int\n val ACTIVE_TEXTURE: Int\n val REPEAT: Int\n
 val CLAMP_TO_EDGE: Int\n val MIRRORED_REPEAT: Int\n val FLOAT_VEC2: Int\n val
 FLOAT_VEC3: Int\n val FLOAT_VEC4: Int\n val INT_VEC2: Int\n val INT_VEC3: Int\n val
 INT_VEC4: Int\n val BOOL: Int\n val BOOL_VEC2: Int\n val BOOL_VEC3: Int\n val
 BOOL_VEC4: Int\n val FLOAT_MAT2: Int\n val FLOAT_MAT3: Int\n val FLOAT_MAT4: Int\n
 val SAMPLER_2D: Int\n val SAMPLER_CUBE: Int\n val VERTEX_ATTRIB_ARRAY_ENABLED:
 Int\n val VERTEX_ATTRIB_ARRAY_SIZE: Int\n val VERTEX_ATTRIB_ARRAY_STRIDE: Int\n
 val VERTEX_ATTRIB_ARRAY_TYPE: Int\n val VERTEX_ATTRIB_ARRAY_NORMALIZED: Int\n
 val VERTEX_ATTRIB_ARRAY_POINTER: Int\n val VERTEX_ATTRIB_ARRAY_BUFFER_BINDING:
 Int\n val IMPLEMENTATION_COLOR_READ_TYPE: Int\n val
 IMPLEMENTATION_COLOR_READ_FORMAT: Int\n val COMPILE_STATUS: Int\n val
 LOW_FLOAT: Int\n val MEDIUM_FLOAT: Int\n val HIGH_FLOAT: Int\n val LOW_INT: Int\n
 val MEDIUM_INT: Int\n val HIGH_INT: Int\n val FRAMEBUFFER: Int\n val RENDERBUFFER:
 Int\n val RGBA4: Int\n val RGB5_A1: Int\n val RGB565: Int\n val DEPTH_COMPONENT16:
 Int\n val STENCIL_INDEX: Int\n val STENCIL_INDEX8: Int\n val DEPTH_STENCIL: Int\n val
 RENDERBUFFER_WIDTH: Int\n val RENDERBUFFER_HEIGHT: Int\n val
 RENDERBUFFER_INTERNAL_FORMAT: Int\n val RENDERBUFFER_RED_SIZE: Int\n val
 RENDERBUFFER_GREEN_SIZE: Int\n val RENDERBUFFER_BLUE_SIZE: Int\n val
 RENDERBUFFER_ALPHA_SIZE: Int\n val RENDERBUFFER_DEPTH_SIZE: Int\n val
 RENDERBUFFER_STENCIL_SIZE: Int\n val FRAMEBUFFER_ATTACHMENT_OBJECT_TYPE: Int\n
 val FRAMEBUFFER_ATTACHMENT_OBJECT_NAME: Int\n val
 FRAMEBUFFER_ATTACHMENT_TEXTURE_LEVEL: Int\n val
 FRAMEBUFFER_ATTACHMENT_TEXTURE_CUBE_MAP_FACE: Int\n val COLOR_ATTACHMENT0:
 Int\n val DEPTH_ATTACHMENT: Int\n val STENCIL_ATTACHMENT: Int\n val
 DEPTH_STENCIL_ATTACHMENT: Int\n val NONE: Int\n val FRAMEBUFFER_COMPLETE: Int\n
 val FRAMEBUFFER_INCOMPLETE_ATTACHMENT: Int\n val
 FRAMEBUFFER_INCOMPLETE_MISSING_ATTACHMENT: Int\n val
 FRAMEBUFFER_INCOMPLETE_DIMENSIONS: Int\n val FRAMEBUFFER_UNSUPPORTED: Int\n
 val FRAMEBUFFER_BINDING: Int\n val RENDERBUFFER_BINDING: Int\n val
 MAX_RENDERBUFFER_SIZE: Int\n val INVALID_FRAMEBUFFER_OPERATION: Int\n val
 UNPACK_FLIP_Y_WEBGL: Int\n val UNPACK_PREMULTIPLY_ALPHA_WEBGL: Int\n val
 CONTEXT_LOST_WEBGL: Int\n val UNPACK_COLORSPACE_CONVERSION_WEBGL: Int\n val
 BROWSER_DEFAULT_WEBGL: Int\n }}\n\n**\n * Exposes the JavaScript
 [WebGLRenderingContext](https://developer.mozilla.org/en/docs/Web/API/WebGLRenderingContext) to Kotlin\n
 *\n\npublic external abstract class WebGLRenderingContext : WebGLRenderingContextBase, RenderingContext {\n
 companion object {\n
 val DEPTH_BUFFER_BIT: Int\n
 val STENCIL_BUFFER_BIT: Int\n
 val
 COLOR_BUFFER_BIT: Int\n
 val POINTS: Int\n
 val LINES: Int\n
 val LINE_LOOP: Int\n
 val
 LINE_STRIP: Int\n
 val TRIANGLES: Int\n
 val TRIANGLE_STRIP: Int\n
 val TRIANGLE_FAN:
 Int\n
 val ZERO: Int\n
 val ONE: Int\n
 val SRC_COLOR: Int\n
 val ONE_MINUS_SRC_COLOR:
 Int\n
 val SRC_ALPHA: Int\n
 val ONE_MINUS_SRC_ALPHA: Int\n
 val DST_ALPHA: Int\n
 val
 ONE_MINUS_DST_ALPHA: Int\n
 val DST_COLOR: Int\n
 val ONE_MINUS_DST_COLOR: Int\n
 val SRC_ALPHA_SATURATE: Int\n
 val FUNC_ADD: Int\n
 val BLEND_EQUATION: Int\n
 val
 BLEND_EQUATION_RGB: Int\n
 val BLEND_EQUATION_ALPHA: Int\n
 val FUNC_SUBTRACT:
 Int\n
 val FUNC_REVERSE_SUBTRACT: Int\n
 val BLEND_DST_RGB: Int\n
 val
 BLEND_SRC_RGB: Int\n
 val BLEND_DST_ALPHA: Int\n
 val BLEND_SRC_ALPHA: Int\n
 val
 CONSTANT_COLOR: Int\n
 val ONE_MINUS_CONSTANT_COLOR: Int\n
 val CONSTANT_ALPHA:

Int\n val ONE_MINUS_CONSTANT_ALPHA: Int\n val BLEND_COLOR: Int\n val
 ARRAY_BUFFER: Int\n val ELEMENT_ARRAY_BUFFER: Int\n val ARRAY_BUFFER_BINDING:
 Int\n val ELEMENT_ARRAY_BUFFER_BINDING: Int\n val STREAM_DRAW: Int\n val
 STATIC_DRAW: Int\n val DYNAMIC_DRAW: Int\n val BUFFER_SIZE: Int\n val
 BUFFER_USAGE: Int\n val CURRENT_VERTEX_ATTRIB: Int\n val FRONT: Int\n val BACK:
 Int\n val FRONT_AND_BACK: Int\n val CULL_FACE: Int\n val BLEND: Int\n val DITHER:
 Int\n val STENCIL_TEST: Int\n val DEPTH_TEST: Int\n val SCISSOR_TEST: Int\n val
 POLYGON_OFFSET_FILL: Int\n val SAMPLE_ALPHA_TO_COVERAGE: Int\n val
 SAMPLE_COVERAGE: Int\n val NO_ERROR: Int\n val INVALID_ENUM: Int\n val
 INVALID_VALUE: Int\n val INVALID_OPERATION: Int\n val OUT_OF_MEMORY: Int\n val CW:
 Int\n val CCW: Int\n val LINE_WIDTH: Int\n val ALIASED_POINT_SIZE_RANGE: Int\n val
 ALIASED_LINE_WIDTH_RANGE: Int\n val CULL_FACE_MODE: Int\n val FRONT_FACE: Int\n
 val DEPTH_RANGE: Int\n val DEPTH_WRITEMASK: Int\n val DEPTH_CLEAR_VALUE: Int\n val
 DEPTH_FUNC: Int\n val STENCIL_CLEAR_VALUE: Int\n val STENCIL_FUNC: Int\n val
 STENCIL_FAIL: Int\n val STENCIL_PASS_DEPTH_FAIL: Int\n val STENCIL_PASS_DEPTH_PASS:
 Int\n val STENCIL_REF: Int\n val STENCIL_VALUE_MASK: Int\n val STENCIL_WRITEMASK:
 Int\n val STENCIL_BACK_FUNC: Int\n val STENCIL_BACK_FAIL: Int\n val
 STENCIL_BACK_PASS_DEPTH_FAIL: Int\n val STENCIL_BACK_PASS_DEPTH_PASS: Int\n val
 STENCIL_BACK_REF: Int\n val STENCIL_BACK_VALUE_MASK: Int\n val
 STENCIL_BACK_WRITEMASK: Int\n val VIEWPORT: Int\n val SCISSOR_BOX: Int\n val
 COLOR_CLEAR_VALUE: Int\n val COLOR_WRITEMASK: Int\n val UNPACK_ALIGNMENT: Int\n
 val PACK_ALIGNMENT: Int\n val MAX_TEXTURE_SIZE: Int\n val MAX_VIEWPORT_DIMS: Int\n
 val SUBPIXEL_BITS: Int\n val RED_BITS: Int\n val GREEN_BITS: Int\n val BLUE_BITS: Int\n
 val ALPHA_BITS: Int\n val DEPTH_BITS: Int\n val STENCIL_BITS: Int\n val
 POLYGON_OFFSET_UNITS: Int\n val POLYGON_OFFSET_FACTOR: Int\n val
 TEXTURE_BINDING_2D: Int\n val SAMPLE_BUFFERS: Int\n val SAMPLES: Int\n val
 SAMPLE_COVERAGE_VALUE: Int\n val SAMPLE_COVERAGE_INVERT: Int\n val
 COMPRESSED_TEXTURE_FORMATS: Int\n val DONT_CARE: Int\n val FASTEST: Int\n val
 NICEST: Int\n val GENERATE_MIPMAP_HINT: Int\n val BYTE: Int\n val UNSIGNED_BYTE:
 Int\n val SHORT: Int\n val UNSIGNED_SHORT: Int\n val INT: Int\n val UNSIGNED_INT: Int\n
 val FLOAT: Int\n val DEPTH_COMPONENT: Int\n val ALPHA: Int\n val RGB: Int\n val
 RGBA: Int\n val LUMINANCE: Int\n val LUMINANCE_ALPHA: Int\n val
 UNSIGNED_SHORT_4_4_4_4: Int\n val UNSIGNED_SHORT_5_5_5_1: Int\n val
 UNSIGNED_SHORT_5_6_5: Int\n val FRAGMENT_SHADER: Int\n val VERTEX_SHADER: Int\n
 val MAX_VERTEX_ATTRIBS: Int\n val MAX_VERTEX_UNIFORM_VECTORS: Int\n val
 MAX_VARYING_VECTORS: Int\n val MAX_COMBINED_TEXTURE_IMAGE_UNITS: Int\n val
 MAX_VERTEX_TEXTURE_IMAGE_UNITS: Int\n val MAX_TEXTURE_IMAGE_UNITS: Int\n val
 MAX_FRAGMENT_UNIFORM_VECTORS: Int\n val SHADER_TYPE: Int\n val DELETE_STATUS:
 Int\n val LINK_STATUS: Int\n val VALIDATE_STATUS: Int\n val ATTACHED_SHADERS: Int\n
 val ACTIVE_UNIFORMS: Int\n val ACTIVE_ATTRIBUTES: Int\n val
 SHADING_LANGUAGE_VERSION: Int\n val CURRENT_PROGRAM: Int\n val NEVER: Int\n val
 LESS: Int\n val EQUAL: Int\n val LEQUAL: Int\n val GREATER: Int\n val NOTEQUAL: Int\n
 val GEQUAL: Int\n val ALWAYS: Int\n val KEEP: Int\n val REPLACE: Int\n val INCR: Int\n
 val DECR: Int\n val INVERT: Int\n val INCR_WRAP: Int\n val DECR_WRAP: Int\n val
 VENDOR: Int\n val RENDERER: Int\n val VERSION: Int\n val NEAREST: Int\n val LINEAR:
 Int\n val NEAREST_MIPMAP_NEAREST: Int\n val LINEAR_MIPMAP_NEAREST: Int\n val
 NEAREST_MIPMAP_LINEAR: Int\n val LINEAR_MIPMAP_LINEAR: Int\n val
 TEXTURE_MAG_FILTER: Int\n val TEXTURE_MIN_FILTER: Int\n val TEXTURE_WRAP_S: Int\n

```

val TEXTURE_WRAP_T: Int\n    val TEXTURE_2D: Int\n    val TEXTURE: Int\n    val
TEXTURE_CUBE_MAP: Int\n    val TEXTURE_BINDING_CUBE_MAP: Int\n    val
TEXTURE_CUBE_MAP_POSITIVE_X: Int\n    val TEXTURE_CUBE_MAP_NEGATIVE_X: Int\n    val
TEXTURE_CUBE_MAP_POSITIVE_Y: Int\n    val TEXTURE_CUBE_MAP_NEGATIVE_Y: Int\n    val
TEXTURE_CUBE_MAP_POSITIVE_Z: Int\n    val TEXTURE_CUBE_MAP_NEGATIVE_Z: Int\n    val
MAX_CUBE_MAP_TEXTURE_SIZE: Int\n    val TEXTURE0: Int\n    val TEXTURE1: Int\n    val
TEXTURE2: Int\n    val TEXTURE3: Int\n    val TEXTURE4: Int\n    val TEXTURE5: Int\n    val
TEXTURE6: Int\n    val TEXTURE7: Int\n    val TEXTURE8: Int\n    val TEXTURE9: Int\n    val
TEXTURE10: Int\n    val TEXTURE11: Int\n    val TEXTURE12: Int\n    val TEXTURE13: Int\n    val
TEXTURE14: Int\n    val TEXTURE15: Int\n    val TEXTURE16: Int\n    val TEXTURE17: Int\n    val
TEXTURE18: Int\n    val TEXTURE19: Int\n    val TEXTURE20: Int\n    val TEXTURE21: Int\n    val
TEXTURE22: Int\n    val TEXTURE23: Int\n    val TEXTURE24: Int\n    val TEXTURE25: Int\n    val
TEXTURE26: Int\n    val TEXTURE27: Int\n    val TEXTURE28: Int\n    val TEXTURE29: Int\n    val
TEXTURE30: Int\n    val TEXTURE31: Int\n    val ACTIVE_TEXTURE: Int\n    val REPEAT: Int\n
val CLAMP_TO_EDGE: Int\n    val MIRRORED_REPEAT: Int\n    val FLOAT_VEC2: Int\n    val
FLOAT_VEC3: Int\n    val FLOAT_VEC4: Int\n    val INT_VEC2: Int\n    val INT_VEC3: Int\n    val
INT_VEC4: Int\n    val BOOL: Int\n    val BOOL_VEC2: Int\n    val BOOL_VEC3: Int\n    val
BOOL_VEC4: Int\n    val FLOAT_MAT2: Int\n    val FLOAT_MAT3: Int\n    val FLOAT_MAT4: Int\n
val SAMPLER_2D: Int\n    val SAMPLER_CUBE: Int\n    val VERTEX_ATTRIB_ARRAY_ENABLED:
Int\n    val VERTEX_ATTRIB_ARRAY_SIZE: Int\n    val VERTEX_ATTRIB_ARRAY_STRIDE: Int\n
val VERTEX_ATTRIB_ARRAY_TYPE: Int\n    val VERTEX_ATTRIB_ARRAY_NORMALIZED: Int\n
val VERTEX_ATTRIB_ARRAY_POINTER: Int\n    val VERTEX_ATTRIB_ARRAY_BUFFER_BINDING:
Int\n    val IMPLEMENTATION_COLOR_READ_TYPE: Int\n    val
IMPLEMENTATION_COLOR_READ_FORMAT: Int\n    val COMPILE_STATUS: Int\n    val
LOW_FLOAT: Int\n    val MEDIUM_FLOAT: Int\n    val HIGH_FLOAT: Int\n    val LOW_INT: Int\n
val MEDIUM_INT: Int\n    val HIGH_INT: Int\n    val FRAMEBUFFER: Int\n    val RENDERBUFFER:
Int\n    val RGBA4: Int\n    val RGB5_A1: Int\n    val RGB565: Int\n    val DEPTH_COMPONENT16:
Int\n    val STENCIL_INDEX: Int\n    val STENCIL_INDEX8: Int\n    val DEPTH_STENCIL: Int\n    val
RENDERBUFFER_WIDTH: Int\n    val RENDERBUFFER_HEIGHT: Int\n    val
RENDERBUFFER_INTERNAL_FORMAT: Int\n    val RENDERBUFFER_RED_SIZE: Int\n    val
RENDERBUFFER_GREEN_SIZE: Int\n    val RENDERBUFFER_BLUE_SIZE: Int\n    val
RENDERBUFFER_ALPHA_SIZE: Int\n    val RENDERBUFFER_DEPTH_SIZE: Int\n    val
RENDERBUFFER_STENCIL_SIZE: Int\n    val FRAMEBUFFER_ATTACHMENT_OBJECT_TYPE: Int\n
val FRAMEBUFFER_ATTACHMENT_OBJECT_NAME: Int\n    val
FRAMEBUFFER_ATTACHMENT_TEXTURE_LEVEL: Int\n    val
FRAMEBUFFER_ATTACHMENT_TEXTURE_CUBE_MAP_FACE: Int\n    val COLOR_ATTACHMENT0:
Int\n    val DEPTH_ATTACHMENT: Int\n    val STENCIL_ATTACHMENT: Int\n    val
DEPTH_STENCIL_ATTACHMENT: Int\n    val NONE: Int\n    val FRAMEBUFFER_COMPLETE: Int\n
val FRAMEBUFFER_INCOMPLETE_ATTACHMENT: Int\n    val
FRAMEBUFFER_INCOMPLETE_MISSING_ATTACHMENT: Int\n    val
FRAMEBUFFER_INCOMPLETE_DIMENSIONS: Int\n    val FRAMEBUFFER_UNSUPPORTED: Int\n
val FRAMEBUFFER_BINDING: Int\n    val RENDERBUFFER_BINDING: Int\n    val
MAX_RENDERBUFFER_SIZE: Int\n    val INVALID_FRAMEBUFFER_OPERATION: Int\n    val
UNPACK_FLIP_Y_WEBGL: Int\n    val UNPACK_PREMULTIPLY_ALPHA_WEBGL: Int\n    val
CONTEXT_LOST_WEBGL: Int\n    val UNPACK_COLORSPACE_CONVERSION_WEBGL: Int\n    val
BROWSER_DEFAULT_WEBGL: Int\n    }\n}\n\n**\n * Exposes the JavaScript
[WebGLContextEvent](https://developer.mozilla.org/en/docs/Web/API/WebGLContextEvent) to Kotlin\n
*/\npublic external open class WebGLContextEvent(type: String, eventInit: WebGLContextEventInit =

```

```

definedExternally) : Event {\n  open val statusMessage: String\n\n  companion object {\n    val NONE: Short\n    val CAPTURING_PHASE: Short\n    val AT_TARGET: Short\n    val BUBBLING_PHASE: Short\n  }\n}\n\npublic external interface WebGLContextEventInit : EventInit {\n  var statusMessage: String? /* = \"\" */\n  get() = definedExternally\n  set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",  
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun  
WebGLContextEventInit(statusMessage: String? = \"\", bubbles: Boolean? = false, cancelable: Boolean? = false,  
composed: Boolean? = false): WebGLContextEventInit {\n  val o = js(\"({})\")\n  o[\"statusMessage\"] =  
statusMessage\n  o[\"bubbles\"] = bubbles\n  o[\"cancelable\"] = cancelable\n  o[\"composed\"] = composed\n  return o\n}\n\n/**\n * Exposes the JavaScript  
[ArrayBuffer](https://developer.mozilla.org/en/docs/Web/API/ArrayBuffer) to Kotlin\n */\npublic external open  
class ArrayBuffer(length: Int) : BufferDataSource {\n  open val byteLength: Int\n  fun slice(begin: Int, end: Int =  
definedExternally): ArrayBuffer\n\n  companion object {\n    fun isView(value: Any?): Boolean\n  }\n}\n\n/**\n * Exposes the JavaScript  
[ArrayBufferView](https://developer.mozilla.org/en/docs/Web/API/ArrayBufferView) to Kotlin\n */\npublic  
external interface ArrayBufferView : BufferDataSource {\n  val buffer: ArrayBuffer\n  val byteOffset: Int\n  val  
byteLength: Int\n}\n\n/**\n * Exposes the JavaScript  
[Int8Array](https://developer.mozilla.org/en/docs/Web/API/Int8Array) to Kotlin\n */\npublic external open class  
Int8Array : ArrayBufferView {\n  constructor(length: Int)\n  constructor(array: Int8Array)\n  constructor(array:  
Array<Byte>)\n  constructor(buffer: ArrayBuffer, byteOffset: Int = definedExternally, length: Int =  
definedExternally)\n  open val length: Int\n  override val buffer: ArrayBuffer\n  override val byteOffset: Int\n  override val byteLength: Int\n  fun set(array: Int8Array, offset: Int = definedExternally)\n  fun set(array:  
Array<Byte>, offset: Int = definedExternally)\n  fun subarray(start: Int, end: Int): Int8Array\n\n  companion  
object {\n    val BYTES_PER_ELEMENT: Int\n  }\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",  
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun Int8Array.get(index: Int):  
Byte = asDynamic()[index]\n\n@Suppress(\"INVISIBLE_REFERENCE\",  
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun Int8Array.set(index: Int,  
value: Byte) { asDynamic()[index] = value }\n\n/**\n * Exposes the JavaScript  
[Uint8Array](https://developer.mozilla.org/en/docs/Web/API/Uint8Array) to Kotlin\n */\npublic external open class  
Uint8Array : ArrayBufferView {\n  constructor(length: Int)\n  constructor(array: Uint8Array)\n  constructor(array: Array<Byte>)\n  constructor(buffer: ArrayBuffer, byteOffset: Int = definedExternally, length:  
Int = definedExternally)\n  open val length: Int\n  override val buffer: ArrayBuffer\n  override val byteOffset:  
Int\n  override val byteLength: Int\n  fun set(array: Uint8Array, offset: Int = definedExternally)\n  fun set(array:  
Array<Byte>, offset: Int = definedExternally)\n  fun subarray(start: Int, end: Int): Uint8Array\n\n  companion  
object {\n    val BYTES_PER_ELEMENT: Int\n  }\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",  
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun Uint8Array.get(index: Int):  
Byte = asDynamic()[index]\n\n@Suppress(\"INVISIBLE_REFERENCE\",  
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun Uint8Array.set(index: Int,  
value: Byte) { asDynamic()[index] = value }\n\n/**\n * Exposes the JavaScript  
[Uint8ClampedArray](https://developer.mozilla.org/en/docs/Web/API/Uint8ClampedArray) to Kotlin\n */\npublic  
external open class Uint8ClampedArray : ArrayBufferView {\n  constructor(length: Int)\n  constructor(array:  
Uint8ClampedArray)\n  constructor(array: Array<Byte>)\n  constructor(buffer: ArrayBuffer, byteOffset: Int =  
definedExternally, length: Int = definedExternally)\n  open val length: Int\n  override val buffer: ArrayBuffer\n  override val byteOffset: Int\n  override val byteLength: Int\n  fun set(array: Uint8ClampedArray, offset: Int =  
definedExternally)\n  fun set(array: Array<Byte>, offset: Int = definedExternally)\n  fun subarray(start: Int, end:  
Int): Uint8ClampedArray\n\n  companion object {\n    val BYTES_PER_ELEMENT: Int\n  }\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",  
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun  
Uint8ClampedArray.get(index: Int): Byte = asDynamic()[index]\n\n@Suppress(\"INVISIBLE_REFERENCE\",

```

```

\ "INVISIBLE_MEMBER" ) \n @kotlin.internal.InlineOnly \n public inline operator fun
UInt8ClampedArray.set(index: Int, value: Byte) { asDynamic()[index] = value } \n \n /** \n * Exposes the JavaScript
[Int16Array](https://developer.mozilla.org/en/docs/Web/API/Int16Array) to Kotlin \n * \n \n public external open class
Int16Array : ArrayBufferView { \n    constructor(length: Int) \n    constructor(array: Int16Array) \n
constructor(array: Array<Short>) \n    constructor(buffer: ByteBuffer, byteOffset: Int = definedExternally, length:
Int = definedExternally) \n    open val length: Int \n    override val buffer: ByteBuffer \n    override val byteOffset:
Int \n    override val byteLength: Int \n    fun set(array: Int16Array, offset: Int = definedExternally) \n    fun set(array:
Array<Short>, offset: Int = definedExternally) \n    fun subarray(start: Int, end: Int): Int16Array \n \n    companion
object { \n        val BYTES_PER_ELEMENT: Int \n    } \n \n \n @Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER") \n @kotlin.internal.InlineOnly \n public inline operator fun Int16Array.get(index: Int):
Short = asDynamic()[index] \n \n @Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER") \n @kotlin.internal.InlineOnly \n public inline operator fun Int16Array.set(index: Int,
value: Short) { asDynamic()[index] = value } \n \n /** \n * Exposes the JavaScript
[UInt16Array](https://developer.mozilla.org/en/docs/Web/API/UInt16Array) to Kotlin \n * \n \n public external open
class UInt16Array : ArrayBufferView { \n    constructor(length: Int) \n    constructor(array: UInt16Array) \n
constructor(array: Array<Short>) \n    constructor(buffer: ByteBuffer, byteOffset: Int = definedExternally, length:
Int = definedExternally) \n    open val length: Int \n    override val buffer: ByteBuffer \n    override val byteOffset:
Int \n    override val byteLength: Int \n    fun set(array: UInt16Array, offset: Int = definedExternally) \n    fun set(array:
Array<Short>, offset: Int = definedExternally) \n    fun subarray(start: Int, end: Int): UInt16Array \n \n    companion
object { \n        val BYTES_PER_ELEMENT: Int \n    } \n \n \n @Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER") \n @kotlin.internal.InlineOnly \n public inline operator fun UInt16Array.get(index: Int):
Short = asDynamic()[index] \n \n @Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER") \n @kotlin.internal.InlineOnly \n public inline operator fun UInt16Array.set(index: Int,
value: Short) { asDynamic()[index] = value } \n \n /** \n * Exposes the JavaScript
[Int32Array](https://developer.mozilla.org/en/docs/Web/API/Int32Array) to Kotlin \n * \n \n public external open class
Int32Array : ArrayBufferView { \n    constructor(length: Int) \n    constructor(array: Int32Array) \n
constructor(array: Array<Int>) \n    constructor(buffer: ByteBuffer, byteOffset: Int = definedExternally, length: Int
= definedExternally) \n    open val length: Int \n    override val buffer: ByteBuffer \n    override val byteOffset: Int \n
override val byteLength: Int \n    fun set(array: Int32Array, offset: Int = definedExternally) \n    fun set(array:
Array<Int>, offset: Int = definedExternally) \n    fun subarray(start: Int, end: Int): Int32Array \n \n    companion object
{ \n        val BYTES_PER_ELEMENT: Int \n    } \n \n \n @Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER") \n @kotlin.internal.InlineOnly \n public inline operator fun Int32Array.get(index: Int): Int
= asDynamic()[index] \n \n @Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER") \n @kotlin.internal.InlineOnly \n public inline operator fun Int32Array.set(index: Int,
value: Int) { asDynamic()[index] = value } \n \n /** \n * Exposes the JavaScript
[UInt32Array](https://developer.mozilla.org/en/docs/Web/API/UInt32Array) to Kotlin \n * \n \n public external open
class UInt32Array : ArrayBufferView { \n    constructor(length: Int) \n    constructor(array: UInt32Array) \n
constructor(array: Array<Int>) \n    constructor(buffer: ByteBuffer, byteOffset: Int = definedExternally, length: Int
= definedExternally) \n    open val length: Int \n    override val buffer: ByteBuffer \n    override val byteOffset: Int \n
override val byteLength: Int \n    fun set(array: UInt32Array, offset: Int = definedExternally) \n    fun set(array:
Array<Int>, offset: Int = definedExternally) \n    fun subarray(start: Int, end: Int): UInt32Array \n \n    companion
object { \n        val BYTES_PER_ELEMENT: Int \n    } \n \n \n @Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER") \n @kotlin.internal.InlineOnly \n public inline operator fun UInt32Array.get(index: Int):
Int = asDynamic()[index] \n \n @Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER") \n @kotlin.internal.InlineOnly \n public inline operator fun UInt32Array.set(index: Int,
value: Int) { asDynamic()[index] = value } \n \n /** \n * Exposes the JavaScript
[Float32Array](https://developer.mozilla.org/en/docs/Web/API/Float32Array) to Kotlin \n * \n \n public external open
class Float32Array : ArrayBufferView { \n    constructor(length: Int) \n    constructor(array: Float32Array) \n

```

```

constructor(array: Array<Float>)\n  constructor(buffer: ArrayBuffer, byteOffset: Int = definedExternally, length:
Int = definedExternally)\n  open val length: Int\n  override val buffer: ArrayBuffer\n  override val byteOffset:
Int\n  override val byteLength: Int\n  fun set(array: Float32Array, offset: Int = definedExternally)\n  fun
set(array: Array<Float>, offset: Int = definedExternally)\n  fun subarray(start: Int, end: Int): Float32Array\n\n
companion object {\n    val BYTES_PER_ELEMENT: Int\n
}\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Float32Array.get(index: Int):
Float = asDynamic()[index]\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Float32Array.set(index: Int,
value: Float) { asDynamic()[index] = value }\n\n/**\n * Exposes the JavaScript
[Float64Array](https://developer.mozilla.org/en/docs/Web/API/Float64Array) to Kotlin\n */\npublic external open
class Float64Array : ArrayBufferView {\n  constructor(length: Int)\n  constructor(array: Float64Array)\n
constructor(array: Array<Double>)\n  constructor(buffer: ArrayBuffer, byteOffset: Int = definedExternally, length:
Int = definedExternally)\n  open val length: Int\n  override val buffer: ArrayBuffer\n  override val byteOffset:
Int\n  override val byteLength: Int\n  fun set(array: Float64Array, offset: Int = definedExternally)\n  fun
set(array: Array<Double>, offset: Int = definedExternally)\n  fun subarray(start: Int, end: Int): Float64Array\n\n
companion object {\n    val BYTES_PER_ELEMENT: Int\n
}\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Float64Array.get(index: Int):
Double = asDynamic()[index]\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Float64Array.set(index: Int,
value: Double) { asDynamic()[index] = value }\n\n/**\n * Exposes the JavaScript
[DataView](https://developer.mozilla.org/en/docs/Web/API/DataView) to Kotlin\n */\npublic external open class
DataView(buffer: ArrayBuffer, byteOffset: Int = definedExternally, byteLength: Int = definedExternally) :
ArrayBufferView {\n  override val buffer: ArrayBuffer\n  override val byteOffset: Int\n  override val
byteLength: Int\n  fun getInt8(byteOffset: Int): Byte\n  fun getUint8(byteOffset: Int): Byte\n  fun
getInt16(byteOffset: Int, littleEndian: Boolean = definedExternally): Short\n  fun getUint16(byteOffset: Int,
littleEndian: Boolean = definedExternally): Short\n  fun getInt32(byteOffset: Int, littleEndian: Boolean =
definedExternally): Int\n  fun getUint32(byteOffset: Int, littleEndian: Boolean = definedExternally): Int\n  fun
getFloat32(byteOffset: Int, littleEndian: Boolean = definedExternally): Float\n  fun getFloat64(byteOffset: Int,
littleEndian: Boolean = definedExternally): Double\n  fun setInt8(byteOffset: Int, value: Byte)\n  fun
setUint8(byteOffset: Int, value: Byte)\n  fun setInt16(byteOffset: Int, value: Short, littleEndian: Boolean =
definedExternally)\n  fun setUint16(byteOffset: Int, value: Short, littleEndian: Boolean = definedExternally)\n
fun setInt32(byteOffset: Int, value: Int, littleEndian: Boolean = definedExternally)\n  fun setUint32(byteOffset: Int,
value: Int, littleEndian: Boolean = definedExternally)\n  fun setFloat32(byteOffset: Int, value: Float, littleEndian:
Boolean = definedExternally)\n  fun setFloat64(byteOffset: Int, value: Double, littleEndian: Boolean =
definedExternally)\n}\n\npublic external interface BufferDataSource\n\npublic external interface
TexImageSource", /*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n *
Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*/\n\n// NOTE: THIS FILE IS AUTO-GENERATED, DO NOT EDIT!\n// See github.com/kotlin/dukat for
details\n\npackage org.w3c.dom.clipboard\n\nimport kotlin.js.*\nimport org.khronos.webgl.*\nimport
org.w3c.dom.*\nimport org.w3c.dom.events.*\n\npublic external interface ClipboardEventInit : EventInit {\n  var
clipboardData: DataTransfer? /* = null */\n  get() = definedExternally\n  set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun ClipboardEventInit(clipboardData:
DataTransfer? = null, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false):
ClipboardEventInit {\n  val o = js("{}")\n  o["clipboardData"] = clipboardData\n  o["bubbles"] = bubbles\n
o["cancelable"] = cancelable\n  o["composed"] = composed\n  return o\n}\n\n/**\n * Exposes the JavaScript

```

```

[ClipboardEvent](https://developer.mozilla.org/en/docs/Web/API/ClipboardEvent) to Kotlin\n *\npublic external
open class ClipboardEvent(type: String, eventInitDict: ClipboardEventInit = definedExternally) : Event {\n  open
val clipboardData: DataTransfer?\n\n  companion object {\n    val NONE: Short\n    val
CAPTURING_PHASE: Short\n    val AT_TARGET: Short\n    val BUBBLING_PHASE: Short\n
}\n}\n\n/**\n * Exposes the JavaScript [Clipboard](https://developer.mozilla.org/en/docs/Web/API/Clipboard) to
Kotlin\n *\npublic external abstract class Clipboard : EventTarget {\n  fun read(): Promise<DataTransfer>\n  fun
readText(): Promise<String>\n  fun write(data: DataTransfer): Promise<Unit>\n  fun writeText(data: String):
Promise<Unit>\n}\n\npublic external interface ClipboardPermissionDescriptor {\n  var allowWithoutGesture:
Boolean? /* = false */\n  get() = definedExternally\n  set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n\n@kotlin.internal.InlineOnly\npublic inline fun
ClipboardPermissionDescriptor(allowWithoutGesture: Boolean? = false): ClipboardPermissionDescriptor {\n  val
o = js("{}")\n  o["allowWithoutGesture"] = allowWithoutGesture\n  return o\n}, /*\n * Copyright 2010-
2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n// NOTE: THIS FILE IS AUTO-
GENERATED, DO NOT EDIT!\n// See github.com/kotlin/dukat for details\n\npackage org.w3c.dom.css\n\nimport
kotlin.js.*\nimport org.khronos.webgl.*\nimport org.w3c.dom.*\n\npublic external abstract class MediaList :
ItemArrayLike<String> {\n  open var mediaText: String\n  fun appendMedium(medium: String)\n  fun
deleteMedium(medium: String)\n  override fun item(index: Int):
String?\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n\n@kotlin.internal.InlineOnly\npublic inline operator fun MediaList.get(index: Int):
String? = asDynamic()[index]\n\n/**\n * Exposes the JavaScript
[StyleSheet](https://developer.mozilla.org/en/docs/Web/API/StyleSheet) to Kotlin\n *\npublic external abstract
class StyleSheet {\n  open val type: String\n  open val href: String?\n  open val ownerNode:
UnionElementOrProcessingInstruction?\n  open val parentStyleSheet: StyleSheet?\n  open val title: String?\n
open val media: MediaList\n  open var disabled: Boolean\n}\n\n/**\n * Exposes the JavaScript
[CSSStyleSheet](https://developer.mozilla.org/en/docs/Web/API/CSSStyleSheet) to Kotlin\n *\npublic external
abstract class CSSStyleSheet : StyleSheet {\n  open val ownerRule: CSSRule?\n  open val cssRules:
CSSRuleList\n  fun insertRule(rule: String, index: Int): Int\n  fun deleteRule(index: Int)\n}\n\n/**\n * Exposes the
JavaScript [StyleSheetList](https://developer.mozilla.org/en/docs/Web/API/StyleSheetList) to Kotlin\n *\npublic
external abstract class StyleSheetList : ItemArrayLike<StyleSheet> {\n  override fun item(index: Int):
StyleSheet?\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n\n@kotlin.internal.InlineOnly\npublic inline operator fun StyleSheetList.get(index: Int):
StyleSheet? = asDynamic()[index]\n\n/**\n * Exposes the JavaScript
[LinkStyle](https://developer.mozilla.org/en/docs/Web/API/LinkStyle) to Kotlin\n *\npublic external interface
LinkStyle {\n  val sheet: StyleSheet?\n  get() = definedExternally\n}\n\n/**\n * Exposes the JavaScript
[CSSRuleList](https://developer.mozilla.org/en/docs/Web/API/CSSRuleList) to Kotlin\n *\npublic external abstract
class CSSRuleList : ItemArrayLike<CSSRule> {\n  override fun item(index: Int):
CSSRule?\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n\n@kotlin.internal.InlineOnly\npublic inline operator fun CSSRuleList.get(index: Int):
CSSRule? = asDynamic()[index]\n\n/**\n * Exposes the JavaScript
[CSSRule](https://developer.mozilla.org/en/docs/Web/API/CSSRule) to Kotlin\n *\npublic external abstract class
CSSRule {\n  open val type: Short\n  open var cssText: String\n  open val parentRule: CSSRule?\n  open val
parentStyleSheet: CSSStyleSheet?\n\n  companion object {\n    val STYLE_RULE: Short\n    val
CHARSET_RULE: Short\n    val IMPORT_RULE: Short\n    val MEDIA_RULE: Short\n    val
FONT_FACE_RULE: Short\n    val PAGE_RULE: Short\n    val MARGIN_RULE: Short\n    val
NAMESPACE_RULE: Short\n  }\n}\n\n/**\n * Exposes the JavaScript
[CSSStyleRule](https://developer.mozilla.org/en/docs/Web/API/CSSStyleRule) to Kotlin\n *\npublic external

```



```

abstract class CSSStyleRule : CSSRule {\n  open var selectorText: String\n  open val style:
CSSStyleDeclaration\n\n  companion object {\n    val STYLE_RULE: Short\n    val CHARSET_RULE:
Short\n    val IMPORT_RULE: Short\n    val MEDIA_RULE: Short\n    val FONT_FACE_RULE: Short\n
    val PAGE_RULE: Short\n    val MARGIN_RULE: Short\n    val NAMESPACE_RULE: Short\n
  }\n}\n\npublic external abstract class CSSImportRule : CSSRule {\n  open val href: String\n  open val media:
MediaList\n  open val styleSheet: CSSStyleSheet\n\n  companion object {\n    val STYLE_RULE: Short\n
    val CHARSET_RULE: Short\n    val IMPORT_RULE: Short\n    val MEDIA_RULE: Short\n    val
FONT_FACE_RULE: Short\n    val PAGE_RULE: Short\n    val MARGIN_RULE: Short\n    val
NAMESPACE_RULE: Short\n  }\n}\n\n/**\n * Exposes the JavaScript
[CSSGroupingRule](https://developer.mozilla.org/en/docs/Web/API/CSSGroupingRule) to Kotlin\n *\npublic
external abstract class CSSGroupingRule : CSSRule {\n  open val cssRules: CSSRuleList\n  fun insertRule(rule:
String, index: Int): Int\n  fun deleteRule(index: Int)\n\n  companion object {\n    val STYLE_RULE: Short\n
    val CHARSET_RULE: Short\n    val IMPORT_RULE: Short\n    val MEDIA_RULE: Short\n    val
FONT_FACE_RULE: Short\n    val PAGE_RULE: Short\n    val MARGIN_RULE: Short\n    val
NAMESPACE_RULE: Short\n  }\n}\n\n/**\n * Exposes the JavaScript
[CSSMediaRule](https://developer.mozilla.org/en/docs/Web/API/CSSMediaRule) to Kotlin\n *\npublic external
abstract class CSSMediaRule : CSSGroupingRule {\n  open val media: MediaList\n\n  companion object {\n
    val STYLE_RULE: Short\n    val CHARSET_RULE: Short\n    val IMPORT_RULE: Short\n    val
MEDIA_RULE: Short\n    val FONT_FACE_RULE: Short\n    val PAGE_RULE: Short\n    val
MARGIN_RULE: Short\n    val NAMESPACE_RULE: Short\n  }\n}\n\n/**\n * Exposes the JavaScript
[CSSPageRule](https://developer.mozilla.org/en/docs/Web/API/CSSPageRule) to Kotlin\n *\npublic external
abstract class CSSPageRule : CSSGroupingRule {\n  open var selectorText: String\n  open val style:
CSSStyleDeclaration\n\n  companion object {\n    val STYLE_RULE: Short\n    val CHARSET_RULE:
Short\n    val IMPORT_RULE: Short\n    val MEDIA_RULE: Short\n    val FONT_FACE_RULE: Short\n
    val PAGE_RULE: Short\n    val MARGIN_RULE: Short\n    val NAMESPACE_RULE: Short\n
  }\n}\n\npublic external abstract class CSSMarginRule : CSSRule {\n  open val name: String\n  open val style:
CSSStyleDeclaration\n\n  companion object {\n    val STYLE_RULE: Short\n    val CHARSET_RULE:
Short\n    val IMPORT_RULE: Short\n    val MEDIA_RULE: Short\n    val FONT_FACE_RULE: Short\n
    val PAGE_RULE: Short\n    val MARGIN_RULE: Short\n    val NAMESPACE_RULE: Short\n
  }\n}\n\n/**\n * Exposes the JavaScript
[CSSNamespaceRule](https://developer.mozilla.org/en/docs/Web/API/CSSNamespaceRule) to Kotlin\n *\npublic
external abstract class CSSNamespaceRule : CSSRule {\n  open val namespaceURI: String\n  open val prefix:
String\n\n  companion object {\n    val STYLE_RULE: Short\n    val CHARSET_RULE: Short\n    val
IMPORT_RULE: Short\n    val MEDIA_RULE: Short\n    val FONT_FACE_RULE: Short\n    val
PAGE_RULE: Short\n    val MARGIN_RULE: Short\n    val NAMESPACE_RULE: Short\n  }\n}\n\n/**\n *
Exposes the JavaScript
[CSSStyleDeclaration](https://developer.mozilla.org/en/docs/Web/API/CSSStyleDeclaration) to Kotlin\n *\npublic
external abstract class CSSStyleDeclaration : ItemArrayLike<String> {\n  open var cssText: String\n  open val
parentRule: CSSRule?\n  open var cssFloat: String\n  open var alignContent: String\n  open var alignItems:
String\n  open var alignSelf: String\n  open var animation: String\n  open var animationDelay: String\n  open
var animationDirection: String\n  open var animationDuration: String\n  open var animationFillMode: String\n
  open var animationIterationCount: String\n  open var animationName: String\n  open var animationPlayState:
String\n  open var animationTimingFunction: String\n  open var backfaceVisibility: String\n  open var
background: String\n  open var backgroundAttachment: String\n  open var backgroundClip: String\n  open var
backgroundColor: String\n  open var backgroundImage: String\n  open var backgroundOrigin: String\n  open var
backgroundPosition: String\n  open var backgroundRepeat: String\n  open var backgroundSize: String\n  open
var border: String\n  open var borderBottom: String\n  open var borderBottomColor: String\n  open var
borderBottomLeftRadius: String\n  open var borderBottomRightRadius: String\n  open var borderBottomStyle:

```

String\n open var borderBottomWidth: String\n open var borderCollapse: String\n open var borderColor: String\n open var borderImage: String\n open var borderImageOutset: String\n open var borderImageRepeat: String\n open var borderImageSlice: String\n open var borderImageSource: String\n open var borderImageWidth: String\n open var borderLeft: String\n open var borderLeftColor: String\n open var borderLeftStyle: String\n open var borderLeftWidth: String\n open var borderRadius: String\n open var borderRight: String\n open var borderRightColor: String\n open var borderRightStyle: String\n open var borderRightWidth: String\n open var borderSpacing: String\n open var borderStyle: String\n open var borderTop: String\n open var borderTopColor: String\n open var borderTopLeftRadius: String\n open var borderTopRightRadius: String\n open var borderTopStyle: String\n open var borderTopWidth: String\n open var borderWidth: String\n open var bottom: String\n open var boxDecorationBreak: String\n open var boxShadow: String\n open var boxSizing: String\n open var breakAfter: String\n open var breakBefore: String\n open var breakInside: String\n open var captionSide: String\n open var clear: String\n open var clip: String\n open var color: String\n open var columnCount: String\n open var columnFill: String\n open var columnGap: String\n open var columnRule: String\n open var columnRuleColor: String\n open var columnRuleStyle: String\n open var columnRuleWidth: String\n open var columnSpan: String\n open var columnWidth: String\n open var columns: String\n open var content: String\n open var counterIncrement: String\n open var counterReset: String\n open var cursor: String\n open var direction: String\n open var display: String\n open var emptyCells: String\n open var filter: String\n open var flex: String\n open var flexBasis: String\n open var flexDirection: String\n open var flexFlow: String\n open var flexGrow: String\n open var flexShrink: String\n open var flexWrap: String\n open var font: String\n open var fontFamily: String\n open var fontFeatureSettings: String\n open var fontKerning: String\n open var fontLanguageOverride: String\n open var fontSize: String\n open var fontSizeAdjust: String\n open var fontStretch: String\n open var fontStyle: String\n open var fontSynthesis: String\n open var fontVariant: String\n open var fontVariantAlternates: String\n open var fontVariantCaps: String\n open var fontVariantEastAsian: String\n open var fontVariantLigatures: String\n open var fontVariantNumeric: String\n open var fontVariantPosition: String\n open var fontWeight: String\n open var hangingPunctuation: String\n open var height: String\n open var hyphens: String\n open var imageOrientation: String\n open var imageRendering: String\n open var imageResolution: String\n open var imeMode: String\n open var justifyContent: String\n open var left: String\n open var letterSpacing: String\n open var lineBreak: String\n open var lineHeight: String\n open var listStyle: String\n open var listStyleImage: String\n open var listStylePosition: String\n open var listStyleType: String\n open var margin: String\n open var marginBottom: String\n open var marginLeft: String\n open var marginRight: String\n open var marginTop: String\n open var mark: String\n open var markAfter: String\n open var markBefore: String\n open var marks: String\n open var marqueeDirection: String\n open var marqueePlayCount: String\n open var marqueeSpeed: String\n open var marqueeStyle: String\n open var mask: String\n open var maskType: String\n open var maxHeight: String\n open var maxWidth: String\n open var minHeight: String\n open var minWidth: String\n open var navDown: String\n open var navIndex: String\n open var navLeft: String\n open var navRight: String\n open var navUp: String\n open var objectFit: String\n open var objectPosition: String\n open var opacity: String\n open var order: String\n open var orphans: String\n open var outline: String\n open var outlineColor: String\n open var outlineOffset: String\n open var outlineStyle: String\n open var outlineWidth: String\n open var overflowWrap: String\n open var overflowX: String\n open var overflowY: String\n open var padding: String\n open var paddingBottom: String\n open var paddingLeft: String\n open var paddingRight: String\n open var paddingTop: String\n open var pageBreakAfter: String\n open var pageBreakBefore: String\n open var pageBreakInside: String\n open var perspective: String\n open var perspectiveOrigin: String\n open var phonemes: String\n open var position: String\n open var quotes: String\n open var resize: String\n open var rest: String\n open var restAfter: String\n open var restBefore: String\n open var right: String\n open var tabSize: String\n open var tableLayout: String\n open var textAlign: String\n open var textAlignLast: String\n open var textCombineUpright: String\n open var textDecoration: String\n open var textDecorationColor:

```

String\n open var textDecorationLine: String\n open var textDecorationStyle: String\n open var textIndent:
String\n open var textJustify: String\n open var textOrientation: String\n open var textOverflow: String\n
open var textShadow: String\n open var textTransform: String\n open var textUnderlinePosition: String\n open
var top: String\n open var transform: String\n open var transformOrigin: String\n open var transformStyle:
String\n open var transition: String\n open var transitionDelay: String\n open var transitionDuration: String\n
open var transitionProperty: String\n open var transitionTimingFunction: String\n open var unicodeBidi:
String\n open var verticalAlign: String\n open var visibility: String\n open var voiceBalance: String\n open
var voiceDuration: String\n open var voicePitch: String\n open var voicePitchRange: String\n open var
voiceRate: String\n open var voiceStress: String\n open var voiceVolume: String\n open var whiteSpace:
String\n open var widows: String\n open var width: String\n open var wordBreak: String\n open var
wordSpacing: String\n open var wordWrap: String\n open var writingMode: String\n open var zIndex: String\n
open var _dashed_attribute: String\n open var _camel_cased_attribute: String\n open var
_webkit_cased_attribute: String\n fun getPropertyValue(property: String): String\n fun
getPropertyPriority(property: String): String\n fun setProperty(property: String, value: String, priority: String =
definedExternally)\n fun setPropertyValue(property: String, value: String)\n fun setPropertyPriority(property:
String, priority: String)\n fun removeProperty(property: String): String\n override fun item(index: Int):
String\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun
CSSStyleDeclaration.get(index: Int): String? = asDynamic()[index]\n\npublic external interface
ElementCSSInlineStyle {\n val style: CSSStyleDeclaration\n}\n\n/**\n * Exposes the JavaScript
[CSS](https://developer.mozilla.org/en/docs/Web/API/CSS) to Kotlin\n *\n\npublic external abstract class CSS {\n
companion object {\n fun escape(ident: String): String\n }\n}\n\npublic external interface
UnionElementOrProcessingInstruction\", \"/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n *\n\n// NOTE: THIS FILE IS AUTO-GENERATED, DO NOT EDIT!\n\n// See
github.com/kotlin/dukat for details\n\npackage org.w3c.dom.encryptedmedia\n\nimport kotlin.js.*\nimport
org.khronos.webgl.*\nimport org.w3c.dom.*\nimport org.w3c.dom.events.*\n\n/**\n * Exposes the JavaScript
[MediaKeySystemConfiguration](https://developer.mozilla.org/en/docs/Web/API/MediaKeySystemConfiguration)
to Kotlin\n *\n\npublic external interface MediaKeySystemConfiguration {\n var label: String? /* = \"\" *\n
get() = definedExternally\n set(value) = definedExternally\n var initDataTypes: Array<String>? /* = arrayOf()
*\n
get() = definedExternally\n set(value) = definedExternally\n var audioCapabilities:
Array<MediaKeySystemMediaCapability>? /* = arrayOf() *\n
get() = definedExternally\n set(value) = definedExternally\n var videoCapabilities: Array<MediaKeySystemMediaCapability>? /* = arrayOf() *\n
get() = definedExternally\n set(value) = definedExternally\n var distinctiveIdentifier:
MediaKeysRequirement? /* = MediaKeysRequirement.OPTIONAL *\n
get() = definedExternally\n
set(value) = definedExternally\n var persistentState: MediaKeysRequirement? /* =
MediaKeysRequirement.OPTIONAL *\n
get() = definedExternally\n set(value) = definedExternally\n
var sessionTypes: Array<String>?\n
get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun MediaKeySystemConfiguration(label:
String? = \"\", initDataTypes: Array<String>? = arrayOf(), audioCapabilities:
Array<MediaKeySystemMediaCapability>? = arrayOf(), videoCapabilities:
Array<MediaKeySystemMediaCapability>? = arrayOf(), distinctiveIdentifier: MediaKeysRequirement? =
MediaKeysRequirement.OPTIONAL, persistentState: MediaKeysRequirement? =
MediaKeysRequirement.OPTIONAL, sessionTypes: Array<String>? = undefined): MediaKeySystemConfiguration
{\n val o = js(\"({})\")\n o[\"label\"] = label\n o[\"initDataTypes\"] = initDataTypes\n
o[\"audioCapabilities\"] = audioCapabilities\n o[\"videoCapabilities\"] = videoCapabilities\n
o[\"distinctiveIdentifier\"] = distinctiveIdentifier\n o[\"persistentState\"] = persistentState\n o[\"sessionTypes\"]

```

```

= sessionTypes\n    return o\n}\n\npublic external interface MediaKeySystemMediaCapability {\n    var
contentType: String? /* = \"\" */\n        get() = definedExternally\n        set(value) = definedExternally\n    var
robustness: String? /* = \"\" */\n        get() = definedExternally\n        set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun
MediaKeySystemMediaCapability(contentType: String? = \"\", robustness: String? = \"\"):
MediaKeySystemMediaCapability {\n    val o = js(\"({})\")\n    o[\"contentType\"] = contentType\n
o[\"robustness\"] = robustness\n    return o\n}\n\n/**\n * Exposes the JavaScript
[MediaKeySystemAccess](https://developer.mozilla.org/en/docs/Web/API/MediaKeySystemAccess) to Kotlin\n
*/\npublic external abstract class MediaKeySystemAccess {\n    open val keySystem: String\n    fun
getConfiguration(): MediaKeySystemConfiguration\n    fun createMediaKeys(): Promise<MediaKeys>\n}\n\n/**\n
* Exposes the JavaScript [MediaKeys](https://developer.mozilla.org/en/docs/Web/API/MediaKeys) to Kotlin\n
*/\npublic external abstract class MediaKeys {\n    fun createSession(sessionType: MediaKeySessionType =
definedExternally): MediaKeySession\n    fun setServerCertificate(serverCertificate: dynamic):
Promise<Boolean>\n}\n\n/**\n * Exposes the JavaScript
[MediaKeySession](https://developer.mozilla.org/en/docs/Web/API/MediaKeySession) to Kotlin\n
*/\npublic
external abstract class MediaKeySession : EventTarget {\n    open val sessionId: String\n    open val expiration:
Double\n    open val closed: Promise<Unit>\n    open val keyStatuses: MediaKeyStatusMap\n    open var
onkeystatuseschange: ((Event) -> dynamic)?\n    open var onmessage: ((MessageEvent) -> dynamic)?\n    fun
generateRequest(initDataType: String, initData: dynamic): Promise<Unit>\n    fun load(sessionId: String):
Promise<Boolean>\n    fun update(response: dynamic): Promise<Unit>\n    fun close(): Promise<Unit>\n    fun
remove(): Promise<Unit>\n}\n\n/**\n * Exposes the JavaScript
[MediaKeyStatusMap](https://developer.mozilla.org/en/docs/Web/API/MediaKeyStatusMap) to Kotlin\n
*/\npublic
external abstract class MediaKeyStatusMap {\n    open val size: Int\n    fun has(keyId: dynamic): Boolean\n    fun
get(keyId: dynamic): Any?\n}\n\n/**\n * Exposes the JavaScript
[MediaKeyMessageEvent](https://developer.mozilla.org/en/docs/Web/API/MediaKeyMessageEvent) to Kotlin\n
*/\npublic external open class MediaKeyMessageEvent(type: String, eventInitDict: MediaKeyMessageEventInit) :
Event {\n    open val messageType: MediaKeyMessageType\n    open val message: ArrayBuffer\n\n    companion
object {\n        val NONE: Short\n        val CAPTURING_PHASE: Short\n        val AT_TARGET: Short\n        val
BUBBLING_PHASE: Short\n    }\n}\n\npublic external interface MediaKeyMessageEventInit : EventInit {\n    var
messageType: MediaKeyMessageType?\n    var message:
ArrayBuffer?\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun
MediaKeyMessageEventInit(messageType: MediaKeyMessageType?, message: ArrayBuffer?, bubbles: Boolean? =
false, cancelable: Boolean? = false, composed: Boolean? = false): MediaKeyMessageEventInit {\n    val o =
js(\"({})\")\n    o[\"messageType\"] = messageType\n    o[\"message\"] = message\n    o[\"bubbles\"] = bubbles\n
o[\"cancelable\"] = cancelable\n    o[\"composed\"] = composed\n    return o\n}\n\npublic external open class
MediaEncryptedEvent(type: String, eventInitDict: MediaEncryptedEventInit = definedExternally) : Event {\n
    open val initDataType: String\n    open val initData: ArrayBuffer?\n\n    companion object {\n        val
NONE: Short\n        val CAPTURING_PHASE: Short\n        val AT_TARGET: Short\n        val BUBBLING_PHASE:
Short\n    }\n}\n\npublic external interface MediaEncryptedEventInit : EventInit {\n    var initDataType: String? /* =
\"\" */\n        get() = definedExternally\n        set(value) = definedExternally\n    var initData: ArrayBuffer? /* = null
*/\n        get() = definedExternally\n        set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun
MediaEncryptedEventInit(initDataType: String? = \"\", initData: ArrayBuffer? = null, bubbles: Boolean? = false,
cancelable: Boolean? = false, composed: Boolean? = false): MediaEncryptedEventInit {\n    val o = js(\"({})\")\n
o[\"initDataType\"] = initDataType\n    o[\"initData\"] = initData\n    o[\"bubbles\"] = bubbles\n    o[\"cancelable\"]

```

```

= cancelable\n    o[\"composed\"] = composed\n    return o\n}\n\n/* please, don't implement this interface!
*\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\npublic external
interface MediaKeysRequirement {\n    companion object\n}\n\npublic inline val
MediaKeysRequirement.Companion.REQUIRED: MediaKeysRequirement get() =
\"required\".asDynamic().unsafeCast<MediaKeysRequirement>()\n\npublic inline val
MediaKeysRequirement.Companion.OPTIONAL: MediaKeysRequirement get() =
\"optional\".asDynamic().unsafeCast<MediaKeysRequirement>()\n\npublic inline val
MediaKeysRequirement.Companion.NOT_ALLOWED: MediaKeysRequirement get() = \"not-
allowed\".asDynamic().unsafeCast<MediaKeysRequirement>()\n\n/* please, don't implement this interface!
*\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\npublic external
interface MediaKeySessionType {\n    companion object\n}\n\npublic inline val
MediaKeySessionType.Companion.TEMPORARY: MediaKeySessionType get() =
\"temporary\".asDynamic().unsafeCast<MediaKeySessionType>()\n\npublic inline val
MediaKeySessionType.Companion.PERSISTENT_LICENSE: MediaKeySessionType get() = \"persistent-
license\".asDynamic().unsafeCast<MediaKeySessionType>()\n\n/* please, don't implement this interface!
*\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\npublic external
interface MediaKeyStatus {\n    companion object\n}\n\npublic inline val MediaKeyStatus.Companion.USABLE:
MediaKeyStatus get() = \"usable\".asDynamic().unsafeCast<MediaKeyStatus>()\n\npublic inline val
MediaKeyStatus.Companion.EXPIRED: MediaKeyStatus get() =
\"expired\".asDynamic().unsafeCast<MediaKeyStatus>()\n\npublic inline val
MediaKeyStatus.Companion.RELEASED: MediaKeyStatus get() =
\"released\".asDynamic().unsafeCast<MediaKeyStatus>()\n\npublic inline val
MediaKeyStatus.Companion.OUTPUT_RESTRICTED: MediaKeyStatus get() = \"output-
restricted\".asDynamic().unsafeCast<MediaKeyStatus>()\n\npublic inline val
MediaKeyStatus.Companion.OUTPUT_DOWNSCALED: MediaKeyStatus get() = \"output-
downscaled\".asDynamic().unsafeCast<MediaKeyStatus>()\n\npublic inline val
MediaKeyStatus.Companion.STATUS_PENDING: MediaKeyStatus get() = \"status-
pending\".asDynamic().unsafeCast<MediaKeyStatus>()\n\npublic inline val
MediaKeyStatus.Companion.INTERNAL_ERROR: MediaKeyStatus get() = \"internal-
error\".asDynamic().unsafeCast<MediaKeyStatus>()\n\n/* please, don't implement this interface!
*\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\npublic external
interface MediaKeyMessageType {\n    companion object\n}\n\npublic inline val
MediaKeyMessageType.Companion.LICENSE_REQUEST: MediaKeyMessageType get() = \"license-
request\".asDynamic().unsafeCast<MediaKeyMessageType>()\n\npublic inline val
MediaKeyMessageType.Companion.LICENSE_RENEWAL: MediaKeyMessageType get() = \"license-
renewal\".asDynamic().unsafeCast<MediaKeyMessageType>()\n\npublic inline val
MediaKeyMessageType.Companion.LICENSE_RELEASE: MediaKeyMessageType get() = \"license-
release\".asDynamic().unsafeCast<MediaKeyMessageType>()\n\npublic inline val
MediaKeyMessageType.Companion.INDIVIDUALIZATION_REQUEST: MediaKeyMessageType get() =
\"individualization-request\".asDynamic().unsafeCast<MediaKeyMessageType>()\", \"/*\n * Copyright 2010-2021
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n *\n\n// NOTE: THIS FILE IS AUTO-
GENERATED, DO NOT EDIT!\n\n// See github.com/kotlin/dukat for details\n\npackage
org.w3c.dom.events\n\nimport kotlin.js.*\nimport org.khronos.webgl.*\nimport org.w3c.dom.*\n\n/**\n * Exposes
the JavaScript [UIEvent](https://developer.mozilla.org/en/docs/Web/API/UIEvent) to Kotlin\n *\n\npublic external
open class UIEvent(type: String, eventInitDict: UIEventInit = definedExternally) : Event {\n    open val view:
Window?\n    open val detail: Int\n\n    companion object {\n        val NONE: Short\n        val
CAPTURING_PHASE: Short\n        val AT_TARGET: Short\n        val BUBBLING_PHASE: Short\n

```

```

}\n}\n\npublic external interface UIEventInit : EventInit {\n    var view: Window? /* = null */\n        get() =
definedExternally\n        set(value) = definedExternally\n        var detail: Int? /* = 0 */\n        get() =
definedExternally\n        set(value) = definedExternally\n}\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun UIEventInit(view: Window? = null,
detail: Int? = 0, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false): UIEventInit
{\n    val o = js(\"({})\")\n    o[\"view\"] = view\n    o[\"detail\"] = detail\n    o[\"bubbles\"] = bubbles\n
o[\"cancelable\"] = cancelable\n    o[\"composed\"] = composed\n    return o\n}\n}\n\n/**\n * Exposes the JavaScript
[FocusEvent](https://developer.mozilla.org/en/docs/Web/API/FocusEvent) to Kotlin\n */\npublic external open class
FocusEvent(type: String, eventInitDict: FocusEventInit = definedExternally) : UIEvent {\n    open val relatedTarget:
EventTarget?\n}\n\n    companion object {\n        val NONE: Short\n        val CAPTURING_PHASE: Short\n        val
AT_TARGET: Short\n        val BUBBLING_PHASE: Short\n    }\n}\n}\n\npublic external interface FocusEventInit :
UIEventInit {\n    var relatedTarget: EventTarget? /* = null */\n        get() = definedExternally\n        set(value) =
definedExternally\n}\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun FocusEventInit(relatedTarget:
EventTarget? = null, view: Window? = null, detail: Int? = 0, bubbles: Boolean? = false, cancelable: Boolean? =
false, composed: Boolean? = false): FocusEventInit {\n    val o = js(\"({})\")\n    o[\"relatedTarget\"] =
relatedTarget\n    o[\"view\"] = view\n    o[\"detail\"] = detail\n    o[\"bubbles\"] = bubbles\n    o[\"cancelable\"] =
cancelable\n    o[\"composed\"] = composed\n    return o\n}\n}\n\n/**\n * Exposes the JavaScript
[MouseEvent](https://developer.mozilla.org/en/docs/Web/API/MouseEvent) to Kotlin\n */\npublic external open
class MouseEvent(type: String, eventInitDict: MouseEventInit = definedExternally) : UIEvent,
UnionElementOrMouseEvent {\n    open val screenX: Int\n    open val screenY: Int\n    open val clientX: Int\n
open val clientY: Int\n    open val ctrlKey: Boolean\n    open val shiftKey: Boolean\n    open val altKey: Boolean\n
open val metaKey: Boolean\n    open val button: Short\n    open val buttons: Short\n    open val relatedTarget:
EventTarget?\n    open val region: String?\n    open val pageX: Double\n    open val pageY: Double\n    open val x:
Double\n    open val y: Double\n    open val offsetX: Double\n    open val offsetY: Double\n    fun
getModifierState(keyArg: String): Boolean\n}\n\n    companion object {\n        val NONE: Short\n        val
CAPTURING_PHASE: Short\n        val AT_TARGET: Short\n        val BUBBLING_PHASE: Short\n    }\n}\n}\n\npublic external interface MouseEventInit : EventModifierInit {\n    var screenX: Int? /* = 0 */\n        get() =
definedExternally\n        set(value) = definedExternally\n        var screenY: Int? /* = 0 */\n        get() =
definedExternally\n        set(value) = definedExternally\n        var clientX: Int? /* = 0 */\n        get() =
definedExternally\n        set(value) = definedExternally\n        var clientY: Int? /* = 0 */\n        get() =
definedExternally\n        set(value) = definedExternally\n        var button: Short? /* = 0 */\n        get() =
definedExternally\n        set(value) = definedExternally\n        var buttons: Short? /* = 0 */\n        get() =
definedExternally\n        set(value) = definedExternally\n        var relatedTarget: EventTarget? /* = null */\n        get()
= definedExternally\n        set(value) = definedExternally\n        var region: String? /* = null */\n        get() =
definedExternally\n        set(value) = definedExternally\n}\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun MouseEventInit(screenX: Int? = 0,
screenY: Int? = 0, clientX: Int? = 0, clientY: Int? = 0, button: Short? = 0, buttons: Short? = 0, relatedTarget:
EventTarget? = null, region: String? = null, ctrlKey: Boolean? = false, shiftKey: Boolean? = false, altKey: Boolean?
= false, metaKey: Boolean? = false, modifierAltGraph: Boolean? = false, modifierCapsLock: Boolean? = false,
modifierFn: Boolean? = false, modifierFnLock: Boolean? = false, modifierHyper: Boolean? = false,
modifierNumLock: Boolean? = false, modifierScrollLock: Boolean? = false, modifierSuper: Boolean? = false,
modifierSymbol: Boolean? = false, modifierSymbolLock: Boolean? = false, view: Window? = null, detail: Int? = 0,
bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false): MouseEventInit {\n    val o =
js(\"({})\")\n    o[\"screenX\"] = screenX\n    o[\"screenY\"] = screenY\n    o[\"clientX\"] = clientX\n    o[\"clientY\"]
= clientY\n    o[\"button\"] = button\n    o[\"buttons\"] = buttons\n    o[\"relatedTarget\"] = relatedTarget\n
o[\"region\"] = region\n    o[\"ctrlKey\"] = ctrlKey\n    o[\"shiftKey\"] = shiftKey\n    o[\"altKey\"] = altKey\n
o[\"metaKey\"] = metaKey\n    o[\"modifierAltGraph\"] = modifierAltGraph\n    o[\"modifierCapsLock\"] =

```

```

modifierCapsLock\n o["modifierFn"] = modifierFn\n o["modifierFnLock"] = modifierFnLock\n
o["modifierHyper"] = modifierHyper\n o["modifierNumLock"] = modifierNumLock\n
o["modifierScrollLock"] = modifierScrollLock\n o["modifierSuper"] = modifierSuper\n
o["modifierSymbol"] = modifierSymbol\n o["modifierSymbolLock"] = modifierSymbolLock\n o["view"] =
view\n o["detail"] = detail\n o["bubbles"] = bubbles\n o["cancelable"] = cancelable\n o["composed"] =
composed\n return o\n}\n\npublic external interface EventModifierInit : UIEventInit {\n var ctrlKey: Boolean?
/* = false */\n get() = definedExternally\n set(value) = definedExternally\n var shiftKey: Boolean? /* =
false */\n get() = definedExternally\n set(value) = definedExternally\n var altKey: Boolean? /* = false
*/\n get() = definedExternally\n set(value) = definedExternally\n var metaKey: Boolean? /* = false */\n
get() = definedExternally\n set(value) = definedExternally\n var modifierAltGraph: Boolean? /* = false */\n
get() = definedExternally\n set(value) = definedExternally\n var modifierCapsLock: Boolean? /* = false
*/\n get() = definedExternally\n set(value) = definedExternally\n var modifierFn: Boolean? /* = false */\n
get() = definedExternally\n set(value) = definedExternally\n var modifierFnLock: Boolean? /* = false */\n
get() = definedExternally\n set(value) = definedExternally\n var modifierHyper: Boolean? /* = false */\n
get() = definedExternally\n set(value) = definedExternally\n var modifierNumLock: Boolean? /* = false */\n
get() = definedExternally\n set(value) = definedExternally\n var modifierScrollLock: Boolean? /* = false
*/\n get() = definedExternally\n set(value) = definedExternally\n var modifierSuper: Boolean? /* = false
*/\n get() = definedExternally\n set(value) = definedExternally\n var modifierSymbol: Boolean? /* = false
*/\n get() = definedExternally\n set(value) = definedExternally\n var modifierSymbolLock: Boolean? /* =
false */\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun EventModifierInit(ctrlKey: Boolean? =
false, shiftKey: Boolean? = false, altKey: Boolean? = false, metaKey: Boolean? = false, modifierAltGraph:
Boolean? = false, modifierCapsLock: Boolean? = false, modifierFn: Boolean? = false, modifierFnLock: Boolean? =
false, modifierHyper: Boolean? = false, modifierNumLock: Boolean? = false, modifierScrollLock: Boolean? = false,
modifierSuper: Boolean? = false, modifierSymbol: Boolean? = false, modifierSymbolLock: Boolean? = false, view:
Window? = null, detail: Int? = 0, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? =
false): EventModifierInit {\n val o = js("{}")\n o["ctrlKey"] = ctrlKey\n o["shiftKey"] = shiftKey\n
o["altKey"] = altKey\n o["metaKey"] = metaKey\n o["modifierAltGraph"] = modifierAltGraph\n
o["modifierCapsLock"] = modifierCapsLock\n o["modifierFn"] = modifierFn\n o["modifierFnLock"] =
modifierFnLock\n o["modifierHyper"] = modifierHyper\n o["modifierNumLock"] = modifierNumLock\n
o["modifierScrollLock"] = modifierScrollLock\n o["modifierSuper"] = modifierSuper\n
o["modifierSymbol"] = modifierSymbol\n o["modifierSymbolLock"] = modifierSymbolLock\n o["view"] =
view\n o["detail"] = detail\n o["bubbles"] = bubbles\n o["cancelable"] = cancelable\n o["composed"] =
composed\n return o\n}\n\n/**\n * Exposes the JavaScript
[WheelEvent](https://developer.mozilla.org/en/docs/Web/API/WheelEvent) to Kotlin\n */\npublic external open
class WheelEvent(type: String, eventInitDict: WheelEventInit = definedExternally) : MouseEvent {\n open val
deltaX: Double\n open val deltaY: Double\n open val deltaZ: Double\n open val deltaMode: Int\n\n companion
object {\n val DOM_DELTA_PIXEL: Int\n val DOM_DELTA_LINE: Int\n val
DOM_DELTA_PAGE: Int\n val NONE: Short\n val CAPTURING_PHASE: Short\n val
AT_TARGET: Short\n val BUBBLING_PHASE: Short\n }\n}\n\npublic external interface WheelEventInit :
MouseEventInit {\n var deltaX: Double? /* = 0.0 */\n get() = definedExternally\n set(value) =
definedExternally\n var deltaY: Double? /* = 0.0 */\n get() = definedExternally\n set(value) =
definedExternally\n var deltaZ: Double? /* = 0.0 */\n get() = definedExternally\n set(value) =
definedExternally\n var deltaMode: Int? /* = 0 */\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun WheelEventInit(deltaX: Double? = 0.0,
deltaY: Double? = 0.0, deltaZ: Double? = 0.0, deltaMode: Int? = 0, screenX: Int? = 0, screenY: Int? = 0, clientX:

```

```

Int? = 0, clientY: Int? = 0, button: Short? = 0, buttons: Short? = 0, relatedTarget: EventTarget? = null, region:
String? = null, ctrlKey: Boolean? = false, shiftKey: Boolean? = false, altKey: Boolean? = false, metaKey: Boolean?
= false, modifierAltGraph: Boolean? = false, modifierCapsLock: Boolean? = false, modifierFn: Boolean? = false,
modifierFnLock: Boolean? = false, modifierHyper: Boolean? = false, modifierNumLock: Boolean? = false,
modifierScrollLock: Boolean? = false, modifierSuper: Boolean? = false, modifierSymbol: Boolean? = false,
modifierSymbolLock: Boolean? = false, view: Window? = null, detail: Int? = 0, bubbles: Boolean? = false,
cancelable: Boolean? = false, composed: Boolean? = false): WheelEventInit {
    val o = js("{}")
    o["deltaX"] = deltaX
    o["deltaY"] = deltaY
    o["deltaZ"] = deltaZ
    o["deltaMode"] = deltaMode
    o["screenX"] = screenX
    o["screenY"] = screenY
    o["clientX"] = clientX
    o["clientY"] = clientY
    o["button"] = button
    o["buttons"] = buttons
    o["relatedTarget"] = relatedTarget
    o["region"] = region
    o["ctrlKey"] = ctrlKey
    o["shiftKey"] = shiftKey
    o["altKey"] = altKey
    o["metaKey"] = metaKey
    o["modifierAltGraph"] = modifierAltGraph
    o["modifierCapsLock"] = modifierCapsLock
    o["modifierFn"] = modifierFn
    o["modifierFnLock"] = modifierFnLock
    o["modifierHyper"] = modifierHyper
    o["modifierNumLock"] = modifierNumLock
    o["modifierScrollLock"] = modifierScrollLock
    o["modifierSuper"] = modifierSuper
    o["modifierSymbol"] = modifierSymbol
    o["modifierSymbolLock"] = modifierSymbolLock
    o["view"] = view
    o["detail"] = detail
    o["bubbles"] = bubbles
    o["cancelable"] = cancelable
    o["composed"] = composed
    return o
}

/** Exposes the JavaScript [InputEvent](https://developer.mozilla.org/en/docs/Web/API/InputEvent) to Kotlin
 * public external open class InputEvent(type: String, eventInitDict: InputEventInit = definedExternally) :
 * UIEvent {
 *     open val data: String
 *     open val isComposing: Boolean
 *     companion object {
 *         val NONE: Short
 *         val CAPTURING_PHASE: Short
 *         val AT_TARGET: Short
 *         val BUBBLING_PHASE: Short
 *     }
 * }

 * public external interface InputEventInit : UIEventInit {
 *     var data: String? /* = "" */
 *     get() = definedExternally
 *     set(value) = definedExternally
 *     var isComposing: Boolean? /* = false */
 *     get() = definedExternally
 *     set(value) = definedExternally
 * }

 * @Suppress("INVISIBLE_REFERENCE", "INVISIBLE_MEMBER")
 * @kotlin.internal.InlineOnly
 * public inline fun InputEventInit(data: String? = "", isComposing: Boolean? = false, view: Window? = null, detail: Int? = 0, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false): InputEventInit {
 *     val o = js("{}")
 *     o["data"] = data
 *     o["isComposing"] = isComposing
 *     o["view"] = view
 *     o["detail"] = detail
 *     o["bubbles"] = bubbles
 *     o["cancelable"] = cancelable
 *     o["composed"] = composed
 *     return o
 * }

 * /** Exposes the JavaScript [KeyboardEvent](https://developer.mozilla.org/en/docs/Web/API/KeyboardEvent) to Kotlin
 * * public external open class KeyboardEvent(type: String, eventInitDict: KeyboardEventInit = definedExternally) : UIEvent {
 *     open val key: String
 *     open val code: String
 *     open val location: Int
 *     open val ctrlKey: Boolean
 *     open val shiftKey: Boolean
 *     open val altKey: Boolean
 *     open val metaKey: Boolean
 *     open val repeat: Boolean
 *     open val isComposing: Boolean
 *     open val charCode: Int
 *     open val keyCode: Int
 *     open val which: Int
 *     fun getModifierState(keyArg: String): Boolean
 *     companion object {
 *         val DOM_KEY_LOCATION_STANDARD: Int
 *         val DOM_KEY_LOCATION_LEFT: Int
 *         val DOM_KEY_LOCATION_RIGHT: Int
 *         val DOM_KEY_LOCATION_NUMPAD: Int
 *         val NONE: Short
 *         val CAPTURING_PHASE: Short
 *         val AT_TARGET: Short
 *         val BUBBLING_PHASE: Short
 *     }
 * }

 * public external interface KeyboardEventInit : EventModifierInit {
 *     var key: String? /* = "" */
 *     get() = definedExternally
 *     set(value) = definedExternally
 *     var code: String? /* = "" */
 *     get() = definedExternally
 *     set(value) = definedExternally
 *     var location: Int? /* = 0 */
 *     get() = definedExternally
 *     set(value) = definedExternally
 *     var repeat: Boolean? /* = false */
 *     get() = definedExternally
 *     set(value) = definedExternally
 *     var isComposing: Boolean? /* = false */
 *     get() = definedExternally
 *     set(value) = definedExternally
 * }

 * @Suppress("INVISIBLE_REFERENCE", "INVISIBLE_MEMBER")
 * @kotlin.internal.InlineOnly
 * public inline fun KeyboardEventInit(key: String? = "", code: String? = "", location: Int? = 0, repeat: Boolean? = false, isComposing: Boolean? = false, ctrlKey: Boolean? = false, shiftKey: Boolean? = false, altKey: Boolean? = false, metaKey: Boolean? = false, modifierAltGraph: Boolean? = false, modifierCapsLock: Boolean? = false, modifierFn: Boolean? = false, modifierFnLock: Boolean? =

```



```

false, modifierHyper: Boolean? = false, modifierNumLock: Boolean? = false, modifierScrollLock: Boolean? = false,
modifierSuper: Boolean? = false, modifierSymbol: Boolean? = false, modifierSymbolLock: Boolean? = false, view:
Window? = null, detail: Int? = 0, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? =
false): KeyEventInit {\n val o = js("{}")\n o["key"] = key\n o["code"] = code\n o["location"] =
location\n o["repeat"] = repeat\n o["isComposing"] = isComposing\n o["ctrlKey"] = ctrlKey\n
o["shiftKey"] = shiftKey\n o["altKey"] = altKey\n o["metaKey"] = metaKey\n o["modifierAltGraph"] =
modifierAltGraph\n o["modifierCapsLock"] = modifierCapsLock\n o["modifierFn"] = modifierFn\n
o["modifierFnLock"] = modifierFnLock\n o["modifierHyper"] = modifierHyper\n o["modifierNumLock"] =
modifierNumLock\n o["modifierScrollLock"] = modifierScrollLock\n o["modifierSuper"] = modifierSuper\n
o["modifierSymbol"] = modifierSymbol\n o["modifierSymbolLock"] = modifierSymbolLock\n o["view"] =
view\n o["detail"] = detail\n o["bubbles"] = bubbles\n o["cancelable"] = cancelable\n o["composed"] =
composed\n return o}\n\n/**\n * Exposes the JavaScript

```

```

[CompositionEvent](https://developer.mozilla.org/en/docs/Web/API/CompositionEvent) to Kotlin\n *\npublic
external open class CompositionEvent(type: String, eventInitDict: CompositionEventInit = definedExternally) :
UIEvent {\n open val data: String\n\n companion object {\n val NONE: Short\n val
CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val BUBBLING_PHASE: Short\n
}\n}\n\npublic external interface CompositionEventInit : UIEventInit {\n var data: String? /* = \"\" *\n get() =
definedExternally\n set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun CompositionEventInit(data: String? =
\"\", view: Window? = null, detail: Int? = 0, bubbles: Boolean? = false, cancelable: Boolean? = false, composed:
Boolean? = false): CompositionEventInit {\n val o = js("{}")\n o["data"] = data\n o["view"] = view\n
o["detail"] = detail\n o["bubbles"] = bubbles\n o["cancelable"] = cancelable\n o["composed"] =
composed\n return o}\n\n/**\n * Exposes the JavaScript

```

```

[Event](https://developer.mozilla.org/en/docs/Web/API/Event) to Kotlin\n *\npublic external open class
Event(type: String, eventInitDict: EventInit = definedExternally) {\n open val type: String\n open val target:
EventTarget?\n open val currentTarget: EventTarget?\n open val eventPhase: Short\n open val bubbles:
Boolean\n open val cancelable: Boolean\n open val defaultPrevented: Boolean\n open val composed:
Boolean\n open val isTrusted: Boolean\n open val timeStamp: Number\n fun composedPath():
Array<EventTarget>\n fun stopPropagation()\n fun stopImmediatePropagation()\n fun preventDefault()\n
fun initEvent(type: String, bubbles: Boolean, cancelable: Boolean)\n\n companion object {\n val NONE:
Short\n val CAPTURING_PHASE: Short\n val AT_TARGET: Short\n val BUBBLING_PHASE:
Short\n }\n}\n\n/**\n * Exposes the JavaScript

```

```

[EventTarget](https://developer.mozilla.org/en/docs/Web/API/EventTarget) to Kotlin\n *\npublic external abstract
class EventTarget {\n fun addEventListener(type: String, callback: EventListener?, options: dynamic =
definedExternally)\n fun addEventListener(type: String, callback: ((Event) -> Unit)?, options: dynamic =
definedExternally)\n fun removeEventListener(type: String, callback: EventListener?, options: dynamic =
definedExternally)\n fun removeEventListener(type: String, callback: ((Event) -> Unit)?, options: dynamic =
definedExternally)\n fun dispatchEvent(event: Event): Boolean\n}\n\n/**\n * Exposes the JavaScript

```

```

[EventListener](https://developer.mozilla.org/en/docs/Web/API/EventListener) to Kotlin\n *\npublic external
interface EventListener {\n fun handleEvent(event: Event)\n}, /*\n * Copyright 2010-2021 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n *\n\n// NOTE: THIS FILE IS AUTO-GENERATED, DO NOT
EDIT!\n\n// See github.com/kotlin/dukat for details\n\npackage org.w3c.dom\n\nimport kotlin.js.*\nimport
org.khronos.webgl.*\nimport org.w3c.dom.clipboard.*\nimport org.w3c.dom.css.*\nimport
org.w3c.dom.encryptedmedia.*\nimport org.w3c.dom.events.*\nimport org.w3c.dom.mediacapture.*\nimport
org.w3c.dom.mediasource.*\nimport org.w3c.dom.pointerevents.*\nimport org.w3c.dom.svg.*\nimport
org.w3c.fetch.*\nimport org.w3c.files.*\nimport org.w3c.performance.*\nimport org.w3c.workers.*\nimport
org.w3c.xhr.*\n\npublic external abstract class HTMLAllCollection {\n open val length: Int\n fun

```

```

item(nameOrIndex: String = definedExternally): UnionElementOrHTMLCollection? \n fun namedItem(name:
String): UnionElementOrHTMLCollection? \n} \n \n @ Suppress(\ "INVISIBLE_REFERENCE\ ",
\ "INVISIBLE_MEMBER\ ") \n @ kotlin.internal.InlineOnly \n public inline operator fun
HTMLAllCollection.get(index: Int): Element? =
asDynamic()[index] \n \n @ Suppress(\ "INVISIBLE_REFERENCE\ ",
\ "INVISIBLE_MEMBER\ ") \n @ kotlin.internal.InlineOnly \n public inline operator fun
HTMLAllCollection.get(name: String): UnionElementOrHTMLCollection? = asDynamic()[name] \n \n /** \n *
Exposes the JavaScript
[HTMLFormControlsCollection](https://developer.mozilla.org/en/docs/Web/API/HTMLFormControlsCollection)
to Kotlin \n * \n public external abstract class HTMLFormControlsCollection : HTMLCollection \n \n /** \n * Exposes
the JavaScript [RadioNodeList](https://developer.mozilla.org/en/docs/Web/API/RadioNodeList) to Kotlin \n
* \n public external abstract class RadioNodeList : NodeList, UnionElementOrRadioNodeList { \n open var value:
String \n } \n \n /** \n * Exposes the JavaScript
[HTMLOptionsCollection](https://developer.mozilla.org/en/docs/Web/API/HTMLOptionsCollection) to Kotlin \n
* \n public external abstract class HTMLOptionsCollection : HTMLCollection { \n override var length: Int \n open
var selectedIndex: Int \n fun add(element: UnionHTMLOptGroupElementOrHTMLOptionElement, before:
dynamic = definedExternally) \n fun remove(index: Int) \n } \n \n @ Suppress(\ "INVISIBLE_REFERENCE\ ",
\ "INVISIBLE_MEMBER\ ") \n @ kotlin.internal.InlineOnly \n public inline operator fun
HTMLOptionsCollection.set(index: Int, option: HTMLOptionElement?) { asDynamic()[index] = option } \n \n /** \n *
Exposes the JavaScript [HTMLInputElement](https://developer.mozilla.org/en/docs/Web/API/HTMLInputElement) to
Kotlin \n * \n public external abstract class HTMLInputElement : Element, GlobalEventHandlers,
DocumentAndElementEventHandlers, ElementContentEditable, ElementCSSInlineStyle { \n open var title:
String \n open var lang: String \n open var translate: Boolean \n open var dir: String \n open val dataset:
DOMStringMap \n open var hidden: Boolean \n open var tabIndex: Int \n open var accessKey: String \n open
val accessKeyLabel: String \n open var draggable: Boolean \n open val dropzone: DOMTokenList \n open var
contextMenu: HTMLMenuElement? \n open var spellcheck: Boolean \n open var innerText: String \n open val
offsetParent: Element? \n open val offsetTop: Int \n open val offsetLeft: Int \n open val offsetWidth: Int \n open
val offsetHeight: Int \n fun click() \n fun focus() \n fun blur() \n fun forceSpellCheck() \n \n companion object
{ \n val ELEMENT_NODE: Short \n val ATTRIBUTE_NODE: Short \n val TEXT_NODE: Short \n
val CDATA_SECTION_NODE: Short \n val ENTITY_REFERENCE_NODE: Short \n val
ENTITY_NODE: Short \n val PROCESSING_INSTRUCTION_NODE: Short \n val COMMENT_NODE:
Short \n val DOCUMENT_NODE: Short \n val DOCUMENT_TYPE_NODE: Short \n val
DOCUMENT_FRAGMENT_NODE: Short \n val NOTATION_NODE: Short \n val
DOCUMENT_POSITION_DISCONNECTED: Short \n val DOCUMENT_POSITION_PRECEDING: Short \n
val DOCUMENT_POSITION_FOLLOWING: Short \n val DOCUMENT_POSITION_CONTAINS: Short \n
val DOCUMENT_POSITION_CONTAINED_BY: Short \n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short \n } \n \n /** \n * Exposes the JavaScript
[HTMLUnknownElement](https://developer.mozilla.org/en/docs/Web/API/HTMLUnknownElement) to Kotlin \n
* \n public external abstract class HTMLUnknownElement : HTMLInputElement { \n companion object { \n val
ELEMENT_NODE: Short \n val ATTRIBUTE_NODE: Short \n val TEXT_NODE: Short \n val
CDATA_SECTION_NODE: Short \n val ENTITY_REFERENCE_NODE: Short \n val ENTITY_NODE:
Short \n val PROCESSING_INSTRUCTION_NODE: Short \n val COMMENT_NODE: Short \n val
DOCUMENT_NODE: Short \n val DOCUMENT_TYPE_NODE: Short \n val
DOCUMENT_FRAGMENT_NODE: Short \n val NOTATION_NODE: Short \n val
DOCUMENT_POSITION_DISCONNECTED: Short \n val DOCUMENT_POSITION_PRECEDING: Short \n
val DOCUMENT_POSITION_FOLLOWING: Short \n val DOCUMENT_POSITION_CONTAINS: Short \n
val DOCUMENT_POSITION_CONTAINED_BY: Short \n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short \n } \n \n /** \n * Exposes the JavaScript

```

[DOMStringMap](https://developer.mozilla.org/en/docs/Web/API/DOMStringMap) to Kotlin\n *\npublic external abstract class DOMStringMap\n@Suppress(\"INVISIBLE_REFERENCE\", \"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun DOMStringMap.get(name: String): String? = asDynamic()[name]\n\n@Suppress(\"INVISIBLE_REFERENCE\", \"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun DOMStringMap.set(name: String, value: String) { asDynamic()[name] = value }\n\n**\n * Exposes the JavaScript

[HTMLHtmlElement](https://developer.mozilla.org/en/docs/Web/API/HTMLHtmlElement) to Kotlin\n *\npublic external abstract class HTMLHtmlElement : HTMLElement {\n open var version: String\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n**\n * Exposes the JavaScript

[HTMLHeadElement](https://developer.mozilla.org/en/docs/Web/API/HTMLHeadElement) to Kotlin\n *\npublic external abstract class HTMLHeadElement : HTMLElement {\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n**\n * Exposes the JavaScript

[HTMLTitleElement](https://developer.mozilla.org/en/docs/Web/API/HTMLTitleElement) to Kotlin\n *\npublic external abstract class HTMLTitleElement : HTMLElement {\n open var text: String\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n**\n * Exposes the JavaScript

[HTMLBaseElement](https://developer.mozilla.org/en/docs/Web/API/HTMLBaseElement) to Kotlin\n *\npublic external abstract class HTMLBaseElement : HTMLElement {\n open var href: String\n open var target: String\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n

```

    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLLinkElement](https://developer.mozilla.org/en/docs/Web/API/HTMLLinkElement) to Kotlin\n *\npublic
external abstract class HTMLLinkElement : HTMLElement, LinkStyle {\n    open var href: String\n    open var
crossOrigin: String?\n    open var rel: String\n    open var `as`: RequestDestination\n    open val relList:
DOMTokenList\n    open var media: String\n    open var nonce: String\n    open var hreflang: String\n    open var
type: String\n    open val sizes: DOMTokenList\n    open var referrerPolicy: String\n    open var charset: String\n
open var rev: String\n    open var target: String\n    open var scope: String\n    open var workerType:
WorkerType\n\n    companion object {\n        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE:
Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLMetaElement](https://developer.mozilla.org/en/docs/Web/API/HTMLMetaElement) to Kotlin\n *\npublic
external abstract class HTMLMetaElement : HTMLElement {\n    open var name: String\n    open var httpEquiv:
String\n    open var content: String\n    open var scheme: String\n\n    companion object {\n        val
ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val
CDATA_SECTION_NODE: Short\n        val ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE:
Short\n        val PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLStyleElement](https://developer.mozilla.org/en/docs/Web/API/HTMLStyleElement) to Kotlin\n *\npublic
external abstract class HTMLStyleElement : HTMLElement, LinkStyle {\n    open var media: String\n    open var
nonce: String\n    open var type: String\n\n    companion object {\n        val ELEMENT_NODE: Short\n        val
ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLBodyElement](https://developer.mozilla.org/en/docs/Web/API/HTMLBodyElement) to Kotlin\n *\npublic
external abstract class HTMLBodyElement : HTMLElement, WindowEventHandlers {\n    open var text: String\n
open var link: String\n    open var vLink: String\n    open var aLink: String\n    open var bgColor: String\n
open var background: String\n\n    companion object {\n        val ELEMENT_NODE: Short\n        val
ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val

```

```

PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLHeadingElement](https://developer.mozilla.org/en/docs/Web/API/HTMLHeadingElement) to Kotlin\n
*/\npublic external abstract class HTMLHeadingElement : HTMLInputElement {\n    open var align: String\n\n
companion object {\n    val ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val
TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE:
Short\n    val ENTITY_NODE: Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val
COMMENT_NODE: Short\n    val DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n
    val DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLParagraphElement](https://developer.mozilla.org/en/docs/Web/API/HTMLParagraphElement) to Kotlin\n
*/\npublic external abstract class HTMLParagraphElement : HTMLInputElement {\n    open var align: String\n\n
companion object {\n    val ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val
TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE:
Short\n    val ENTITY_NODE: Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val
COMMENT_NODE: Short\n    val DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n
    val DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLHRElement](https://developer.mozilla.org/en/docs/Web/API/HTMLHRElement) to Kotlin\n
*/\npublic external abstract class HTMLHRElement : HTMLInputElement {\n    open var align: String\n    open var color: String\n
    open var noShade: Boolean\n    open var size: String\n    open var width: String\n\n    companion object {\n    val
ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val
CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE:
Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLPreElement](https://developer.mozilla.org/en/docs/Web/API/HTMLPreElement) to Kotlin\n
*/\npublic external abstract class HTMLPreElement : HTMLInputElement {\n    open var width: Int\n\n    companion object {\n    val
ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val
CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE:
Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val

```

```

DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n} \n \n /** \n * Exposes the JavaScript
[HTMLQuoteElement](https://developer.mozilla.org/en/docs/Web/API/HTMLQuoteElement) to Kotlin \n * \n public
external abstract class HTMLQuoteElement : HTMLInputElement { \n    open var cite: String \n \n    companion object { \n
    val ELEMENT_NODE: Short \n    val ATTRIBUTE_NODE: Short \n    val TEXT_NODE: Short \n    val
CDATA_SECTION_NODE: Short \n    val ENTITY_REFERENCE_NODE: Short \n    val ENTITY_NODE:
Short \n    val PROCESSING_INSTRUCTION_NODE: Short \n    val COMMENT_NODE: Short \n    val
DOCUMENT_NODE: Short \n    val DOCUMENT_TYPE_NODE: Short \n    val
DOCUMENT_FRAGMENT_NODE: Short \n    val NOTATION_NODE: Short \n    val
DOCUMENT_POSITION_DISCONNECTED: Short \n    val DOCUMENT_POSITION_PRECEDING: Short \n
    val DOCUMENT_POSITION_FOLLOWING: Short \n    val DOCUMENT_POSITION_CONTAINS: Short \n
    val DOCUMENT_POSITION_CONTAINED_BY: Short \n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n} \n \n /** \n * Exposes the JavaScript
[HTMLLOListElement](https://developer.mozilla.org/en/docs/Web/API/HTMLLOListElement) to Kotlin \n * \n public
external abstract class HTMLLOListElement : HTMLInputElement { \n    open var reversed: Boolean \n    open var start:
Int \n    open var type: String \n    open var compact: Boolean \n \n    companion object { \n    val
ELEMENT_NODE: Short \n    val ATTRIBUTE_NODE: Short \n    val TEXT_NODE: Short \n    val
CDATA_SECTION_NODE: Short \n    val ENTITY_REFERENCE_NODE: Short \n    val ENTITY_NODE:
Short \n    val PROCESSING_INSTRUCTION_NODE: Short \n    val COMMENT_NODE: Short \n    val
DOCUMENT_NODE: Short \n    val DOCUMENT_TYPE_NODE: Short \n    val
DOCUMENT_FRAGMENT_NODE: Short \n    val NOTATION_NODE: Short \n    val
DOCUMENT_POSITION_DISCONNECTED: Short \n    val DOCUMENT_POSITION_PRECEDING: Short \n
    val DOCUMENT_POSITION_FOLLOWING: Short \n    val DOCUMENT_POSITION_CONTAINS: Short \n
    val DOCUMENT_POSITION_CONTAINED_BY: Short \n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n} \n \n /** \n * Exposes the JavaScript
[HTMLLUListElement](https://developer.mozilla.org/en/docs/Web/API/HTMLLUListElement) to Kotlin \n * \n public
external abstract class HTMLLUListElement : HTMLInputElement { \n    open var compact: Boolean \n    open var type:
String \n \n    companion object { \n    val ELEMENT_NODE: Short \n    val ATTRIBUTE_NODE: Short \n
    val TEXT_NODE: Short \n    val CDATA_SECTION_NODE: Short \n    val ENTITY_REFERENCE_NODE:
Short \n    val ENTITY_NODE: Short \n    val PROCESSING_INSTRUCTION_NODE: Short \n    val
COMMENT_NODE: Short \n    val DOCUMENT_NODE: Short \n    val DOCUMENT_TYPE_NODE: Short \n
    val DOCUMENT_FRAGMENT_NODE: Short \n    val NOTATION_NODE: Short \n    val
DOCUMENT_POSITION_DISCONNECTED: Short \n    val DOCUMENT_POSITION_PRECEDING: Short \n
    val DOCUMENT_POSITION_FOLLOWING: Short \n    val DOCUMENT_POSITION_CONTAINS: Short \n
    val DOCUMENT_POSITION_CONTAINED_BY: Short \n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n} \n \n /** \n * Exposes the JavaScript
[HTMLLIElement](https://developer.mozilla.org/en/docs/Web/API/HTMLLIElement) to Kotlin \n * \n public
external abstract class HTMLLIElement : HTMLInputElement { \n    open var value: Int \n    open var type: String \n \n
    companion object { \n    val ELEMENT_NODE: Short \n    val ATTRIBUTE_NODE: Short \n    val
TEXT_NODE: Short \n    val CDATA_SECTION_NODE: Short \n    val ENTITY_REFERENCE_NODE:
Short \n    val ENTITY_NODE: Short \n    val PROCESSING_INSTRUCTION_NODE: Short \n    val
COMMENT_NODE: Short \n    val DOCUMENT_NODE: Short \n    val DOCUMENT_TYPE_NODE: Short \n
    val DOCUMENT_FRAGMENT_NODE: Short \n    val NOTATION_NODE: Short \n    val
DOCUMENT_POSITION_DISCONNECTED: Short \n    val DOCUMENT_POSITION_PRECEDING: Short \n
    val DOCUMENT_POSITION_FOLLOWING: Short \n    val DOCUMENT_POSITION_CONTAINS: Short \n
    val DOCUMENT_POSITION_CONTAINED_BY: Short \n    val

```

DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript [HTMLDListElement](https://developer.mozilla.org/en/docs/Web/API/HTMLDListElement) to Kotlin\n */\n\npublic external abstract class HTMLDListElement : HTMLElement {\n open var compact: Boolean\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val

DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript [HTMLDivElement](https://developer.mozilla.org/en/docs/Web/API/HTMLDivElement) to Kotlin\n */\n\npublic external abstract class HTMLDivElement : HTMLElement {\n open var align: String\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val

DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript [HTMLAnchorElement](https://developer.mozilla.org/en/docs/Web/API/HTMLAnchorElement) to Kotlin\n */\n\npublic external abstract class HTMLAnchorElement : HTMLElement, HTMLHyperlinkElementUtils {\n open var target: String\n open var download: String\n open var ping: String\n open var rel: String\n open var relList: DOMTokenList\n open var hreflang: String\n open var type: String\n open var text: String\n open varreferrerPolicy: String\n open var coords: String\n open var charset: String\n open var name: String\n open var rev: String\n open var shape: String\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val

DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript [HTMLDataElement](https://developer.mozilla.org/en/docs/Web/API/HTMLDataElement) to Kotlin\n */\n\npublic external abstract class HTMLDataElement : HTMLElement {\n open var value: String\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val


```

    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLPictureElement](https://developer.mozilla.org/en/docs/Web/API/HTMLPictureElement) to Kotlin\n
*\n\npublic external abstract class HTMLPictureElement : HTMLInputElement {\n    companion object {\n        val
ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val
CDATA_SECTION_NODE: Short\n        val ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE:
Short\n        val PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLSourceElement](https://developer.mozilla.org/en/docs/Web/API/HTMLSourceElement) to Kotlin\n
*\n\npublic external abstract class HTMLSourceElement : HTMLInputElement {\n    open var src: String\n    open var
type: String\n    open var srcset: String\n    open var sizes: String\n    open var media: String\n\n    companion object
{\n        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n
        val CDATA_SECTION_NODE: Short\n        val ENTITY_REFERENCE_NODE: Short\n        val
ENTITY_NODE: Short\n        val PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE:
Short\n        val DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLImageElement](https://developer.mozilla.org/en/docs/Web/API/HTMLImageElement) to Kotlin\n
*\n\npublic external abstract class HTMLImageElement : HTMLInputElement, HTMLCanvasImageElement,
TexImageSource {\n    open var alt: String\n    open var src: String\n    open var srcset: String\n    open var sizes:
String\n    open var crossOrigin: String?\n    open var useMap: String\n    open var isMap: Boolean\n    open var
width: Int\n    open var height: Int\n    open val naturalWidth: Int\n    open val naturalHeight: Int\n    open val
complete: Boolean\n    open val currentSrc: String\n    open var referrerPolicy: String\n    open var name: String\n
    open var lowsrc: String\n    open var align: String\n    open var hspace: Int\n    open var vspace: Int\n    open var
longDesc: String\n    open var border: String\n    open val x: Int\n    open val y: Int\n\n    companion object {\n
        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val
CDATA_SECTION_NODE: Short\n        val ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE:
Short\n        val PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLIFrameElement](https://developer.mozilla.org/en/docs/Web/API/HTMLIFrameElement) to Kotlin\n
*\n\npublic external abstract class HTMLIFrameElement : HTMLInputElement {\n    open var src: String\n    open var
srcdoc: String\n    open var name: String\n    open val sandbox: DOMTokenList\n    open var allowFullscreen:
Boolean\n    open var allowUserMedia: Boolean\n    open var width: String\n    open var height: String\n    open var
referrerPolicy: String\n    open val contentDocument: Document?\n    open val contentWindow: Window?\n    open
var align: String\n    open var scrolling: String\n    open var frameBorder: String\n    open var longDesc: String\n

```

```

open var marginHeight: String\n open var marginWidth: String\n fun getSVGDocument(): Document?\n\ncompanion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val\n TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE:\n Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val\n COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val\n DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val\n DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript\n [HTMLEmbedElement](https://developer.mozilla.org/en/docs/Web/API/HTMLEmbedElement) to Kotlin\n */\npublic external abstract class HTMLEmbedElement : HTMLElement {\n open var src: String\n open var\n type: String\n open var width: String\n open var height: String\n open var align: String\n open var name:\n String\n fun getSVGDocument(): Document?\n\n companion object {\n val ELEMENT_NODE: Short\n\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val\n PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val\n DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val\n DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val\n DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val\n DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript\n [HTMLObjectElement](https://developer.mozilla.org/en/docs/Web/API/HTMLObjectElement) to Kotlin\n */\npublic external abstract class HTMLObjectElement : HTMLElement {\n open var data: String\n open var\n type: String\n open var typeMustMatch: Boolean\n open var name: String\n open var useMap: String\n open\n val form: HTMLFormElement?\n open var width: String\n open var height: String\n open val\n contentDocument: Document?\n open val contentWindow: Window?\n open val willValidate: Boolean\n open\n val validity: ValidityState\n open val validationMessage: String\n open var align: String\n open var archive:\n String\n open var code: String\n open var declare: Boolean\n open var hspace: Int\n open var standby:\n String\n open var vspace: Int\n open var codeBase: String\n open var codeType: String\n open var border:\n String\n fun getSVGDocument(): Document?\n fun checkValidity(): Boolean\n fun reportValidity():\n Boolean\n fun setCustomValidity(error: String)\n\n companion object {\n val ELEMENT_NODE: Short\n\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val\n PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val\n DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val\n DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val\n DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val\n DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript\n [HTMLParamElement](https://developer.mozilla.org/en/docs/Web/API/HTMLParamElement) to Kotlin\n */\npublic external abstract class HTMLParamElement : HTMLElement {\n open var name: String\n open var\n value: String\n open var type: String\n open var valueType: String\n\n companion object {\n val\n ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val\n CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:\n Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val

```

```

DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLVideoElement](https://developer.mozilla.org/en/docs/Web/API/HTMLVideoElement) to Kotlin\n *\npublic
external abstract class HTMLVideoElement : HTMLMediaElement, CanvasImageSource, TexImageSource {\n
open var width: Int\n    open var height: Int\n    open val videoWidth: Int\n    open val videoHeight: Int\n    open var
poster: String\n    open var playsInline: Boolean\n\n    companion object {\n        val NETWORK_EMPTY: Short\n
        val NETWORK_IDLE: Short\n        val NETWORK_LOADING: Short\n        val NETWORK_NO_SOURCE:
Short\n        val HAVE_NOTHING: Short\n        val HAVE_METADATA: Short\n        val
HAVE_CURRENT_DATA: Short\n        val HAVE_FUTURE_DATA: Short\n        val HAVE_ENOUGH_DATA:
Short\n        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n
        val CDATA_SECTION_NODE: Short\n        val ENTITY_REFERENCE_NODE: Short\n        val
ENTITY_NODE: Short\n        val PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE:
Short\n        val DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLAudioElement](https://developer.mozilla.org/en/docs/Web/API/HTMLAudioElement) to Kotlin\n *\npublic
external abstract class HTMLAudioElement : HTMLMediaElement {\n    companion object {\n        val
NETWORK_EMPTY: Short\n        val NETWORK_IDLE: Short\n        val NETWORK_LOADING: Short\n
        val NETWORK_NO_SOURCE: Short\n        val HAVE_NOTHING: Short\n        val HAVE_METADATA:
Short\n        val HAVE_CURRENT_DATA: Short\n        val HAVE_FUTURE_DATA: Short\n        val
HAVE_ENOUGH_DATA: Short\n        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE: Short\n
        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val ENTITY_REFERENCE_NODE:
Short\n        val ENTITY_NODE: Short\n        val PROCESSING_INSTRUCTION_NODE: Short\n        val
COMMENT_NODE: Short\n        val DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n
        val DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLTrackElement](https://developer.mozilla.org/en/docs/Web/API/HTMLTrackElement) to Kotlin\n *\npublic
external abstract class HTMLTrackElement : HTMLMediaElement {\n    open var kind: String\n    open var src: String\n
open var srclang: String\n    open var label: String\n    open var default: Boolean\n    open val readyState: Short\n
open val track: TextTrack\n\n    companion object {\n        val NONE: Short\n        val LOADING: Short\n        val
LOADED: Short\n        val ERROR: Short\n        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE:
Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n

```

```

    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLMediaElement](https://developer.mozilla.org/en/docs/Web/API/HTMLMediaElement) to Kotlin\n
*\n\npublic external abstract class HTMLMediaElement : HTMLElement {\n    open val error: MediaError?\n    open
var src: String\n    open var srcObject: MediaProvider?\n    open val currentSrc: String\n    open var crossOrigin:
String?\n    open val networkState: Short\n    open var preload: String\n    open val buffered: TimeRanges\n    open
val readyState: Short\n    open val seeking: Boolean\n    open var currentTime: Double\n    open val duration:
Double\n    open val paused: Boolean\n    open var defaultPlaybackRate: Double\n    open var playbackRate:
Double\n    open val played: TimeRanges\n    open val seekable: TimeRanges\n    open val ended: Boolean\n    open
var autoplay: Boolean\n    open var loop: Boolean\n    open var controls: Boolean\n    open var volume: Double\n
open var muted: Boolean\n    open var defaultMuted: Boolean\n    open val audioTracks: AudioTrackList\n    open
val videoTracks: VideoTrackList\n    open val textTracks: TextTrackList\n    open val mediaKeys: MediaKeys?\n
open var onencrypted: ((Event) -> dynamic)?\n    open var onwaitingforkey: ((Event) -> dynamic)?\n    fun load()\n
fun canPlayType(type: String): CanPlayTypeResult\n    fun fastSeek(time: Double)\n    fun getStartDate():
dynamic\n    fun play(): Promise<Unit>\n    fun pause()\n    fun addTextTrack(kind: TextTrackKind, label: String =
definedExternally, language: String = definedExternally): TextTrack\n    fun setMediaKeys(mediaKeys:
MediaKeys?): Promise<Unit>\n\n    companion object {\n        val NETWORK_EMPTY: Short\n        val
NETWORK_IDLE: Short\n        val NETWORK_LOADING: Short\n        val NETWORK_NO_SOURCE: Short\n
        val HAVE_NOTHING: Short\n        val HAVE_METADATA: Short\n        val HAVE_CURRENT_DATA:
Short\n        val HAVE_FUTURE_DATA: Short\n        val HAVE_ENOUGH_DATA: Short\n        val
ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val
CDATA_SECTION_NODE: Short\n        val ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE:
Short\n        val PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[MediaError](https://developer.mozilla.org/en/docs/Web/API/MediaError) to Kotlin\n
*\n\npublic external abstract
class MediaError {\n    open val code: Short\n\n    companion object {\n        val MEDIA_ERR_ABORTED: Short\n
        val MEDIA_ERR_NETWORK: Short\n        val MEDIA_ERR_DECODE: Short\n        val
MEDIA_ERR_SRC_NOT_SUPPORTED: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[AudioTrackList](https://developer.mozilla.org/en/docs/Web/API/AudioTrackList) to Kotlin\n
*\n\npublic external
abstract class AudioTrackList : EventTarget {\n    open val length: Int\n    open var onchange: ((Event) ->
dynamic)?\n    open var onaddtrack: ((TrackEvent) -> dynamic)?\n    open var onremovetrack: ((TrackEvent) ->
dynamic)?\n    fun getTrackById(id: String): AudioTrack?\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\n\npublic inline operator fun AudioTrackList.get(index:
Int): AudioTrack? = asDynamic()[index]\n\n/**\n * Exposes the JavaScript
[AudioTrack](https://developer.mozilla.org/en/docs/Web/API/AudioTrack) to Kotlin\n
*\n\npublic external abstract
class AudioTrack : UnionAudioTrackOrTextTrackOrVideoTrack {\n    open val id: String\n    open val kind:
String\n    open val label: String\n    open val language: String\n    open var enabled: Boolean\n    open val
sourceBuffer: SourceBuffer?\n}\n\n/**\n * Exposes the JavaScript
[VideoTrackList](https://developer.mozilla.org/en/docs/Web/API/VideoTrackList) to Kotlin\n
*\n\npublic external
abstract class VideoTrackList : EventTarget {\n    open val length: Int\n    open val selectedIndex: Int\n    open var
onchange: ((Event) -> dynamic)?\n    open var onaddtrack: ((TrackEvent) -> dynamic)?\n    open var
onremovetrack: ((TrackEvent) -> dynamic)?\n    fun getTrackById(id: String):
VideoTrack?\n}\n\n@Suppress("INVISIBLE_REFERENCE",

```

```

\invisible_member\)\n@kotlin.internal.InlineOnly\npublic inline operator fun VideoTrackList.get(index:
Int): VideoTrack? = asDynamic()[index]\n\n/**\n * Exposes the JavaScript
[VideoTrack](https://developer.mozilla.org/en/docs/Web/API/VideoTrack) to Kotlin\n */\npublic external abstract
class VideoTrack : UnionAudioTrackOrTextTrackOrVideoTrack {\n    open val id: String\n    open val kind:
String\n    open val label: String\n    open val language: String\n    open var selected: Boolean\n    open val
sourceBuffer: SourceBuffer?\n}\n\npublic external abstract class TextTrackList : EventTarget {\n    open val length:
Int\n    open var onchange: ((Event) -> dynamic)?\n    open var onaddtrack: ((TrackEvent) -> dynamic)?\n    open
var onremovetrack: ((TrackEvent) -> dynamic)?\n    fun getTrackById(id: String):
TextTrack?\n}\n\n@Suppress("INVISIBLE_REFERENCE",
\invisible_member\)\n@kotlin.internal.InlineOnly\npublic inline operator fun TextTrackList.get(index: Int):
TextTrack? = asDynamic()[index]\n\n/**\n * Exposes the JavaScript
[TextTrack](https://developer.mozilla.org/en/docs/Web/API/TextTrack) to Kotlin\n */\npublic external abstract
class TextTrack : EventTarget, UnionAudioTrackOrTextTrackOrVideoTrack {\n    open val kind: TextTrackKind\n
open val label: String\n    open val language: String\n    open val id: String\n    open val
inBandMetadataTrackDispatchType: String\n    open var mode: TextTrackMode\n    open val cues:
TextTrackCueList?\n    open val activeCues: TextTrackCueList?\n    open var oncuechange: ((Event) ->
dynamic)?\n    open val sourceBuffer: SourceBuffer?\n    fun addCue(cue: TextTrackCue)\n    fun removeCue(cue:
TextTrackCue)\n}\n\npublic external abstract class TextTrackCueList {\n    open val length: Int\n    fun
getCueById(id: String): TextTrackCue?\n}\n\n@Suppress("INVISIBLE_REFERENCE",
\invisible_member\)\n@kotlin.internal.InlineOnly\npublic inline operator fun TextTrackCueList.get(index:
Int): TextTrackCue? = asDynamic()[index]\n\n/**\n * Exposes the JavaScript
[TextTrackCue](https://developer.mozilla.org/en/docs/Web/API/TextTrackCue) to Kotlin\n */\npublic external
abstract class TextTrackCue : EventTarget {\n    open val track: TextTrack?\n    open var id: String\n    open var
startTime: Double\n    open var endTime: Double\n    open var pauseOnExit: Boolean\n    open var onenter: ((Event)
-> dynamic)?\n    open var onexit: ((Event) -> dynamic)?\n}\n\n/**\n * Exposes the JavaScript
[TimeRanges](https://developer.mozilla.org/en/docs/Web/API/TimeRanges) to Kotlin\n */\npublic external abstract
class TimeRanges {\n    open val length: Int\n    fun start(index: Int): Double\n    fun end(index: Int):
Double\n}\n\n/**\n * Exposes the JavaScript
[TrackEvent](https://developer.mozilla.org/en/docs/Web/API/TrackEvent) to Kotlin\n */\npublic external open class
TrackEvent(type: String, eventInitDict: TrackEventInit = definedExternally) : Event {\n    open val track:
UnionAudioTrackOrTextTrackOrVideoTrack?\n\n    companion object {\n        val NONE: Short\n        val
CAPTURING_PHASE: Short\n        val AT_TARGET: Short\n        val BUBBLING_PHASE: Short\n    }\n}\n\npublic external interface TrackEventInit : EventInit {\n    var track:
UnionAudioTrackOrTextTrackOrVideoTrack? /* = null */\n    get() = definedExternally\n    set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
\invisible_member\)\n@kotlin.internal.InlineOnly\npublic inline fun TrackEventInit(track:
UnionAudioTrackOrTextTrackOrVideoTrack? = null, bubbles: Boolean? = false, cancelable: Boolean? = false,
composed: Boolean? = false): TrackEventInit {\n    val o = js("{}")\n    o["track"] = track\n    o["bubbles"] =
bubbles\n    o["cancelable"] = cancelable\n    o["composed"] = composed\n    return o\n}\n\n/**\n * Exposes the
JavaScript [HTMLElement](https://developer.mozilla.org/en/docs/Web/API/HTMLElement) to Kotlin\n */\npublic external abstract class HTMLElement : HTMLCollection {\n    open var name: String\n    open val
areas: HTMLCollection\n\n    companion object {\n        val ELEMENT_NODE: Short\n        val
ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n

```

```

    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n } \n \n /** \n * Exposes the JavaScript
[HTMLAreaElement](https://developer.mozilla.org/en/docs/Web/API/HTMLAreaElement) to Kotlin \n */ \n public
external abstract class HTMLAreaElement : HTMLInputElement, HTMLHyperlinkElementUtils { \n    open var alt:
String \n    open var coords: String \n    open var shape: String \n    open var target: String \n    open var download:
String \n    open var ping: String \n    open var rel: String \n    open val relList: DOMTokenList \n    open var
referrerPolicy: String \n    open var noHref: Boolean \n \n    companion object { \n        val ELEMENT_NODE:
Short\n        val ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE:
Short\n        val ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n } \n \n /** \n * Exposes the JavaScript
[HTMLTableElement](https://developer.mozilla.org/en/docs/Web/API/HTMLTableElement) to Kotlin \n */ \n public
external abstract class HTMLTableElement : HTMLInputElement { \n    open var caption:
HTMLTableCaptionElement? \n    open var tHead: HTMLTableSectionElement? \n    open var tFoot:
HTMLTableSectionElement? \n    open val tBodies: HTMLCollection \n    open val rows: HTMLCollection \n    open
var align: String \n    open var border: String \n    open var frame: String \n    open var rules: String \n    open var
summary: String \n    open var width: String \n    open var bgColor: String \n    open var cellPadding: String \n    open
var cellSpacing: String \n    fun createCaption(): HTMLTableCaptionElement \n    fun deleteCaption() \n    fun
createTHead(): HTMLTableSectionElement \n    fun deleteTHead() \n    fun createTFoot():
HTMLTableSectionElement \n    fun deleteTFoot() \n    fun createTBody(): HTMLTableSectionElement \n    fun
insertRow(index: Int = definedExternally): HTMLTableRowElement \n    fun deleteRow(index: Int) \n \n    companion object { \n        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE: Short\n        val
TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val ENTITY_REFERENCE_NODE:
Short\n        val ENTITY_NODE: Short\n        val PROCESSING_INSTRUCTION_NODE: Short\n        val
COMMENT_NODE: Short\n        val DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n
        val DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n } \n \n /** \n * Exposes the JavaScript
[HTMLTableCaptionElement](https://developer.mozilla.org/en/docs/Web/API/HTMLTableCaptionElement) to
Kotlin \n */ \n public external abstract class HTMLTableCaptionElement : HTMLInputElement { \n    open var align:
String \n \n    companion object { \n        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE: Short\n
        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val ENTITY_REFERENCE_NODE:
Short\n        val ENTITY_NODE: Short\n        val PROCESSING_INSTRUCTION_NODE: Short\n        val
COMMENT_NODE: Short\n        val DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n
        val DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n } \n \n /** \n * Exposes the JavaScript
[HTMLTableColElement](https://developer.mozilla.org/en/docs/Web/API/HTMLTableColElement) to Kotlin \n

```

```

*\npublic external abstract class HTMLTableColElement : HTMLInputElement {\n  open var span: Int\n  open var align: String\n  open var ch: String\n  open var chOff: String\n  open var vAlign: String\n  open var width: String\n\n  companion object {\n    val ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n  }\n}\n\n/**\n * Exposes the JavaScript [HTMLTableSectionElement](https://developer.mozilla.org/en/docs/Web/API/HTMLTableSectionElement) to Kotlin\n */\n\npublic external abstract class HTMLTableSectionElement : HTMLInputElement {\n  open val rows: HTMLCollection\n  open var align: String\n  open var ch: String\n  open var chOff: String\n  open var vAlign: String\n  fun insertRow(index: Int = definedExternally): HTMLInputElement\n  fun deleteRow(index: Int)\n\n  companion object {\n    val ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n  }\n}\n\n/**\n * Exposes the JavaScript [HTMLTableRowElement](https://developer.mozilla.org/en/docs/Web/API/HTMLTableRowElement) to Kotlin\n */\n\npublic external abstract class HTMLTableRowElement : HTMLInputElement {\n  open val rowIndex: Int\n  open val sectionRowIndex: Int\n  open val cells: HTMLCollection\n  open var align: String\n  open var ch: String\n  open var chOff: String\n  open var vAlign: String\n  open var bgColor: String\n  fun insertCell(index: Int = definedExternally): HTMLInputElement\n  fun deleteCell(index: Int)\n\n  companion object {\n    val ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n  }\n}\n\n/**\n * Exposes the JavaScript [HTMLTableCellElement](https://developer.mozilla.org/en/docs/Web/API/HTMLTableCellElement) to Kotlin\n */\n\npublic external abstract class HTMLTableCellElement : HTMLInputElement {\n  open var colSpan: Int\n  open var rowSpan: Int\n  open var headers: String\n  open val cellIndex: Int\n  open var scope: String\n  open var abbr: String\n  open var align: String\n  open var axis: String\n  open var height: String\n  open var width: String\n  open var ch: String\n  open var chOff: String\n  open var noWrap: Boolean\n  open var vAlign: String\n  open var bgColor: String\n\n  companion object {\n    val ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n  }\n}

```

```

DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n} \n \n /** \n * Exposes the JavaScript
[HTMLFormElement](https://developer.mozilla.org/en/docs/Web/API/HTMLFormElement) to Kotlin \n * \n public
external abstract class HTMLFormElement : HTMLInputElement { \n    open var acceptCharset: String \n    open var
action: String \n    open var autocomplete: String \n    open var enctype: String \n    open var encoding: String \n    open
var method: String \n    open var name: String \n    open var noValidate: Boolean \n    open var target: String \n    open
val elements: HTMLFormControlsCollection \n    open val length: Int \n    fun submit() \n    fun reset() \n    fun
checkValidity(): Boolean \n    fun reportValidity(): Boolean \n \n    companion object { \n        val ELEMENT_NODE:
Short\n        val ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE:
Short\n        val ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n
    } \n} \n \n @Suppress(\ "INVISIBLE_REFERENCE",
\ "INVISIBLE_MEMBER" ) \n @kotlin.internal.InlineOnly \n public inline operator fun
HTMLFormElement.get(index: Int): Element? =
asDynamic()[index] \n \n @Suppress(\ "INVISIBLE_REFERENCE",
\ "INVISIBLE_MEMBER" ) \n @kotlin.internal.InlineOnly \n public inline operator fun
HTMLFormElement.get(name: String): UnionElementOrRadioNodeList? = asDynamic()[name] \n \n /** \n * Exposes
the JavaScript [HTMLLabelElement](https://developer.mozilla.org/en/docs/Web/API/HTMLLabelElement) to
Kotlin \n * \n public external abstract class HTMLLabelElement : HTMLInputElement { \n    open val form:
HTMLFormElement? \n    open var htmlFor: String \n    open val control: HTMLInputElement? \n \n    companion object
{ \n        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n
        val CDATA_SECTION_NODE: Short\n        val ENTITY_REFERENCE_NODE: Short\n        val
ENTITY_NODE: Short\n        val PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE:
Short\n        val DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n} \n \n /** \n * Exposes the JavaScript
[HTMLInputElement](https://developer.mozilla.org/en/docs/Web/API/HTMLInputElement) to Kotlin \n * \n public
external abstract class HTMLInputElement : HTMLInputElement { \n    open var accept: String \n    open var alt: String \n
open var autocomplete: String \n    open var autofocus: Boolean \n    open var defaultChecked: Boolean \n    open var
checked: Boolean \n    open var dirName: String \n    open var disabled: Boolean \n    open val form:
HTMLFormElement? \n    open val files: FileList? \n    open var formAction: String \n    open var formEnctype:
String \n    open var formMethod: String \n    open var formNoValidate: Boolean \n    open var formTarget: String \n
open var height: Int \n    open var indeterminate: Boolean \n    open var inputMode: String \n    open val list:
HTMLInputElement? \n    open var max: String \n    open var maxLength: Int \n    open var min: String \n    open var
minLength: Int \n    open var multiple: Boolean \n    open var name: String \n    open var pattern: String \n    open var
placeholder: String \n    open var readOnly: Boolean \n    open var required: Boolean \n    open var size: Int \n    open

```



```

var src: String\n  open var step: String\n  open var type: String\n  open var defaultValue: String\n  open var
value: String\n  open var valueAsDate: dynamic\n  open var valueAsNumber: Double\n  open var width: Int\n
open val willValidate: Boolean\n  open val validity: ValidityState\n  open val validationMessage: String\n  open
val labels: NodeList\n  open var selectionStart: Int?\n  open var selectionEnd: Int?\n  open var
selectionDirection: String?\n  open var align: String\n  open var useMap: String\n  fun stepUp(n: Int =
definedExternally)\n  fun stepDown(n: Int = definedExternally)\n  fun checkValidity(): Boolean\n  fun
reportValidity(): Boolean\n  fun setCustomValidity(error: String)\n  fun select()\n  fun
setRangeText(replacement: String)\n  fun setRangeText(replacement: String, start: Int, end: Int, selectionMode:
SelectionMode = definedExternally)\n  fun setSelectionRange(start: Int, end: Int, direction: String =
definedExternally)\n\n  companion object {\n    val ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE:
Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val
ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val
PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n  }\n}\n\n/**\n * Exposes the JavaScript
[HTMLButtonElement](https://developer.mozilla.org/en/docs/Web/API/HTMLButtonElement) to Kotlin\n
*\n\npublic external abstract class HTMLButtonElement : HTMLInputElement {\n  open var autofocus: Boolean\n
open var disabled: Boolean\n  open val form: HTMLFormElement?\n  open var formAction: String\n  open var
formEnctype: String\n  open var formMethod: String\n  open var formNoValidate: Boolean\n  open var
formTarget: String\n  open var name: String\n  open var type: String\n  open var value: String\n  open var
menu: HTMLMenuElement?\n  open val willValidate: Boolean\n  open val validity: ValidityState\n  open val
validationMessage: String\n  open val labels: NodeList\n  fun checkValidity(): Boolean\n  fun reportValidity():
Boolean\n  fun setCustomValidity(error: String)\n\n  companion object {\n    val ELEMENT_NODE: Short\n
    val ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n
    val ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val
PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n  }\n}\n\n/**\n * Exposes the JavaScript
[HTMLSelectElement](https://developer.mozilla.org/en/docs/Web/API/HTMLSelectElement) to Kotlin\n
*\n\npublic external abstract class HTMLSelectElement : HTMLInputElement, ItemArrayLike<Element> {\n  open var
autocomplete: String\n  open var autofocus: Boolean\n  open var disabled: Boolean\n  open val form:
HTMLFormElement?\n  open var multiple: Boolean\n  open var name: String\n  open var required: Boolean\n
open var size: Int\n  open val type: String\n  open val options: HTMLCollection\n  override var length:
Int\n  open val selectedOptions: HTMLCollection\n  open var selectedIndex: Int\n  open var value: String\n
open val willValidate: Boolean\n  open val validity: ValidityState\n  open val validationMessage: String\n  open
val labels: NodeList\n  fun namedItem(name: String): HTMLOptionElement?\n  fun add(element:
UnionHTMLOptGroupElementOrHTMLOptionElement, before: dynamic = definedExternally)\n  fun
remove(index: Int)\n  fun checkValidity(): Boolean\n  fun reportValidity(): Boolean\n  fun
setCustomValidity(error: String)\n  override fun item(index: Int): Element?\n\n  companion object {\n    val
ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val

```

```

CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE:
Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n
}\n}\n\n@Suppress(\n"INVISIBLE_REFERENCE",
\n"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun
HTMLSelectElement.get(index: Int): Element? =
asDynamic()[index]\n\n@Suppress(\n"INVISIBLE_REFERENCE",
\n"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun
HTMLSelectElement.set(index: Int, option: HTMLOptionElement?) { asDynamic()[index] = option }\n\n/**\n *
Exposes the JavaScript
[HTMLDataListElement](https://developer.mozilla.org/en/docs/Web/API/HTMLDataListElement) to Kotlin\n
*/\npublic external abstract class HTMLDataListElement : HTMLInputElement {\n    open val options:
HTMLCollection\n\n    companion object {\n        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE:
Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLOptGroupElement](https://developer.mozilla.org/en/docs/Web/API/HTMLOptGroupElement) to Kotlin\n
*/\npublic external abstract class HTMLOptGroupElement : HTMLInputElement,
UnionHTMLOptGroupElementOrHTMLOptionElement {\n    open var disabled: Boolean\n    open var label:
String\n\n    companion object {\n        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE: Short\n
        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val ENTITY_REFERENCE_NODE:
Short\n        val ENTITY_NODE: Short\n        val PROCESSING_INSTRUCTION_NODE: Short\n        val
COMMENT_NODE: Short\n        val DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n
        val DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLOptionElement](https://developer.mozilla.org/en/docs/Web/API/HTMLOptionElement) to Kotlin\n
*/\npublic external abstract class HTMLOptionElement : HTMLInputElement,
UnionHTMLOptGroupElementOrHTMLOptionElement {\n    open var disabled: Boolean\n    open val form:
HTMLFormElement?\n    open var label: String\n    open var defaultSelected: Boolean\n    open var selected:
Boolean\n    open var value: String\n    open var text: String\n    open val index: Int\n\n    companion object {\n
        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val
CDATA_SECTION_NODE: Short\n        val ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE:
Short\n        val PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val

```

```

DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }n}\n\n/**\n * Exposes the JavaScript
[HTMLTextAreaElement](https://developer.mozilla.org/en/docs/Web/API/HTMLTextAreaElement) to Kotlin\n
*\npublic external abstract class HTMLTextAreaElement : HTMLElement {\n    open var autocomplete: String\n
open var autofocus: Boolean\n    open var cols: Int\n    open var dirName: String\n    open var disabled: Boolean\n
open val form: HTMLFormElement?\n    open var inputMode: String\n    open var maxLength: Int\n    open var
minLength: Int\n    open var name: String\n    open var placeholder: String\n    open var readOnly: Boolean\n    open
var required: Boolean\n    open var rows: Int\n    open var wrap: String\n    open val type: String\n    open var
defaultValue: String\n    open var value: String\n    open val textLength: Int\n    open val willValidate: Boolean\n
open val validity: ValidityState\n    open val validationMessage: String\n    open val labels: NodeList\n    open var
selectionStart: Int?\n    open var selectionEnd: Int?\n    open var selectionDirection: String?\n    fun checkValidity():
Boolean\n    fun reportValidity(): Boolean\n    fun setCustomValidity(error: String)\n    fun select()\n    fun
setRangeText(replacement: String)\n    fun setRangeText(replacement: String, start: Int, end: Int, selectionMode:
SelectionMode = definedExternally)\n    fun setSelectionRange(start: Int, end: Int, direction: String =
definedExternally)\n\n    companion object {\n        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE:
Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }n}\n\n/**\n * Exposes the JavaScript
[HTMLKeygenElement](https://developer.mozilla.org/en/docs/Web/API/HTMLKeygenElement) to Kotlin\n
*\npublic external abstract class HTMLKeygenElement : HTMLElement {\n    open var autofocus: Boolean\n
open var challenge: String\n    open var disabled: Boolean\n    open val form: HTMLFormElement?\n    open var
keytype: String\n    open var name: String\n    open val type: String\n    open val willValidate: Boolean\n    open val
validity: ValidityState\n    open val validationMessage: String\n    open val labels: NodeList\n    fun checkValidity():
Boolean\n    fun reportValidity(): Boolean\n    fun setCustomValidity(error: String)\n\n    companion object {\n
        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val
CDATA_SECTION_NODE: Short\n        val ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE:
Short\n        val PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }n}\n\n/**\n * Exposes the JavaScript
[HTMLOutputElement](https://developer.mozilla.org/en/docs/Web/API/HTMLOutputElement) to Kotlin\n
*\npublic external abstract class HTMLOutputElement : HTMLElement {\n    open val htmlFor: DOMTokenList\n
open val form: HTMLFormElement?\n    open var name: String\n    open val type: String\n    open var
defaultValue: String\n    open var value: String\n    open val willValidate: Boolean\n    open val validity:
ValidityState\n    open val validationMessage: String\n    open val labels: NodeList\n    fun checkValidity():
Boolean\n    fun reportValidity(): Boolean\n    fun setCustomValidity(error: String)\n\n    companion object {\n

```

```

val ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val
CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE:
Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n} \n \n /** \n * Exposes the JavaScript
[HTMLProgressElement](https://developer.mozilla.org/en/docs/Web/API/HTMLProgressElement) to Kotlin \n
*/ \n public external abstract class HTMLProgressElement : HTMLElement { \n    open var value: Double \n    open
var max: Double \n    open val position: Double \n    open val labels: NodeList \n \n    companion object { \n    val
ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val
CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE:
Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n} \n \n /** \n * Exposes the JavaScript
[HTMLMeterElement](https://developer.mozilla.org/en/docs/Web/API/HTMLMeterElement) to Kotlin \n
*/ \n public external abstract class HTMLMeterElement : HTMLElement { \n    open var value: Double \n    open var min:
Double \n    open var max: Double \n    open var low: Double \n    open var high: Double \n    open var optimum:
Double \n    open val labels: NodeList \n \n    companion object { \n    val ELEMENT_NODE: Short\n    val
ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val
ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val
PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n} \n \n /** \n * Exposes the JavaScript
[HTMLFieldSetElement](https://developer.mozilla.org/en/docs/Web/API/HTMLFieldSetElement) to Kotlin \n
*/ \n public external abstract class HTMLFieldSetElement : HTMLElement { \n    open var disabled: Boolean \n
open val form: HTMLFormElement? \n    open var name: String \n    open val type: String \n    open val elements:
HTMLCollection \n    open val willValidate: Boolean \n    open val validity: ValidityState \n    open val
validationMessage: String \n    fun checkValidity(): Boolean \n    fun reportValidity(): Boolean \n    fun
setCustomValidity(error: String) \n \n    companion object { \n    val ELEMENT_NODE: Short\n    val
ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val
ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val
PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val

```

DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript [HTMLLegendElement](https://developer.mozilla.org/en/docs/Web/API/HTMLLegendElement) to Kotlin\n\n*/\npublic external abstract class HTMLLegendElement : HTMLElement {\n open val form: HTMLFormElement?\n open var align: String\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val

DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript [ValidityState](https://developer.mozilla.org/en/docs/Web/API/ValidityState) to Kotlin\n\n*/\npublic external abstract class ValidityState {\n open val valueMissing: Boolean\n open val typeMismatch: Boolean\n open val patternMismatch: Boolean\n open val tooLong: Boolean\n open val tooShort: Boolean\n open val rangeUnderflow: Boolean\n open val rangeOverflow: Boolean\n open val stepMismatch: Boolean\n open val badInput: Boolean\n open val customError: Boolean\n open val valid: Boolean\n}\n\n/**\n * Exposes the JavaScript [HTMLDetailsElement](https://developer.mozilla.org/en/docs/Web/API/HTMLDetailsElement) to Kotlin\n\n*/\npublic external abstract class HTMLDetailsElement : HTMLElement {\n open var open: Boolean\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val

DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\npublic external abstract class HTMLMenuElement : HTMLElement {\n open var type: String\n open var label: String\n open var compact: Boolean\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val

DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\npublic external abstract class HTMLMenuItemElement : HTMLElement {\n open var type: String\n open var label: String\n open var icon: String\n open var disabled: Boolean\n open var checked: Boolean\n open var radiogroup: String\n open var default: Boolean\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n

```

    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\npublic external open class
RelatedEvent(type: String, eventInitDict: RelatedEventInit = definedExternally) : Event {\n    open val
relatedTarget: EventTarget?\n\n    companion object {\n        val NONE: Short\n        val CAPTURING_PHASE:
Short\n        val AT_TARGET: Short\n        val BUBBLING_PHASE: Short\n    }\n}\n\npublic external interface
RelatedEventInit : EventInit {\n    var relatedTarget: EventTarget? /* = null */\n        get() = definedExternally\n
set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\n\npublic inline fun RelatedEventInit(relatedTarget:
EventTarget? = null, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false):
RelatedEventInit {\n    val o = js("{}")\n    o["relatedTarget"] = relatedTarget\n    o["bubbles"] = bubbles\n
o["cancelable"] = cancelable\n    o["composed"] = composed\n    return o\n}\n\n/**\n * Exposes the JavaScript
[HTMLDialogElement](https://developer.mozilla.org/en/docs/Web/API/HTMLDialogElement) to Kotlin\n
*/\n\npublic external abstract class HTMLDialogElement : HTMLInputElement {\n    open var open: Boolean\n    open var
returnValue: String\n    fun show(anchor: UnionElementOrMouseEvent = definedExternally)\n    fun
showModal(anchor: UnionElementOrMouseEvent = definedExternally)\n    fun close(returnValue: String =
definedExternally)\n\n    companion object {\n        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE:
Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLScriptElement](https://developer.mozilla.org/en/docs/Web/API/HTMLScriptElement) to Kotlin\n
*/\n\npublic external abstract class HTMLScriptElement : HTMLInputElement, HTMLOrSVGScriptElement {\n    open var src:
String\n    open var type: String\n    open var charset: String\n    open var async: Boolean\n    open var defer:
Boolean\n    open var crossOrigin: String?\n    open var text: String\n    open var nonce: String\n    open var event:
String\n    open var htmlFor: String\n\n    companion object {\n        val ELEMENT_NODE: Short\n        val
ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLTemplateElement](https://developer.mozilla.org/en/docs/Web/API/HTMLTemplateElement) to Kotlin\n
*/\n\npublic external abstract class HTMLTemplateElement : HTMLInputElement {\n    open val content:
DocumentFragment\n\n    companion object {\n        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE:
Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n}

```

```

DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n} \n\n/**\n * Exposes the JavaScript
[HTMLSlotElement](https://developer.mozilla.org/en/docs/Web/API/HTMLSlotElement) to Kotlin\n\n *\n\npublic
external abstract class HTMLSlotElement : HTMLElement {\n    open var name: String\n    fun
assignedNodes(options: AssignedNodesOptions = definedExternally): Array<Node>\n\n    companion object {\n
val ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val
CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE:
Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n} \n\npublic external interface
AssignedNodesOptions {\n    var flatten: Boolean? /* = false */\n    get() = definedExternally\n    set(value) =
definedExternally\n} \n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\n\npublic inline fun AssignedNodesOptions(flatten:
Boolean? = false): AssignedNodesOptions {\n    val o = js("{}")\n    o["flatten"] = flatten\n    return
o\n} \n\n/**\n * Exposes the JavaScript
[HTMLCanvasElement](https://developer.mozilla.org/en/docs/Web/API/HTMLCanvasElement) to Kotlin\n\n
*\n\npublic external abstract class HTMLCanvasElement : HTMLImageElement, CanvasImageSource, TexImageSource
{\n    open var width: Int\n    open var height: Int\n    fun getContext(contextId: String, vararg arguments: Any?):
RenderingContext?\n    fun toDataURL(type: String = definedExternally, quality: Any? = definedExternally):
String\n    fun toBlob(_callback: (Blob?) -> Unit, type: String = definedExternally, quality: Any? =
definedExternally)\n\n    companion object {\n        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE:
Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n} \n\npublic external interface
CanvasRenderingContext2DSettings {\n    var alpha: Boolean? /* = true */\n    get() = definedExternally\n
set(value) = definedExternally\n} \n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\n\npublic inline fun
CanvasRenderingContext2DSettings(alpha: Boolean? = true): CanvasRenderingContext2DSettings {\n    val o =
js("{}")\n    o["alpha"] = alpha\n    return o\n} \n\n/**\n * Exposes the JavaScript
[CanvasRenderingContext2D](https://developer.mozilla.org/en/docs/Web/API/CanvasRenderingContext2D) to
Kotlin\n\n *\n\npublic external abstract class CanvasRenderingContext2D : CanvasState, CanvasTransform,
CanvasCompositing, CanvasImageSmoothing, CanvasFillStrokeStyles, CanvasShadowStyles, CanvasFilters,
CanvasRect, CanvasDrawPath, CanvasUserInterface, CanvasText, CanvasDrawImage, CanvasHitRegion,
CanvasImageData, CanvasPathDrawingStyles, CanvasTextDrawingStyles, CanvasPath, RenderingContext {\n
open val canvas: HTMLCanvasElement\n} \n\npublic external interface CanvasState {\n    fun save()\n    fun
restore()\n} \n\npublic external interface CanvasTransform {\n    fun scale(x: Double, y: Double)\n    fun

```

```

rotate(angle: Double)\n fun translate(x: Double, y: Double)\n fun transform(a: Double, b: Double, c: Double, d:
Double, e: Double, f: Double)\n fun getTransform(): DOMMatrix\n fun setTransform(a: Double, b: Double, c:
Double, d: Double, e: Double, f: Double)\n fun setTransform(transform: dynamic = definedExternally)\n fun
resetTransform()\n\n\npublic external interface CanvasCompositing {\n var globalAlpha: Double\n var
globalCompositeOperation: String\n}\n\n\npublic external interface CanvasImageSmoothing {\n var
imageSmoothingEnabled: Boolean\n var imageSmoothingQuality: ImageSmoothingQuality\n}\n\n\npublic external
interface CanvasFillStrokeStyles {\n var strokeStyle: dynamic\n get() = definedExternally\n set(value) =
definedExternally\n var fillStyle: dynamic\n get() = definedExternally\n set(value) = definedExternally\n
fun createLinearGradient(x0: Double, y0: Double, x1: Double, y1: Double): CanvasGradient\n fun
createRadialGradient(x0: Double, y0: Double, r0: Double, x1: Double, y1: Double, r1: Double): CanvasGradient\n
fun createPattern(image: CanvasImageSource, repetition: String): CanvasPattern?\n}\n\n\npublic external interface
CanvasShadowStyles {\n var shadowOffsetX: Double\n var shadowOffsetY: Double\n var shadowBlur:
Double\n var shadowColor: String\n}\n\n\npublic external interface CanvasFilters {\n var filter:
String\n}\n\n\npublic external interface CanvasRect {\n fun clearRect(x: Double, y: Double, w: Double, h:
Double)\n fun fillRect(x: Double, y: Double, w: Double, h: Double)\n fun strokeRect(x: Double, y: Double, w:
Double, h: Double)\n}\n\n\npublic external interface CanvasDrawPath {\n fun beginPath()\n fun fill(fillRule:
CanvasFillRule = definedExternally)\n fun fill(path: Path2D, fillRule: CanvasFillRule = definedExternally)\n
fun stroke()\n fun stroke(path: Path2D)\n fun clip(fillRule: CanvasFillRule = definedExternally)\n fun
clip(path: Path2D, fillRule: CanvasFillRule = definedExternally)\n fun resetClip()\n fun isPointInPath(x:
Double, y: Double, fillRule: CanvasFillRule = definedExternally): Boolean\n fun isPointInPath(path: Path2D, x:
Double, y: Double, fillRule: CanvasFillRule = definedExternally): Boolean\n fun isPointInStroke(x: Double, y:
Double): Boolean\n fun isPointInStroke(path: Path2D, x: Double, y: Double): Boolean\n}\n\n\npublic external
interface CanvasUserInterface {\n fun drawFocusIfNeeded(element: Element)\n fun drawFocusIfNeeded(path:
Path2D, element: Element)\n fun scrollPathIntoView()\n fun scrollPathIntoView(path: Path2D)\n}\n\n\npublic
external interface CanvasText {\n fun fillText(text: String, x: Double, y: Double, maxWidth: Double =
definedExternally)\n fun strokeText(text: String, x: Double, y: Double, maxWidth: Double = definedExternally)\n
fun measureText(text: String): TextMetrics\n}\n\n\npublic external interface CanvasDrawImage {\n fun
drawImage(image: CanvasImageSource, dx: Double, dy: Double)\n fun drawImage(image: CanvasImageSource,
dx: Double, dy: Double, dw: Double, dh: Double)\n fun drawImage(image: CanvasImageSource, sx: Double, sy:
Double, sw: Double, sh: Double, dx: Double, dy: Double, dw: Double, dh: Double)\n}\n\n\npublic external interface
CanvasHitRegion {\n fun addHitRegion(options: HitRegionOptions = definedExternally)\n fun
removeHitRegion(id: String)\n fun clearHitRegions()\n}\n\n\npublic external interface CanvasImageData {\n fun
createImageData(sw: Double, sh: Double): ImageData\n fun createImageData(imagedata: ImageData):
ImageData\n fun getImageData(sx: Double, sy: Double, sw: Double, sh: Double): ImageData\n fun
putImageData(imagedata: ImageData, dx: Double, dy: Double)\n fun putImageData(imagedata: ImageData, dx:
Double, dy: Double, dirtyX: Double, dirtyY: Double, dirtyWidth: Double, dirtyHeight: Double)\n}\n\n\npublic
external interface CanvasPathDrawingStyles {\n var lineWidth: Double\n var lineCap: CanvasLineCap\n var
lineJoin: CanvasLineJoin\n var miterLimit: Double\n var lineDashOffset: Double\n fun setLineDash(segments:
Array<Double>)\n fun getLineDash(): Array<Double>\n}\n\n\npublic external interface CanvasTextDrawingStyles
{\n var font: String\n var textAlign: CanvasTextAlign\n var textBaseline: CanvasTextBaseline\n var
direction: CanvasDirection\n}\n\n\npublic external interface CanvasPath {\n fun closePath()\n fun moveTo(x:
Double, y: Double)\n fun lineTo(x: Double, y: Double)\n fun quadraticCurveTo(cp1x: Double, cp1y: Double, cp2x:
Double, cp2y: Double, x: Double, y: Double)\n fun bezierCurveTo(cp1x: Double, cp1y: Double, cp2x: Double, cp2y:
Double, x: Double, y: Double)\n fun arcTo(x1: Double, y1: Double, x2: Double, y2: Double, radius: Double)\n fun
arcTo(x1: Double, y1: Double, x2: Double, y2: Double, radiusX: Double, radiusY: Double, rotation: Double)\n fun
rect(x: Double, y: Double, w: Double, h: Double)\n fun arc(x: Double, y: Double, radius: Double, startAngle: Double, endAngle:
Double, anticlockwise: Boolean = definedExternally)\n fun ellipse(x: Double, y: Double, radiusX: Double,
radiusY: Double, rotation: Double, startAngle: Double, endAngle: Double, anticlockwise: Boolean =

```



```

definedExternally)\n}\n\n/**\n * Exposes the JavaScript
[CanvasGradient](https://developer.mozilla.org/en/docs/Web/API/CanvasGradient) to Kotlin\n */\npublic external
abstract class CanvasGradient {\n    fun addColorStop(offset: Double, color: String)\n}\n\n/**\n * Exposes the
JavaScript [CanvasPattern](https://developer.mozilla.org/en/docs/Web/API/CanvasPattern) to Kotlin\n */\npublic
external abstract class CanvasPattern {\n    fun setTransform(transform: dynamic = definedExternally)\n}\n\n/**\n *
Exposes the JavaScript [TextMetrics](https://developer.mozilla.org/en/docs/Web/API/TextMetrics) to Kotlin\n
*/\npublic external abstract class TextMetrics {\n    open val width: Double\n    open val actualBoundingBoxLeft:
Double\n    open val actualBoundingBoxRight: Double\n    open val fontBoundingBoxAscent: Double\n    open val
fontBoundingBoxDescent: Double\n    open val actualBoundingBoxAscent: Double\n    open val
actualBoundingBoxDescent: Double\n    open val emHeightAscent: Double\n    open val emHeightDescent:
Double\n    open val hangingBaseline: Double\n    open val alphabeticBaseline: Double\n    open val
ideographicBaseline: Double\n}\n\npublic external interface HitRegionOptions {\n    var path: Path2D? /* = null
*/\n    get() = definedExternally\n    set(value) = definedExternally\n    var fillRule: CanvasFillRule? /* =
CanvasFillRule.NONZERO */\n    get() = definedExternally\n    set(value) = definedExternally\n    var id:
String? /* = \"\" */\n    get() = definedExternally\n    set(value) = definedExternally\n    var parentID: String? /*
= null */\n    get() = definedExternally\n    set(value) = definedExternally\n    var cursor: String? /* = \"inherit\"
*/\n    get() = definedExternally\n    set(value) = definedExternally\n    var control: Element? /* = null */\n
get() = definedExternally\n    set(value) = definedExternally\n    var label: String? /* = null */\n    get() =
definedExternally\n    set(value) = definedExternally\n    var role: String? /* = null */\n    get() =
definedExternally\n    set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun HitRegionOptions(path: Path2D? =
null, fillRule: CanvasFillRule? = CanvasFillRule.NONZERO, id: String? = \"\", parentID: String? = null, cursor:
String? = \"inherit\", control: Element? = null, label: String? = null, role: String? = null): HitRegionOptions {\n    val
o = js(\"({})\")\n    o[\"path\"] = path\n    o[\"fillRule\"] = fillRule\n    o[\"id\"] = id\n    o[\"parentID\"] = parentID\n
o[\"cursor\"] = cursor\n    o[\"control\"] = control\n    o[\"label\"] = label\n    o[\"role\"] = role\n    return
o\n}\n\n/**\n * Exposes the JavaScript [ImageData](https://developer.mozilla.org/en/docs/Web/API/ImageData) to
Kotlin\n */\npublic external open class ImageData : ImageBitmapSource, TexImageSource {\n    constructor(sw:
Int, sh: Int)\n    constructor(data: Uint8ClampedArray, sw: Int, sh: Int = definedExternally)\n    open val width: Int\n
open val height: Int\n    open val data: Uint8ClampedArray\n}\n\n/**\n * Exposes the JavaScript
[Path2D](https://developer.mozilla.org/en/docs/Web/API/Path2D) to Kotlin\n */\npublic external open class
Path2D() : CanvasPath {\n    constructor(path: Path2D)\n    constructor(paths: Array<Path2D>, fillRule:
CanvasFillRule = definedExternally)\n    constructor(d: String)\n    fun addPath(path: Path2D, transform: dynamic =
definedExternally)\n    override fun closePath()\n    override fun moveTo(x: Double, y: Double)\n    override fun
lineTo(x: Double, y: Double)\n    override fun quadraticCurveTo(cpx: Double, cpy: Double, x: Double, y: Double)\n
    override fun bezierCurveTo(cp1x: Double, cp1y: Double, cp2x: Double, cp2y: Double, x: Double, y: Double)\n
    override fun arcTo(x1: Double, y1: Double, x2: Double, y2: Double, radius: Double)\n    override fun arcTo(x1:
Double, y1: Double, x2: Double, y2: Double, radiusX: Double, radiusY: Double, rotation: Double)\n    override fun
rect(x: Double, y: Double, w: Double, h: Double)\n    override fun arc(x: Double, y: Double, radius: Double,
startAngle: Double, endAngle: Double, anticlockwise: Boolean /* = definedExternally */) \n    override fun ellipse(x:
Double, y: Double, radiusX: Double, radiusY: Double, rotation: Double, startAngle: Double, endAngle: Double,
anticlockwise: Boolean /* = definedExternally */) \n}\n\n/**\n * Exposes the JavaScript
[ImageBitmapRenderingContext](https://developer.mozilla.org/en/docs/Web/API/ImageBitmapRenderingContext)
to Kotlin\n */\npublic external abstract class ImageBitmapRenderingContext {\n    open val canvas:
HTMLCanvasElement\n    fun transferFromImageBitmap(bitmap: ImageBitmap?)\n}\n\npublic external interface
ImageBitmapRenderingContextSettings {\n    var alpha: Boolean? /* = true */\n    get() = definedExternally\n
set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun
ImageBitmapRenderingContextSettings(alpha: Boolean? = true): ImageBitmapRenderingContextSettings {\n    val o

```

```

= js("{}")\n  o["alpha"] = alpha\n  return o\n}\n\n/**\n * Exposes the JavaScript
[CustomElementRegistry](https://developer.mozilla.org/en/docs/Web/API/CustomElementRegistry) to Kotlin\n
*/\npublic external abstract class CustomElementRegistry {\n  fun define(name: String, constructor: () -> dynamic,
options: ElementDefinitionOptions = definedExternally)\n  fun get(name: String): Any?\n  fun
whenDefined(name: String): Promise<Unit>\n}\n\npublic external interface ElementDefinitionOptions {\n  var
extends: String?\n  get() = definedExternally\n  set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun ElementDefinitionOptions(extends:
String? = undefined): ElementDefinitionOptions {\n  val o = js("{}")\n  o["extends"] = extends\n  return
o\n}\n\npublic external interface ElementContentEditable {\n  var contentEditable: String\n  val
isContentEditable: Boolean\n}\n\n/**\n * Exposes the JavaScript
[DataTransfer](https://developer.mozilla.org/en/docs/Web/API/DataTransfer) to Kotlin\n
*/\npublic external
abstract class DataTransfer {\n  open var dropEffect: String\n  open var effectAllowed: String\n  open val items:
DataTransferItemList\n  open val types: Array<out String>\n  open val files: FileList\n  fun
setDragImage(image: Element, x: Int, y: Int)\n  fun getData(format: String): String\n  fun setData(format: String,
data: String)\n  fun clearData(format: String = definedExternally)\n}\n\n/**\n * Exposes the JavaScript
[DataTransferItemList](https://developer.mozilla.org/en/docs/Web/API/DataTransferItemList) to Kotlin\n
*/\npublic
external abstract class DataTransferItemList {\n  open val length: Int\n  fun add(data: String, type: String):
DataTransferItem?\n  fun add(data: File): DataTransferItem?\n  fun remove(index: Int)\n  fun
clear()\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun
DataTransferItemList.get(index: Int): DataTransferItem? = asDynamic()[index]\n\n/**\n * Exposes the JavaScript
[DataTransferItem](https://developer.mozilla.org/en/docs/Web/API/DataTransferItem) to Kotlin\n
*/\npublic
external abstract class DataTransferItem {\n  open val kind: String\n  open val type: String\n  fun
getAsString(_callback: ((String) -> Unit)?)\n  fun getAsFile(): File?\n}\n\n/**\n * Exposes the JavaScript
[DragEvent](https://developer.mozilla.org/en/docs/Web/API/DragEvent) to Kotlin\n
*/\npublic external open class
DragEvent(type: String, eventInitDict: DragEventInit = definedExternally) : MouseEvent {\n  open val
dataTransfer: DataTransfer?\n\n  companion object {\n    val NONE: Short\n    val CAPTURING_PHASE:
Short\n    val AT_TARGET: Short\n    val BUBBLING_PHASE: Short\n  }\n}\n\npublic external interface
DragEventInit : MouseEventInit {\n  var dataTransfer: DataTransfer? /* = null */\n  get() = definedExternally\n
  set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun DragEventInit(dataTransfer:
DataTransfer? = null, screenX: Int? = 0, screenY: Int? = 0, clientX: Int? = 0, clientY: Int? = 0, button: Short? = 0,
buttons: Short? = 0, relatedTarget: EventTarget? = null, region: String? = null, ctrlKey: Boolean? = false, shiftKey:
Boolean? = false, altKey: Boolean? = false, metaKey: Boolean? = false, modifierAltGraph: Boolean? = false,
modifierCapsLock: Boolean? = false, modifierFn: Boolean? = false, modifierFnLock: Boolean? = false,
modifierHyper: Boolean? = false, modifierNumLock: Boolean? = false, modifierScrollLock: Boolean? = false,
modifierSuper: Boolean? = false, modifierSymbol: Boolean? = false, modifierSymbolLock: Boolean? = false, view:
Window? = null, detail: Int? = 0, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? =
false): DragEventInit {\n  val o = js("{}")\n  o["dataTransfer"] = dataTransfer\n  o["screenX"] = screenX\n
  o["screenY"] = screenY\n  o["clientX"] = clientX\n  o["clientY"] = clientY\n  o["button"] = button\n
  o["buttons"] = buttons\n  o["relatedTarget"] = relatedTarget\n  o["region"] = region\n  o["ctrlKey"] =
ctrlKey\n  o["shiftKey"] = shiftKey\n  o["altKey"] = altKey\n  o["metaKey"] = metaKey\n
  o["modifierAltGraph"] = modifierAltGraph\n  o["modifierCapsLock"] = modifierCapsLock\n
  o["modifierFn"] = modifierFn\n  o["modifierFnLock"] = modifierFnLock\n  o["modifierHyper"] =
modifierHyper\n  o["modifierNumLock"] = modifierNumLock\n  o["modifierScrollLock"] =
modifierScrollLock\n  o["modifierSuper"] = modifierSuper\n  o["modifierSymbol"] = modifierSymbol\n
  o["modifierSymbolLock"] = modifierSymbolLock\n  o["view"] = view\n  o["detail"] = detail\n

```

```

o["bubbles"] = bubbles\n  o["cancelable"] = cancelable\n  o["composed"] = composed\n  return
o\n}\n\n/**\n * Exposes the JavaScript [Window](https://developer.mozilla.org/en/docs/Web/API/Window) to
Kotlin\n */\npublic external abstract class Window : EventTarget, GlobalEventHandlers, WindowEventHandlers,
WindowOrWorkerGlobalScope, WindowSessionStorage, WindowLocalStorage, GlobalPerformance,
UnionMessagePortOrWindowProxy {\n  open val window: Window\n  open val self: Window\n  open val
document: Document\n  open val name: String\n  open val location: Location\n  open val history: History\n
open val customElements: CustomElementRegistry\n  open val locationbar: BarProp\n  open val menubar:
BarProp\n  open val personalbar: BarProp\n  open val scrollbars: BarProp\n  open val statusbar: BarProp\n
open val toolbar: BarProp\n  open val status: String\n  open val closed: Boolean\n  open val frames: Window\n
open val length: Int\n  open val top: Window\n  open var opener: Any?\n  open val parent: Window\n  open val
frameElement: Element?\n  open val navigator: Navigator\n  open val applicationCache: ApplicationCache\n
open val external: External\n  open val screen: Screen\n  open val innerWidth: Int\n  open val innerHeight: Int\n
open val scrollX: Double\n  open val pageXOffset: Double\n  open val scrollY: Double\n  open val
pageYOffset: Double\n  open val screenX: Int\n  open val screenY: Int\n  open val outerWidth: Int\n  open val
outerHeight: Int\n  open val devicePixelRatio: Double\n  fun close()\n  fun stop()\n  fun focus()\n  fun blur()\n
fun open(url: String = definedExternally, target: String = definedExternally, features: String = definedExternally):
Window?\n  fun alert()\n  fun alert(message: String)\n  fun confirm(message: String = definedExternally):
Boolean\n  fun prompt(message: String = definedExternally, default: String = definedExternally): String?\n  fun
print()\n  fun requestAnimationFrame(callback: (Double) -> Unit): Int\n  fun cancelAnimationFrame(handle:
Int)\n  fun postMessage(message: Any?, targetOrigin: String, transfer: Array<dynamic> = definedExternally)\n
fun captureEvents()\n  fun releaseEvents()\n  fun matchMedia(query: String): MediaQueryList\n  fun moveTo(x:
Int, y: Int)\n  fun moveBy(x: Int, y: Int)\n  fun resizeTo(x: Int, y: Int)\n  fun resizeBy(x: Int, y: Int)\n  fun
scroll(options: ScrollToOptions = definedExternally)\n  fun scroll(x: Double, y: Double)\n  fun scrollTo(options:
ScrollToOptions = definedExternally)\n  fun scrollTo(x: Double, y: Double)\n  fun scrollBy(options:
ScrollToOptions = definedExternally)\n  fun scrollBy(x: Double, y: Double)\n  fun getComputedStyle(elt:
Element, pseudoElt: String? = definedExternally):
CSSStyleDeclaration\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Window.get(name: String):
dynamic = asDynamic()[name]\n\npublic external abstract class BarProp {\n  open val visible: Boolean\n}\n\n/**\n * Exposes the JavaScript [History](https://developer.mozilla.org/en/docs/Web/API/History) to Kotlin\n */\npublic
external abstract class History {\n  open val length: Int\n  open var scrollRestoration: ScrollRestoration\n  open
val state: Any?\n  fun go(delta: Int = definedExternally)\n  fun back()\n  fun forward()\n  fun pushState(data:
Any?, title: String, url: String? = definedExternally)\n  fun replaceState(data: Any?, title: String, url: String? =
definedExternally)\n}\n\n/**\n * Exposes the JavaScript
[Location](https://developer.mozilla.org/en/docs/Web/API/Location) to Kotlin\n */\npublic external abstract class
Location {\n  open var href: String\n  open val origin: String\n  open var protocol: String\n  open var host:
String\n  open var hostname: String\n  open var port: String\n  open var pathname: String\n  open var search:
String\n  open var hash: String\n  open val ancestorOrigins: Array<out String>\n  fun assign(url: String)\n  fun
replace(url: String)\n  fun reload()\n}\n\n/**\n * Exposes the JavaScript
[PopStateEvent](https://developer.mozilla.org/en/docs/Web/API/PopStateEvent) to Kotlin\n */\npublic external
open class PopStateEvent(type: String, eventInitDict: PopStateEventInit = definedExternally) : Event {\n  open val
state: Any?\n\n  companion object {\n    val NONE: Short\n    val CAPTURING_PHASE: Short\n    val
AT_TARGET: Short\n    val BUBBLING_PHASE: Short\n  }\n}\n\npublic external interface PopStateEventInit
: EventInit {\n  var state: Any? /* = null */\n  get() = definedExternally\n  set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun PopStateEventInit(state: Any? = null,
bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false): PopStateEventInit {\n  val o
= js("{}")\n  o["state"] = state\n  o["bubbles"] = bubbles\n  o["cancelable"] = cancelable\n

```

```

o["composed"] = composed\n    return o\n}\n\n**\n * Exposes the JavaScript
[HashChangeEvent](https://developer.mozilla.org/en/docs/Web/API/HashChangeEvent) to Kotlin\n *\npublic
external open class HashChangeEvent(type: String, eventInitDict: HashChangeEventInit = definedExternally) :
Event {\n    open val oldURL: String\n    open val newURL: String\n\n    companion object {\n        val NONE:
Short\n        val CAPTURING_PHASE: Short\n        val AT_TARGET: Short\n        val BUBBLING_PHASE:
Short\n    }\n}\n\npublic external interface HashChangeEventInit : EventInit {\n    var oldURL: String? /* = "" */\n
get() = definedExternally\n    set(value) = definedExternally\n    var newURL: String? /* = "" */\n    get() =
definedExternally\n    set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun HashChangeEventInit(oldURL:
String? = "", newURL: String? = "", bubbles: Boolean? = false, cancelable: Boolean? = false, composed:
Boolean? = false): HashChangeEventInit {\n    val o = js("{}")\n    o["oldURL"] = oldURL\n    o["newURL"]
= newURL\n    o["bubbles"] = bubbles\n    o["cancelable"] = cancelable\n    o["composed"] = composed\n
return o\n}\n\n**\n * Exposes the JavaScript
[PageTransitionEvent](https://developer.mozilla.org/en/docs/Web/API/PageTransitionEvent) to Kotlin\n *\npublic
external open class PageTransitionEvent(type: String, eventInitDict: PageTransitionEventInit = definedExternally) :
Event {\n    open val persisted: Boolean\n\n    companion object {\n        val NONE: Short\n        val
CAPTURING_PHASE: Short\n        val AT_TARGET: Short\n        val BUBBLING_PHASE: Short\n    }\n}\n\npublic external interface PageTransitionEventInit : EventInit {\n    var persisted: Boolean? /* = false */\n
get() = definedExternally\n    set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun PageTransitionEventInit(persisted:
Boolean? = false, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false):
PageTransitionEventInit {\n    val o = js("{}")\n    o["persisted"] = persisted\n    o["bubbles"] = bubbles\n
o["cancelable"] = cancelable\n    o["composed"] = composed\n    return o\n}\n\n**\n * Exposes the JavaScript
[BeforeUnloadEvent](https://developer.mozilla.org/en/docs/Web/API/BeforeUnloadEvent) to Kotlin\n *\npublic
external open class BeforeUnloadEvent : Event {\n    var returnValue: String\n\n    companion object {\n        val
NONE: Short\n        val CAPTURING_PHASE: Short\n        val AT_TARGET: Short\n        val
BUBBLING_PHASE: Short\n    }\n}\n\npublic external abstract class ApplicationCache : EventTarget {\n    open
val status: Short\n    open var onchecking: ((Event) -> dynamic)?\n    open var onerror: ((Event) -> dynamic)?\n
open var onnoupdate: ((Event) -> dynamic)?\n    open var ondownloading: ((Event) -> dynamic)?\n    open var
onprogress: ((ProgressEvent) -> dynamic)?\n    open var onunreadystatechange: ((Event) -> dynamic)?\n    open var
oncached: ((Event) -> dynamic)?\n    open var onobsolete: ((Event) -> dynamic)?\n    fun update()\n    fun abort()\n
fun swapCache()\n\n    companion object {\n        val UNCACHED: Short\n        val IDLE: Short\n        val
CHECKING: Short\n        val DOWNLOADING: Short\n        val UPDATEREADY: Short\n        val OBSOLETE:
Short\n    }\n}\n\n**\n * Exposes the JavaScript
[NavigatorOnLine](https://developer.mozilla.org/en/docs/Web/API/NavigatorOnLine) to Kotlin\n *\npublic
external interface NavigatorOnLine {\n    val onLine: Boolean\n}\n\n**\n * Exposes the JavaScript
[ErrorEvent](https://developer.mozilla.org/en/docs/Web/API/ErrorEvent) to Kotlin\n *\npublic external open class
ErrorEvent(type: String, eventInitDict: ErrorEventInit = definedExternally) : Event {\n    open val message: String\n
open val filename: String\n    open val lineno: Int\n    open val colno: Int\n    open val error: Any?\n\n    companion
object {\n        val NONE: Short\n        val CAPTURING_PHASE: Short\n        val AT_TARGET: Short\n        val
BUBBLING_PHASE: Short\n    }\n}\n\npublic external interface ErrorEventInit : EventInit {\n    var message:
String? /* = "" */\n    get() = definedExternally\n    set(value) = definedExternally\n    var filename: String? /*
= "" */\n    get() = definedExternally\n    set(value) = definedExternally\n    var lineno: Int? /* = 0 */\n
get() = definedExternally\n    set(value) = definedExternally\n    var colno: Int? /* = 0 */\n    get() =
definedExternally\n    set(value) = definedExternally\n    var error: Any? /* = null */\n    get() =
definedExternally\n    set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun ErrorEventInit(message: String? = "",
filename: String? = "", lineno: Int? = 0, colno: Int? = 0, error: Any? = null, bubbles: Boolean? = false, cancelable:

```

```
Boolean? = false, composed: Boolean? = false): ErrorEventInit {\n  val o = js("{}")\n  o["message"] = message\n  o["filename"] = filename\n  o["lineno"] = lineno\n  o["colno"] = colno\n  o["error"] = error\n  o["bubbles"] = bubbles\n  o["cancelable"] = cancelable\n  o["composed"] = composed\n  return o\n}\n\n/**\n * Exposes the JavaScript
```

```
[PromiseRejectionEvent](https://developer.mozilla.org/en/docs/Web/API/PromiseRejectionEvent) to Kotlin\n*/\n\npublic external open class PromiseRejectionEvent(type: String, eventInitDict: PromiseRejectionEventInit) :
```

```
Event {\n  open val promise: Promise<Any?>\n  open val reason: Any?\n  companion object {\n    val NONE: Short\n    val CAPTURING_PHASE: Short\n    val AT_TARGET: Short\n    val BUBBLING_PHASE: Short\n  }\n}\n\npublic external interface PromiseRejectionEventInit : EventInit {\n  var promise: Promise<Any?>?\n  var reason: Any??\n  get() = definedExternally\n  set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
```

```
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun PromiseRejectionEventInit(promise: Promise<Any?>?, reason: Any? = undefined, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false): PromiseRejectionEventInit {\n  val o = js("{}")\n  o["promise"] = promise\n  o["reason"] = reason\n  o["bubbles"] = bubbles\n  o["cancelable"] = cancelable\n  o["composed"] = composed\n  return o\n}\n\n/**\n * Exposes the JavaScript
```

```
[GlobalEventHandlers](https://developer.mozilla.org/en/docs/Web/API/GlobalEventHandlers) to Kotlin\n*/\n\npublic external interface GlobalEventHandlers {\n  var onabort: ((Event) -> dynamic)?\n  get() =
```

```
definedExternally\n  set(value) = definedExternally\n  var onblur: ((FocusEvent) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var oncancel: ((Event) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var oncanplay: ((Event) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var oncanplaythrough: ((Event) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var onchange: ((Event) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var onclick: ((MouseEvent) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var onclose: ((Event) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var oncontextmenu: ((MouseEvent) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var oncuechange: ((Event) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var ondblclick: ((MouseEvent) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var ondrag: ((DragEvent) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var ondragend: ((DragEvent) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var ondragenter: ((DragEvent) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var ondragexit: ((DragEvent) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var ondragleave: ((DragEvent) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var ondragover: ((DragEvent) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var ondragstart: ((DragEvent) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var ondrop: ((DragEvent) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var ondurationchange: ((Event) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var onemptied: ((Event) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var onended: ((Event) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var onerror: ((dynamic, String, Int, Int, Any?) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var onfocus: ((FocusEvent) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var oninput: ((InputEvent) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var oninvalid: ((Event) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var onkeydown: ((KeyboardEvent) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var onkeypress: ((KeyboardEvent) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var onkeyup: ((KeyboardEvent) -> dynamic)?\n  get() = definedExternally\n  set(value) = definedExternally\n  var onload: ((Event) -> dynamic)?\n  get() = definedExternally\n  set(value) =
```

```

definedExternally\n    var onloadeddata: ((Event) -> dynamic)?\n        get() = definedExternally\n        set(value) =
definedExternally\n    var onloadedmetadata: ((Event) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var onloadend: ((Event) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var onloadstart: ((ProgressEvent) -> dynamic)?\n        get() = definedExternally\n
        set(value) = definedExternally\n    var onmousedown: ((MouseEvent) -> dynamic)?\n        get() =
definedExternally\n        set(value) = definedExternally\n    var onmouseenter: ((MouseEvent) -> dynamic)?\n
get() = definedExternally\n        set(value) = definedExternally\n    var onmouseleave: ((MouseEvent) ->
dynamic)?\n        get() = definedExternally\n        set(value) = definedExternally\n    var onmousemove:
((MouseEvent) -> dynamic)?\n        get() = definedExternally\n        set(value) = definedExternally\n    var
onmouseout: ((MouseEvent) -> dynamic)?\n        get() = definedExternally\n        set(value) = definedExternally\n
var onmouseover: ((MouseEvent) -> dynamic)?\n        get() = definedExternally\n        set(value) =
definedExternally\n    var onmouseup: ((MouseEvent) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var onwheel: ((WheelEvent) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var onpause: ((Event) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var onplay: ((Event) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var onplaying: ((Event) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var onprogress: ((ProgressEvent) -> dynamic)?\n        get() = definedExternally\n
        set(value) = definedExternally\n    var onratechange: ((Event) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var onreset: ((Event) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var onresize: ((Event) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var onscroll: ((Event) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var onseeked: ((Event) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var onseeking: ((Event) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var onselect: ((Event) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var onshow: ((Event) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var onstalled: ((Event) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var onsubmit: ((Event) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var onsuspend: ((Event) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var ontimeupdate: ((Event) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var ontoggle: ((Event) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var onvolumechange: ((Event) -> dynamic)?\n        get() = definedExternally\n
        set(value) = definedExternally\n    var onwaiting: ((Event) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var ongotpointercapture: ((PointerEvent) -> dynamic)?\n        get() =
definedExternally\n        set(value) = definedExternally\n    var onlostpointercapture: ((PointerEvent) -> dynamic)?\n
        get() = definedExternally\n        set(value) = definedExternally\n    var onpointerdown: ((PointerEvent) ->
dynamic)?\n        get() = definedExternally\n        set(value) = definedExternally\n    var onpointermove:
((PointerEvent) -> dynamic)?\n        get() = definedExternally\n        set(value) = definedExternally\n    var
onpointerup: ((PointerEvent) -> dynamic)?\n        get() = definedExternally\n        set(value) = definedExternally\n
var onpointercancel: ((PointerEvent) -> dynamic)?\n        get() = definedExternally\n        set(value) =
definedExternally\n    var onpointerover: ((PointerEvent) -> dynamic)?\n        get() = definedExternally\n
set(value) = definedExternally\n    var onpointerout: ((PointerEvent) -> dynamic)?\n        get() = definedExternally\n
        set(value) = definedExternally\n    var onpointerenter: ((PointerEvent) -> dynamic)?\n        get() =
definedExternally\n        set(value) = definedExternally\n    var onpointerleave: ((PointerEvent) -> dynamic)?\n
get() = definedExternally\n        set(value) = definedExternally\n}\n\n**\n * Exposes the JavaScript
[WindowEventHandlers](https://developer.mozilla.org/en/docs/Web/API/WindowEventHandlers) to Kotlin\n
*\n\npublic external interface WindowEventHandlers {\n    var onafterprint: ((Event) -> dynamic)?\n        get() =
definedExternally\n        set(value) = definedExternally\n    var onbeforeprint: ((Event) -> dynamic)?\n        get() =
definedExternally\n        set(value) = definedExternally\n    var onbeforeunload: ((BeforeUnloadEvent) ->

```

```

String?)?
    get() = definedExternally
    set(value) = definedExternally
    var onhashchange:
        ((HashChangeEvent) -> dynamic)?
        get() = definedExternally
        set(value) = definedExternally
    var onlanguagechange: ((Event) -> dynamic)?
        get() = definedExternally
        set(value) = definedExternally
    var onmessage: ((MessageEvent) -> dynamic)?
        get() = definedExternally
        set(value) = definedExternally
    var onoffline: ((Event) -> dynamic)?
        get() = definedExternally
        set(value) = definedExternally
    var ononline: ((Event) -> dynamic)?
        get() = definedExternally
        set(value) = definedExternally
    var onpagehide: ((PageTransitionEvent) -> dynamic)?
        get() = definedExternally
        set(value) = definedExternally
    var onpageshow: ((PageTransitionEvent) -> dynamic)?
        get() = definedExternally
        set(value) = definedExternally
    var onpopstate: ((PopStateEvent) -> dynamic)?
        get() = definedExternally
        set(value) = definedExternally
    var onrejectionhandled: ((Event) -> dynamic)?
        get() = definedExternally
        set(value) = definedExternally
    var onstorage: ((StorageEvent) -> dynamic)?
        get() = definedExternally
        set(value) = definedExternally
    var onunhandledrejection:
        ((PromiseRejectionEvent) -> dynamic)?
        get() = definedExternally
        set(value) = definedExternally
    var onunload: ((Event) -> dynamic)?
        get() = definedExternally
        set(value) = definedExternally
}

public external interface DocumentAndElementEventHandlers {
    var oncopy:
        ((ClipboardEvent) -> dynamic)?
        get() = definedExternally
        set(value) = definedExternally
    var oncut:
        ((ClipboardEvent) -> dynamic)?
        get() = definedExternally
        set(value) = definedExternally
    var onpaste:
        ((ClipboardEvent) -> dynamic)?
        get() = definedExternally
        set(value) = definedExternally
}

/**
 * Exposes the JavaScript
 [WindowOrWorkerGlobalScope](https://developer.mozilla.org/en/docs/Web/API/WindowOrWorkerGlobalScope)
 to Kotlin
 */
public external interface WindowOrWorkerGlobalScope {
    val origin: String
    val caches: CacheStorage
    fun btoa(data: String): String
    fun atob(data: String): String
    fun setTimeout(handler: dynamic, timeout: Int = definedExternally, vararg arguments: Any?): Int
    fun clearTimeout(handle: Int = definedExternally)
    fun setInterval(handler: dynamic, timeout: Int = definedExternally, vararg arguments: Any?): Int
    fun clearInterval(handle: Int = definedExternally)
    fun createImageBitmap(image: ImageBitmapSource, options: ImageBitmapOptions = definedExternally): Promise<ImageBitmap>
    fun createImageBitmap(image: ImageBitmapSource, sx: Int, sy: Int, sw: Int, sh: Int, options: ImageBitmapOptions = definedExternally): Promise<ImageBitmap>
    fun fetch(input: dynamic, init: RequestInit = definedExternally): Promise<Response>
}

/**
 * Exposes the JavaScript
 [Navigator](https://developer.mozilla.org/en/docs/Web/API/Navigator)
 to Kotlin
 */
public external abstract class Navigator : NavigatorID, NavigatorLanguage, NavigatorOnLine, NavigatorContentUtils, NavigatorCookies, NavigatorPlugins, NavigatorConcurrentHardware {
    open val clipboard: Clipboard
    open val mediaDevices: MediaDevices
    open val maxTouchPoints: Int
    open val serviceWorker: ServiceWorkerContainer
    fun requestMediaKeySystemAccess(keySystem: String, supportedConfigurations: Array<MediaKeySystemConfiguration>): Promise<MediaKeySystemAccess>
    fun getUserMedia(constraints: MediaStreamConstraints, successCallback: (MediaStream) -> Unit, errorCallback: (dynamic) -> Unit)
    fun vibrate(pattern: dynamic): Boolean
}

/**
 * Exposes the JavaScript
 [NavigatorID](https://developer.mozilla.org/en/docs/Web/API/NavigatorID)
 to Kotlin
 */
public external interface NavigatorID {
    val appCodeName: String
    val appName: String
    val appVersion: String
    val platform: String
    val product: String
    val productSub: String
    val userAgent: String
    val vendor: String
    val vendorSub: String
    val oscpu: String
    fun taintEnabled(): Boolean
}

/**
 * Exposes the JavaScript
 [NavigatorLanguage](https://developer.mozilla.org/en/docs/Web/API/NavigatorLanguage)
 to Kotlin
 */
public external interface NavigatorLanguage {
    val language: String
    val languages: Array<out String>
}

public external interface NavigatorContentUtils {
    fun registerProtocolHandler(scheme: String, url: String, title: String)
    fun registerContentHandler(mimeType: String, url: String, title: String)
    fun isProtocolHandlerRegistered(scheme: String, url: String): String
    fun isContentHandlerRegistered(mimeType: String, url: String): String
    fun unregisterProtocolHandler(scheme: String, url: String)
    fun unregisterContentHandler(mimeType: String, url: String)
}

public external interface NavigatorCookies {
    val

```

```

cookieEnabled: Boolean\n}\n\n/**\n * Exposes the JavaScript
[NavigatorPlugins](https://developer.mozilla.org/en/docs/Web/API/NavigatorPlugins) to Kotlin\n */\npublic
external interface NavigatorPlugins {\n    val plugins: PluginArray\n    val mimeTypeArray: MimeTypeError\n    fun
javaEnabled(): Boolean\n}\n\n/**\n * Exposes the JavaScript
[PluginArray](https://developer.mozilla.org/en/docs/Web/API/PluginArray) to Kotlin\n */\npublic external abstract
class PluginArray : ItemArrayLike<Plugin> {\n    fun refresh(reload: Boolean = definedExternally)\n    override fun
item(index: Int): Plugin?\n    fun namedItem(name: String):
Plugin?\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun PluginArray.get(index: Int):
Plugin? = asDynamic()[index]\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun PluginArray.get(name:
String): Plugin? = asDynamic()[name]\n\n/**\n * Exposes the JavaScript
[MimeTypeArray](https://developer.mozilla.org/en/docs/Web/API/MimeTypeArray) to Kotlin\n */\npublic external
abstract class MimeTypeArray : ItemArrayLike<MimeType> {\n    override fun item(index: Int): MimeType?\n    fun
namedItem(name: String): MimeType?\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun MimeTypeArray.get(index:
Int): MimeType? = asDynamic()[index]\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun MimeTypeArray.get(name:
String): MimeType? = asDynamic()[name]\n\n/**\n * Exposes the JavaScript
[Plugin](https://developer.mozilla.org/en/docs/Web/API/Plugin) to Kotlin\n */\npublic external abstract class Plugin
: ItemArrayLike<MimeType> {\n    open val name: String\n    open val description: String\n    open val filename:
String\n    override fun item(index: Int): MimeType?\n    fun namedItem(name: String):
MimeType?\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun Plugin.get(index: Int):
MimeType? = asDynamic()[index]\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun Plugin.get(name: String):
MimeType? = asDynamic()[name]\n\n/**\n * Exposes the JavaScript
[MimeType](https://developer.mozilla.org/en/docs/Web/API/MimeType) to Kotlin\n */\npublic external abstract
class MimeType {\n    open val type: String\n    open val description: String\n    open val suffixes: String\n    open
val enabledPlugin: Plugin\n}\n\n/**\n * Exposes the JavaScript
[ImageBitmap](https://developer.mozilla.org/en/docs/Web/API/ImageBitmap) to Kotlin\n */\npublic external
abstract class ImageBitmap : CanvasImageSource, TexImageSource {\n    open val width: Int\n    open val height:
Int\n    fun close()\n}\n\npublic external interface ImageBitmapOptions {\n    var imageOrientation:
ImageOrientation? /* = ImageOrientation.NONE */\n        get() = definedExternally\n        set(value) =
definedExternally\n    var premultiplyAlpha: PremultiplyAlpha? /* = PremultiplyAlpha.DEFAULT */\n        get() =
definedExternally\n        set(value) = definedExternally\n    var colorSpaceConversion: ColorSpaceConversion? /* =
ColorSpaceConversion.DEFAULT */\n        get() = definedExternally\n        set(value) = definedExternally\n    var
resizeWidth: Int?\n        get() = definedExternally\n        set(value) = definedExternally\n    var resizeHeight: Int?\n
        get() = definedExternally\n        set(value) = definedExternally\n    var resizeQuality: ResizeQuality? /* =
ResizeQuality.LOW */\n        get() = definedExternally\n        set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun
ImageBitmapOptions(imageOrientation: ImageOrientation? = ImageOrientation.NONE, premultiplyAlpha:
PremultiplyAlpha? = PremultiplyAlpha.DEFAULT, colorSpaceConversion: ColorSpaceConversion? =
ColorSpaceConversion.DEFAULT, resizeWidth: Int? = undefined, resizeHeight: Int? = undefined, resizeQuality:
ResizeQuality? = ResizeQuality.LOW): ImageBitmapOptions {\n    val o = js(\"({})\")\n    o[\"imageOrientation\"]
= imageOrientation\n    o[\"premultiplyAlpha\"] = premultiplyAlpha\n    o[\"colorSpaceConversion\"] =
colorSpaceConversion\n    o[\"resizeWidth\"] = resizeWidth\n    o[\"resizeHeight\"] = resizeHeight\n}

```



```

o["resizeQuality"] = resizeQuality\n    return o\n}\n\n/**\n * Exposes the JavaScript
[MessageEvent](https://developer.mozilla.org/en/docs/Web/API/MessageEvent) to Kotlin\n */\npublic external open
class MessageEvent(type: String, eventInitDict: MessageEventInit = definedExternally) : Event {\n    open val data:
Any?\n    open val origin: String\n    open val lastEventId: String\n    open val source:
UnionMessagePortOrWindowProxy?\n    open val ports: Array<out MessagePort>\n    fun initMessageEvent(type:
String, bubbles: Boolean, cancelable: Boolean, data: Any?, origin: String, lastEventId: String, source:
UnionMessagePortOrWindowProxy?, ports: Array<MessagePort>)\n\n    companion object {\n        val NONE:
Short\n        val CAPTURING_PHASE: Short\n        val AT_TARGET: Short\n        val BUBBLING_PHASE:
Short\n    }\n}\n\npublic external interface MessageEventInit : EventInit {\n    var data: Any? /* = null */\n    get()
= definedExternally\n    set(value) = definedExternally\n    var origin: String? /* = \"\" */\n    get() =
definedExternally\n    set(value) = definedExternally\n    var lastEventId: String? /* = \"\" */\n    get() =
definedExternally\n    set(value) = definedExternally\n    var source: UnionMessagePortOrWindowProxy? /* =
null */\n    get() = definedExternally\n    set(value) = definedExternally\n    var ports: Array<MessagePort>? /*
= arrayOf() */\n    get() = definedExternally\n    set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun MessageEventInit(data: Any? = null,
origin: String? = \"\", lastEventId: String? = \"\", source: UnionMessagePortOrWindowProxy? = null, ports:
Array<MessagePort>? = arrayOf(), bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? =
false): MessageEventInit {\n    val o = js(\"({})\")\n    o[\"data\"] = data\n    o[\"origin\"] = origin\n
o[\"lastEventId\"] = lastEventId\n    o[\"source\"] = source\n    o[\"ports\"] = ports\n    o[\"bubbles\"] = bubbles\n
o[\"cancelable\"] = cancelable\n    o[\"composed\"] = composed\n    return o\n}\n\n/**\n * Exposes the JavaScript
[EventSource](https://developer.mozilla.org/en/docs/Web/API/EventSource) to Kotlin\n */\npublic external open
class EventSource(url: String, eventSourceInitDict: EventSourceInit = definedExternally) : EventTarget {\n    open
val url: String\n    open val withCredentials: Boolean\n    open val readyState: Short\n    var onopen: ((Event) ->
dynamic)?\n    var onmessage: ((MessageEvent) -> dynamic)?\n    var onerror: ((Event) -> dynamic)?\n    fun
close()\n\n    companion object {\n        val CONNECTING: Short\n        val OPEN: Short\n        val CLOSED:
Short\n    }\n}\n\npublic external interface EventSourceInit {\n    var withCredentials: Boolean? /* = false */\n
get() = definedExternally\n    set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun EventSourceInit(withCredentials:
Boolean? = false): EventSourceInit {\n    val o = js(\"({})\")\n    o[\"withCredentials\"] = withCredentials\n    return
o\n}\n\n/**\n * Exposes the JavaScript [WebSocket](https://developer.mozilla.org/en/docs/Web/API/WebSocket) to
Kotlin\n */\npublic external open class WebSocket(url: String, protocols: dynamic = definedExternally) :
EventTarget {\n    open val url: String\n    open val readyState: Short\n    open val bufferedAmount: Number\n    var
onopen: ((Event) -> dynamic)?\n    var onerror: ((Event) -> dynamic)?\n    var onclose: ((Event) ->
dynamic)?\n    open val extensions: String\n    open val protocol: String\n    var onmessage: ((MessageEvent) ->
dynamic)?\n    var binaryType: BinaryType\n    fun close(code: Short = definedExternally, reason: String =
definedExternally)\n    fun send(data: String)\n    fun send(data: Blob)\n    fun send(data: ArrayBuffer)\n    fun
send(data:
ArrayBufferView)\n\n    companion object {\n        val CONNECTING: Short\n        val OPEN: Short\n        val
CLOSING: Short\n        val CLOSED: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[CloseEvent](https://developer.mozilla.org/en/docs/Web/API/CloseEvent) to Kotlin\n */\npublic external open
class CloseEvent(type: String, eventInitDict: CloseEventInit = definedExternally) : Event {\n    open val wasClean:
Boolean\n    open val code: Short\n    open val reason: String\n\n    companion object {\n        val NONE: Short\n
        val CAPTURING_PHASE: Short\n        val AT_TARGET: Short\n        val BUBBLING_PHASE: Short\n    }\n}\n\npublic external interface CloseEventInit : EventInit {\n    var wasClean: Boolean? /* = false */\n    get() =
definedExternally\n    set(value) = definedExternally\n    var code: Short? /* = 0 */\n    get() =
definedExternally\n    set(value) = definedExternally\n    var reason: String? /* = \"\" */\n    get() =
definedExternally\n    set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun CloseEventInit(wasClean: Boolean? =

```

```

false, code: Short? = 0, reason: String? = "", bubbles: Boolean? = false, cancelable: Boolean? = false, composed:
Boolean? = false): CloseEventInit {\n  val o = js("{}")\n  o["wasClean"] = wasClean\n  o["code"] = code\n  o["reason"] = reason\n  o["bubbles"] = bubbles\n  o["cancelable"] = cancelable\n  o["composed"] =
composed\n  return o\n}\n\n**\n * Exposes the JavaScript
[MessageChannel](https://developer.mozilla.org/en/docs/Web/API/MessageChannel) to Kotlin\n *^npublic external
open class MessageChannel {\n  open val port1: MessagePort\n  open val port2: MessagePort\n}\n\n**\n *
Exposes the JavaScript [MessagePort](https://developer.mozilla.org/en/docs/Web/API/MessagePort) to Kotlin\n
*^npublic external abstract class MessagePort : EventTarget, UnionMessagePortOrWindowProxy,
UnionMessagePortOrServiceWorker, UnionClientOrMessagePortOrServiceWorker {\n  open var onmessage:
((MessageEvent) -> dynamic)?\n  fun postMessage(message: Any?, transfer: Array<dynamic> =
definedExternally)\n  fun start()\n  fun close()\n}\n\n**\n * Exposes the JavaScript
[BroadcastChannel](https://developer.mozilla.org/en/docs/Web/API/BroadcastChannel) to Kotlin\n *^npublic
external open class BroadcastChannel(name: String) : EventTarget {\n  open val name: String\n  var onmessage:
((MessageEvent) -> dynamic)?\n  fun postMessage(message: Any?)\n  fun close()\n}\n\n**\n * Exposes the
JavaScript [WorkerGlobalScope](https://developer.mozilla.org/en/docs/Web/API/WorkerGlobalScope) to Kotlin\n
*^npublic external abstract class WorkerGlobalScope : EventTarget, WindowOrWorkerGlobalScope,
GlobalPerformance {\n  open val self: WorkerGlobalScope\n  open val location: WorkerLocation\n  open val
navigator: WorkerNavigator\n  open var onerror: ((dynamic, String, Int, Int, Any?) -> dynamic)?\n  open var
onlanguagechange: ((Event) -> dynamic)?\n  open var onoffline: ((Event) -> dynamic)?\n  open var ononline:
((Event) -> dynamic)?\n  open var onrejectionhandled: ((Event) -> dynamic)?\n  open var onunhandledrejection:
((PromiseRejectionEvent) -> dynamic)?\n  fun importScripts(vararg urls: String)\n}\n\n**\n * Exposes the
JavaScript
[DedicatedWorkerGlobalScope](https://developer.mozilla.org/en/docs/Web/API/DedicatedWorkerGlobalScope) to
Kotlin\n *^npublic external abstract class DedicatedWorkerGlobalScope : WorkerGlobalScope {\n  open var
onmessage: ((MessageEvent) -> dynamic)?\n  fun postMessage(message: Any?, transfer: Array<dynamic> =
definedExternally)\n  fun close()\n}\n\n**\n * Exposes the JavaScript
[SharedWorkerGlobalScope](https://developer.mozilla.org/en/docs/Web/API/SharedWorkerGlobalScope) to
Kotlin\n *^npublic external abstract class SharedWorkerGlobalScope : WorkerGlobalScope {\n  open val name:
String\n  open val applicationCache: ApplicationCache\n  open var onconnect: ((Event) -> dynamic)?\n  fun
close()\n}\n\n**\n * Exposes the JavaScript
[AbstractWorker](https://developer.mozilla.org/en/docs/Web/API/AbstractWorker) to Kotlin\n *^npublic external
interface AbstractWorker {\n  var onerror: ((Event) -> dynamic)?\n  get() = definedExternally\n  set(value)
= definedExternally\n}\n\n**\n * Exposes the JavaScript
[Worker](https://developer.mozilla.org/en/docs/Web/API/Worker) to Kotlin\n *^npublic external open class
Worker(scriptURL: String, options: WorkerOptions = definedExternally) : EventTarget, AbstractWorker {\n  var
onmessage: ((MessageEvent) -> dynamic)?\n  override var onerror: ((Event) -> dynamic)?\n  fun terminate()\n
fun postMessage(message: Any?, transfer: Array<dynamic> = definedExternally)\n}\n\npublic external interface
WorkerOptions {\n  var type: WorkerType? /* = WorkerType.CLASSIC */\n  get() = definedExternally\n  set(value) =
definedExternally\n  var credentials: RequestCredentials? /* = RequestCredentials.OMIT */\n  get() =
definedExternally\n  set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun WorkerOptions(type: WorkerType? =
WorkerType.CLASSIC, credentials: RequestCredentials? = RequestCredentials.OMIT): WorkerOptions {\n  val o
= js("{}")\n  o["type"] = type\n  o["credentials"] = credentials\n  return o\n}\n\n**\n * Exposes the
JavaScript [SharedWorker](https://developer.mozilla.org/en/docs/Web/API/SharedWorker) to Kotlin\n *^npublic
external open class SharedWorker(scriptURL: String, name: String = definedExternally, options: WorkerOptions =
definedExternally) : EventTarget, AbstractWorker {\n  open val port: MessagePort\n  override var onerror:
((Event) -> dynamic)?\n}\n\n**\n * Exposes the JavaScript
[NavigatorConcurrentHardware](https://developer.mozilla.org/en/docs/Web/API/NavigatorConcurrentHardware) to

```

```

Kotlin\n *\npublic external interface NavigatorConcurrentHardware {\n    val hardwareConcurrency:
Number\n}\n\n/**\n * Exposes the JavaScript
[WorkerNavigator](https://developer.mozilla.org/en/docs/Web/API/WorkerNavigator) to Kotlin\n *\npublic
external abstract class WorkerNavigator : NavigatorID, NavigatorLanguage, NavigatorOnLine,
NavigatorConcurrentHardware {\n    open val serviceWorker: ServiceWorkerContainer\n}\n\n/**\n * Exposes the
JavaScript [WorkerLocation](https://developer.mozilla.org/en/docs/Web/API/WorkerLocation) to Kotlin\n
*\npublic external abstract class WorkerLocation {\n    open val href: String\n    open val origin: String\n    open val
protocol: String\n    open val host: String\n    open val hostname: String\n    open val port: String\n    open val
pathname: String\n    open val search: String\n    open val hash: String\n}\n\n/**\n * Exposes the JavaScript
[Storage](https://developer.mozilla.org/en/docs/Web/API/Storage) to Kotlin\n *\npublic external abstract class
Storage {\n    open val length: Int\n    fun key(index: Int): String?\n    fun removeItem(key: String)\n    fun clear()\n
fun getItem(key: String): String?\n    fun setItem(key: String, value:
String)\n}\n\n@Suppress(\n"INVISIBLE_REFERENCE",
\n"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Storage.get(key: String):
String? = asDynamic()[key]\n\n@Suppress(\n"INVISIBLE_REFERENCE",
\n"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun Storage.set(key: String, value:
String) { asDynamic()[key] = value }\n\n/**\n * Exposes the JavaScript
[WindowSessionStorage](https://developer.mozilla.org/en/docs/Web/API/WindowSessionStorage) to Kotlin\n
*\npublic external interface WindowSessionStorage {\n    val sessionStorage: Storage\n}\n\n/**\n * Exposes the
JavaScript [WindowLocalStorage](https://developer.mozilla.org/en/docs/Web/API/WindowLocalStorage) to
Kotlin\n *\npublic external interface WindowLocalStorage {\n    val localStorage: Storage\n}\n\n/**\n * Exposes
the JavaScript [StorageEvent](https://developer.mozilla.org/en/docs/Web/API/StorageEvent) to Kotlin\n *\npublic
external open class StorageEvent(type: String, eventInitDict: StorageEventInit = definedExternally) : Event {\n
    open val key: String?\n    open val oldValue: String?\n    open val newValue: String?\n    open val url: String\n
    open val storageArea: Storage?\n\n    companion object {\n        val NONE: Short\n        val CAPTURING_PHASE:
Short\n        val AT_TARGET: Short\n        val BUBBLING_PHASE: Short\n    }\n\n    public external interface
StorageEventInit : EventInit {\n        var key: String? /* = null */\n        get() = definedExternally\n        set(value) =
definedExternally\n        var oldValue: String? /* = null */\n        get() = definedExternally\n        set(value) =
definedExternally\n        var newValue: String? /* = null */\n        get() = definedExternally\n        set(value) =
definedExternally\n        var url: String? /* = "" */\n        get() = definedExternally\n        set(value) =
definedExternally\n        var storageArea: Storage? /* = null */\n        get() = definedExternally\n        set(value) =
definedExternally\n    }\n\n    @Suppress(\n"INVISIBLE_REFERENCE",
\n"INVISIBLE_MEMBER")\n    @kotlin.internal.InlineOnly\n    public inline fun StorageEventInit(key: String? = null,
oldValue: String? = null, newValue: String? = null, url: String? = "", storageArea: Storage? = null, bubbles:
Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false): StorageEventInit {\n        val o =
js("{}")\n        o["key"] = key\n        o["oldValue"] = oldValue\n        o["newValue"] = newValue\n        o["url"] =
url\n        o["storageArea"] = storageArea\n        o["bubbles"] = bubbles\n        o["cancelable"] = cancelable\n
        o["composed"] = composed\n        return o\n    }\n\n    public external abstract class HTMLAppletElement :
HTMLElement {\n        open var align: String\n        open var alt: String\n        open var archive: String\n        open var code:
String\n        open var codeBase: String\n        open var height: String\n        open var hspace: Int\n        open var name:
String\n        open var _object: String\n        open var vspace: Int\n        open var width: String\n\n        companion object {\n            val ELEMENT_NODE: Short\n            val ATTRIBUTE_NODE: Short\n            val TEXT_NODE: Short\n            val
CDATA_SECTION_NODE: Short\n            val ENTITY_REFERENCE_NODE: Short\n            val ENTITY_NODE: Short\n            val
PROCESSING_INSTRUCTION_NODE: Short\n            val COMMENT_NODE: Short\n            val
DOCUMENT_NODE: Short\n            val DOCUMENT_TYPE_NODE: Short\n            val
DOCUMENT_FRAGMENT_NODE: Short\n            val NOTATION_NODE: Short\n            val
DOCUMENT_POSITION_DISCONNECTED: Short\n            val DOCUMENT_POSITION_PRECEDING: Short\n            val
DOCUMENT_POSITION_FOLLOWING: Short\n            val DOCUMENT_POSITION_CONTAINS: Short\n

```

```

    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLMarqueeElement](https://developer.mozilla.org/en/docs/Web/API/HTMLMarqueeElement) to Kotlin\n
*\npublic external abstract class HTMLMarqueeElement : HTMLElement {\n    open var behavior: String\n    open
var bgColor: String\n    open var direction: String\n    open var height: String\n    open var hspace: Int\n    open var
loop: Int\n    open var scrollAmount: Int\n    open var scrollDelay: Int\n    open var trueSpeed: Boolean\n    open var
vspace: Int\n    open var width: String\n    open var onbounce: ((Event) -> dynamic)?\n    open var onfinish: ((Event)
-> dynamic)?\n    open var onstart: ((Event) -> dynamic)?\n    fun start()\n    fun stop()\n\n    companion object {\n
        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val
CDATA_SECTION_NODE: Short\n        val ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE:
Short\n        val PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[HTMLFrameSetElement](https://developer.mozilla.org/en/docs/Web/API/HTMLFrameSetElement) to Kotlin\n
*\npublic external abstract class HTMLFrameSetElement : HTMLElement, WindowEventHandlers {\n    open var
cols: String\n    open var rows: String\n\n    companion object {\n        val ELEMENT_NODE: Short\n        val
ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\npublic external abstract class
HTMLFrameElement : HTMLElement {\n    open var name: String\n    open var scrolling: String\n    open var src:
String\n    open var frameBorder: String\n    open var longDesc: String\n    open var noResize: Boolean\n    open val
contentDocument: Document?\n    open val contentWindow: Window?\n    open var marginHeight: String\n    open
var marginWidth: String\n\n    companion object {\n        val ELEMENT_NODE: Short\n        val
ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\npublic external abstract class
HTMLDirectoryElement : HTMLElement {\n    open var compact: Boolean\n\n    companion object {\n        val
ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val
CDATA_SECTION_NODE: Short\n        val ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE:
Short\n        val PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val

```

```

DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }n}\n\n/**\n * Exposes the JavaScript
[HTMLFontElement](https://developer.mozilla.org/en/docs/Web/API/HTMLFontElement) to Kotlin\n *\npublic
external abstract class HTMLFontElement : HTMLElement {\n    open var color: String\n    open var face: String\n
open var size: String\n\n    companion object {\n        val ELEMENT_NODE: Short\n        val
ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }n}\n\npublic external interface External
{\n    fun AddSearchProvider()\n    fun IsSearchProviderInstalled()\n}\n\npublic external interface EventInit {\n
var bubbles: Boolean? /* = false */\n    get() = definedExternally\n    set(value) = definedExternally\n    var
cancelable: Boolean? /* = false */\n    get() = definedExternally\n    set(value) = definedExternally\n    var
composed: Boolean? /* = false */\n    get() = definedExternally\n    set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun EventInit(bubbles: Boolean? = false,
cancelable: Boolean? = false, composed: Boolean? = false): EventInit {\n    val o = js("{}")\n    o["bubbles"] =
bubbles\n    o["cancelable"] = cancelable\n    o["composed"] = composed\n    return o\n}\n\n/**\n * Exposes the
JavaScript [CustomEvent](https://developer.mozilla.org/en/docs/Web/API/CustomEvent) to Kotlin\n *\npublic
external open class CustomEvent(type: String, eventInitDict: CustomEventInit = definedExternally) : Event {\n
open val detail: Any?\n    fun initCustomEvent(type: String, bubbles: Boolean, cancelable: Boolean, detail:
Any?)\n\n    companion object {\n        val NONE: Short\n        val CAPTURING_PHASE: Short\n        val
AT_TARGET: Short\n        val BUBBLING_PHASE: Short\n    }n}\n\npublic external interface CustomEventInit :
EventInit {\n    var detail: Any? /* = null */\n    get() = definedExternally\n    set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun CustomEventInit(detail: Any? = null,
bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false): CustomEventInit {\n    val o
= js("{}")\n    o["detail"] = detail\n    o["bubbles"] = bubbles\n    o["cancelable"] = cancelable\n
o["composed"] = composed\n    return o\n}\n\npublic external interface EventListenerOptions {\n    var capture:
Boolean? /* = false */\n    get() = definedExternally\n    set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun EventListenerOptions(capture:
Boolean? = false): EventListenerOptions {\n    val o = js("{}")\n    o["capture"] = capture\n    return
o\n}\n\npublic external interface AddEventListenerOptions : EventListenerOptions {\n    var passive: Boolean? /* =
false */\n    get() = definedExternally\n    set(value) = definedExternally\n    var once: Boolean? /* = false */\n
get() = definedExternally\n    set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun AddEventListenerOptions(passive:
Boolean? = false, once: Boolean? = false, capture: Boolean? = false): AddEventListenerOptions {\n    val o =
js("{}")\n    o["passive"] = passive\n    o["once"] = once\n    o["capture"] = capture\n    return o\n}\n\npublic
external interface NonElementParentNode {\n    fun getElementById(elementId: String): Element?\n}\n\n/**\n *
Exposes the JavaScript
[DocumentOrShadowRoot](https://developer.mozilla.org/en/docs/Web/API/DocumentOrShadowRoot) to Kotlin\n

```

```

*\npublic external interface DocumentOrShadowRoot {\n    val fullscreenElement: Element?\n        get() =
definedExternally\n}\n\n/**\n * Exposes the JavaScript
[ParentNode](https://developer.mozilla.org/en/docs/Web/API/ParentNode) to Kotlin\n
*\npublic external interface
ParentNode {\n    val children: HTMLCollection\n    val firstElementChild: Element?\n        get() =
definedExternally\n    val lastElementChild: Element?\n        get() = definedExternally\n    val childElementCount:
Int\n    fun prepend(vararg nodes: dynamic)\n    fun append(vararg nodes: dynamic)\n    fun querySelector(selectors:
String): Element?\n    fun querySelectorAll(selectors: String): NodeList\n}\n\n/**\n * Exposes the JavaScript
[NonDocumentTypeChildNode](https://developer.mozilla.org/en/docs/Web/API/NonDocumentTypeChildNode) to
Kotlin\n
*\npublic external interface NonDocumentTypeChildNode {\n    val previousElementSibling: Element?\n        get() =
definedExternally\n    val nextElementSibling: Element?\n        get() = definedExternally\n}\n\n/**\n *
Exposes the JavaScript [ChildNode](https://developer.mozilla.org/en/docs/Web/API/ChildNode) to Kotlin\n
*\npublic external interface ChildNode {\n    fun before(vararg nodes: dynamic)\n    fun after(vararg nodes:
dynamic)\n    fun replaceWith(vararg nodes: dynamic)\n    fun remove()\n}\n\n/**\n * Exposes the JavaScript
[Slotable](https://developer.mozilla.org/en/docs/Web/API/Slotable) to Kotlin\n
*\npublic external interface Slotable
{\n    val assignedSlot: HTMLSlotElement?\n        get() = definedExternally\n}\n\n/**\n * Exposes the JavaScript
[NodeList](https://developer.mozilla.org/en/docs/Web/API/NodeList) to Kotlin\n
*\npublic external abstract class
NodeList : ItemArrayLike<Node> {\n    override fun item(index: Int):
Node?\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun NodeList.get(index: Int):
Node? = asDynamic()[index]\n\n/**\n * Exposes the JavaScript
[HTMLCollection](https://developer.mozilla.org/en/docs/Web/API/HTMLCollection) to Kotlin\n
*\npublic
external abstract class HTMLCollection : ItemArrayLike<Element>, UnionElementOrHTMLCollection {\n
    override fun item(index: Int): Element?\n    fun namedItem(name: String):
Element?\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun HTMLCollection.get(index:
Int): Element? = asDynamic()[index]\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun HTMLCollection.get(name:
String): Element? = asDynamic()[name]\n\n/**\n * Exposes the JavaScript
[MutationObserver](https://developer.mozilla.org/en/docs/Web/API/MutationObserver) to Kotlin\n
*\npublic
external open class MutationObserver(callback: (Array<MutationRecord>, MutationObserver) -> Unit) {\n    fun
observe(target: Node, options: MutationObserverInit = definedExternally)\n    fun disconnect()\n    fun
takeRecords(): Array<MutationRecord>\n}\n\n/**\n * Exposes the JavaScript
[MutationObserverInit](https://developer.mozilla.org/en/docs/Web/API/MutationObserverInit) to Kotlin\n
*\npublic external interface MutationObserverInit {\n    var childList: Boolean? /* = false */\n        get() =
definedExternally\n    set(value) = definedExternally\n    var attributes: Boolean?\n        get() =
definedExternally\n    set(value) = definedExternally\n    var characterData: Boolean?\n        get() =
definedExternally\n    set(value) = definedExternally\n    var subtree: Boolean? /* = false */\n        get() =
definedExternally\n    set(value) = definedExternally\n    var attributeOldValue: Boolean?\n        get() =
definedExternally\n    set(value) = definedExternally\n    var characterDataOldValue: Boolean?\n        get() =
definedExternally\n    set(value) = definedExternally\n    var attributeFilter: Array<String>?\n        get() =
definedExternally\n    set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun MutationObserverInit(childList:
Boolean? = false, attributes: Boolean? = undefined, characterData: Boolean? = undefined, subtree: Boolean? = false,
attributeOldValue: Boolean? = undefined, characterDataOldValue: Boolean? = undefined, attributeFilter:
Array<String>? = undefined): MutationObserverInit {\n    val o = js("{}")\n    o["childList"] = childList\n
o["attributes"] = attributes\n    o["characterData"] = characterData\n    o["subtree"] = subtree\n
o["attributeOldValue"] = attributeOldValue\n    o["characterDataOldValue"] = characterDataOldValue\n
o["attributeFilter"] = attributeFilter\n    return o\n}\n\n/**\n * Exposes the JavaScript

```

```

[MutationRecord](https://developer.mozilla.org/en/docs/Web/API/MutationRecord) to Kotlin\n */\npublic external
abstract class MutationRecord {\n  open val type: String\n  open val target: Node\n  open val addedNodes:
NodeList\n  open val removedNodes: NodeList\n  open val previousSibling: Node?\n  open val nextSibling:
Node?\n  open val attributeName: String?\n  open val attributeNamespace: String?\n  open val oldValue:
String?\n}\n\n/**\n * Exposes the JavaScript [Node](https://developer.mozilla.org/en/docs/Web/API/Node) to
Kotlin\n */\npublic external abstract class Node : EventTarget {\n  open val nodeType: Short\n  open val
nodeName: String\n  open val baseURI: String\n  open val isConnected: Boolean\n  open val ownerDocument:
Document?\n  open val parentNode: Node?\n  open val parentElement: Element?\n  open val childNodes:
NodeList\n  open val firstChild: Node?\n  open val lastChild: Node?\n  open val previousSibling: Node?\n
open val nextSibling: Node?\n  open var nodeValue: String?\n  open var textContent: String?\n  fun
getRootNode(options: GetRootNodeOptions = definedExternally): Node\n  fun hasChildNodes(): Boolean\n  fun
normalize()\n  fun cloneNode(deep: Boolean = definedExternally): Node\n  fun isEqualNode(otherNode: Node?):
Boolean\n  fun isSameNode(otherNode: Node?): Boolean\n  fun compareDocumentPosition(other: Node): Short\n
fun contains(other: Node?): Boolean\n  fun lookupPrefix(namespace: String?): String?\n  fun
lookupNamespaceURI(prefix: String?): String?\n  fun isDefaultNamespace(namespace: String?): Boolean\n  fun
insertBefore(node: Node, child: Node?): Node\n  fun appendChild(node: Node): Node\n  fun replaceChild(node:
Node, child: Node): Node\n  fun removeChild(child: Node): Node\n\n  companion object {\n    val
ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val
CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE:
Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n  }\n}\n\npublic external interface
GetRootNodeOptions {\n  var composed: Boolean? /* = false */\n  get() = definedExternally\n  set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun GetRootNodeOptions(composed:
Boolean? = false): GetRootNodeOptions {\n  val o = js(\"({})\")\n  o[\"composed\"] = composed\n  return
o\n}\n\n/**\n * Exposes the JavaScript [Document](https://developer.mozilla.org/en/docs/Web/API/Document) to
Kotlin\n */\npublic external open class Document : Node, GlobalEventHandlers,
DocumentAndElementEventHandlers, NonElementParentNode, DocumentOrShadowRoot, ParentNode,
GeometryUtils {\n  open val implementation: DOMImplementation\n  open val URL: String\n  open val
documentURI: String\n  open val origin: String\n  open val compatMode: String\n  open val characterSet:
String\n  open val charset: String\n  open val inputEncoding: String\n  open val contentType: String\n  open val
doctype: DocumentType?\n  open val documentElement: Element?\n  open val location: Location?\n  var
domain: String\n  open val referrer: String\n  var cookie: String\n  open val lastModified: String\n  open val
readyState: DocumentReadyState\n  var title: String\n  var dir: String\n  var body: HTMLElement?\n  open val
head: HTMLHeadElement?\n  open val images: HTMLCollection\n  open val embeds: HTMLCollection\n  open
val plugins: HTMLCollection\n  open val links: HTMLCollection\n  open val forms: HTMLCollection\n  open
val scripts: HTMLCollection\n  open val currentScript: HTMLScriptElement?\n  open val defaultView:
Window?\n  open val activeElement: Element?\n  var designMode: String\n  var onreadystatechange: ((Event) ->
dynamic)?\n  var fgColor: String\n  var linkColor: String\n  var vlinkColor: String\n  var alinkColor: String\n
var bgColor: String\n  open val anchors: HTMLCollection\n  open val applets: HTMLCollection\n  open val all:
HTMLAllCollection\n  open val scrollingElement: Element?\n  open val styleSheets: StyleSheetList\n  open val
rootElement: SVGSVGElement?\n  open val fullscreenEnabled: Boolean\n  open val fullscreen: Boolean\n  var
onfullscreenchange: ((Event) -> dynamic)?\n  var onfullscreenerror: ((Event) -> dynamic)?\n  override var

```

```

onabort: ((Event) -> dynamic)?\n  override var onBlur: ((FocusEvent) -> dynamic)?\n  override var onCancel:
((Event) -> dynamic)?\n  override var onCancelplay: ((Event) -> dynamic)?\n  override var onCancelplaythrough:
((Event) -> dynamic)?\n  override var onChange: ((Event) -> dynamic)?\n  override var onclick: ((MouseEvent) ->
dynamic)?\n  override var onClose: ((Event) -> dynamic)?\n  override var oncontextmenu: ((MouseEvent) ->
dynamic)?\n  override var oncuechange: ((Event) -> dynamic)?\n  override var ondblclick: ((MouseEvent) ->
dynamic)?\n  override var ondrag: ((DragEvent) -> dynamic)?\n  override var ondragend: ((DragEvent) ->
dynamic)?\n  override var ondragenter: ((DragEvent) -> dynamic)?\n  override var ondragexit: ((DragEvent) ->
dynamic)?\n  override var ondragleave: ((DragEvent) -> dynamic)?\n  override var ondragover: ((DragEvent) ->
dynamic)?\n  override var ondragstart: ((DragEvent) -> dynamic)?\n  override var ondrop: ((DragEvent) ->
dynamic)?\n  override var ondurationchange: ((Event) -> dynamic)?\n  override var onemptied: ((Event) ->
dynamic)?\n  override var onended: ((Event) -> dynamic)?\n  override var onerror: ((dynamic, String, Int, Int,
Any?) -> dynamic)?\n  override var onFocus: ((FocusEvent) -> dynamic)?\n  override var oninput: ((InputEvent) -
> dynamic)?\n  override var oninvalid: ((Event) -> dynamic)?\n  override var onkeydown: ((KeyboardEvent) ->
dynamic)?\n  override var onkeypress: ((KeyboardEvent) -> dynamic)?\n  override var onkeyup:
((KeyboardEvent) -> dynamic)?\n  override var onload: ((Event) -> dynamic)?\n  override var onloadeddata:
((Event) -> dynamic)?\n  override var onloadedmetadata: ((Event) -> dynamic)?\n  override var onloadend:
((Event) -> dynamic)?\n  override var onloadstart: ((ProgressEvent) -> dynamic)?\n  override var onmousedown:
((MouseEvent) -> dynamic)?\n  override var onmouseenter: ((MouseEvent) -> dynamic)?\n  override var
onmouseleave: ((MouseEvent) -> dynamic)?\n  override var onmousemove: ((MouseEvent) -> dynamic)?\n
override var onmouseout: ((MouseEvent) -> dynamic)?\n  override var onmouseover: ((MouseEvent) ->
dynamic)?\n  override var onmouseup: ((MouseEvent) -> dynamic)?\n  override var onwheel: ((WheelEvent) ->
dynamic)?\n  override var onpause: ((Event) -> dynamic)?\n  override var onplay: ((Event) -> dynamic)?\n
override var onplaying: ((Event) -> dynamic)?\n  override var onprogress: ((ProgressEvent) -> dynamic)?\n
override var onratechange: ((Event) -> dynamic)?\n  override var onreset: ((Event) -> dynamic)?\n  override var
onresize: ((Event) -> dynamic)?\n  override var onscroll: ((Event) -> dynamic)?\n  override var onseeked:
((Event) -> dynamic)?\n  override var onseeking: ((Event) -> dynamic)?\n  override var onselect: ((Event) ->
dynamic)?\n  override var onshow: ((Event) -> dynamic)?\n  override var onstalled: ((Event) -> dynamic)?\n
override var onsubmit: ((Event) -> dynamic)?\n  override var onsuspend: ((Event) -> dynamic)?\n  override var
ontimeupdate: ((Event) -> dynamic)?\n  override var ontoggle: ((Event) -> dynamic)?\n  override var
onvolumechange: ((Event) -> dynamic)?\n  override var onwaiting: ((Event) -> dynamic)?\n  override var
ongotpointercapture: ((PointerEvent) -> dynamic)?\n  override var onlostpointercapture: ((PointerEvent) ->
dynamic)?\n  override var onpointerdown: ((PointerEvent) -> dynamic)?\n  override var onpointermove:
((PointerEvent) -> dynamic)?\n  override var onpointerup: ((PointerEvent) -> dynamic)?\n  override var
onpointercancel: ((PointerEvent) -> dynamic)?\n  override var onpointerover: ((PointerEvent) -> dynamic)?\n
override var onpointerout: ((PointerEvent) -> dynamic)?\n  override var onpointerenter: ((PointerEvent) ->
dynamic)?\n  override var onpointerleave: ((PointerEvent) -> dynamic)?\n  override var oncopy:
((ClipboardEvent) -> dynamic)?\n  override var oncut: ((ClipboardEvent) -> dynamic)?\n  override var onpaste:
((ClipboardEvent) -> dynamic)?\n  override val fullscreenElement: Element?\n  override val children:
HTMLCollection\n  override val firstElementChild: Element?\n  override val lastElementChild: Element?\n
override val childElementCount: Int\n  fun getElementsByTagName(qualifiedName: String): HTMLCollection\n
fun getElementsByTagNameNS(namespace: String?, localName: String): HTMLCollection\n  fun
getElementsByTagNameNS(namespace: String?, localName: String, options: ElementCreationOptions = definedExternally): HTMLCollection\n
fun getElementsByTagNameNS(namespace: String?, qualifiedName: String, options: ElementCreationOptions = definedExternally): HTMLCollection\n
fun createElement(localName: String, options: ElementCreationOptions = definedExternally): Element\n
fun createElementNS(namespace: String?, qualifiedName: String, options: ElementCreationOptions = definedExternally): Element\n
fun createDocumentFragment(): DocumentFragment\n  fun createTextNode(data: String): Text\n  fun
createCDATASection(data: String): CDATASection\n  fun createComment(data: String): Comment\n  fun
createProcessingInstruction(target: String, data: String): ProcessingInstruction\n  fun importNode(node: Node,
deep: Boolean = definedExternally): Node\n  fun adoptNode(node: Node): Node\n  fun

```



```

createAttribute(localName: String): Attr\n fun createAttributeNS(namespace: String?, qualifiedName: String):
Attr\n fun createEvent(`interface`: String): Event\n fun createRange(): Range\n fun createNodeIterator(root:
Node, whatToShow: Int = definedExternally, filter: NodeFilter? = definedExternally): NodeIterator\n fun
createNodeIterator(root: Node, whatToShow: Int = definedExternally, filter: ((Node) -> Short)? =
definedExternally): NodeIterator\n fun createTreeWalker(root: Node, whatToShow: Int = definedExternally, filter:
NodeFilter? = definedExternally): TreeWalker\n fun createTreeWalker(root: Node, whatToShow: Int =
definedExternally, filter: ((Node) -> Short)? = definedExternally): TreeWalker\n fun
getElementsByName(elementName: String): NodeList\n fun open(type: String = definedExternally, replace:
String = definedExternally): Document\n fun open(url: String, name: String, features: String): Window\n fun
close()\n fun write(vararg text: String)\n fun writeln(vararg text: String)\n fun hasFocus(): Boolean\n fun
execCommand(commandId: String, showUI: Boolean = definedExternally, value: String = definedExternally):
Boolean\n fun queryCommandEnabled(commandId: String): Boolean\n fun
queryCommandIndeterm(commandId: String): Boolean\n fun queryCommandState(commandId: String):
Boolean\n fun queryCommandSupported(commandId: String): Boolean\n fun
queryCommandValue(commandId: String): String\n fun clear()\n fun captureEvents()\n fun releaseEvents()\n
fun elementFromPoint(x: Double, y: Double): Element?\n fun elementsFromPoint(x: Double, y: Double):
Array<Element>\n fun caretPositionFromPoint(x: Double, y: Double): CaretPosition?\n fun createTouch(view:
Window, target: EventTarget, identifier: Int, pageX: Int, pageY: Int, screenX: Int, screenY: Int): Touch\n fun
createTouchList(vararg touches: Touch): TouchList\n fun exitFullscreen(): Promise<Unit>\n override fun
getElementById(elementId: String): Element?\n override fun prepend(vararg nodes: dynamic)\n override fun
append(vararg nodes: dynamic)\n override fun querySelector(selectors: String): Element?\n override fun
querySelectorAll(selectors: String): NodeList\n override fun getBoxQuads(options: BoxQuadOptions /* =
definedExternally */): Array<DOMQuad>\n override fun convertQuadFromNode(quad: dynamic, from: dynamic,
options: ConvertCoordinateOptions /* = definedExternally */): DOMQuad\n override fun
convertRectFromNode(rect: DOMRectReadOnly, from: dynamic, options: ConvertCoordinateOptions /* =
definedExternally */): DOMQuad\n override fun convertPointFromNode(point: DOMPointInit, from: dynamic,
options: ConvertCoordinateOptions /* = definedExternally */): DOMPoint\n\n companion object {\n val
ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n
}\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun Document.get(name: String):
dynamic = asDynamic()[name]\n\n/**\n * Exposes the JavaScript
[XMLDocument](https://developer.mozilla.org/en/docs/Web/API/XMLDocument) to Kotlin\n */\npublic external
open class XMLDocument : Document {\n companion object {\n val ELEMENT_NODE: Short\n val
ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val
ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val
PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n

```

```

    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\npublic external interface
ElementCreationOptions {\n    var `is`: String?\n    get() = definedExternally\n    set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n\n@kotlin.internal.InlineOnly\n\npublic inline fun ElementCreationOptions(`is`: String?
= undefined): ElementCreationOptions {\n    val o = js(\"({})\")\n    o[\"is\"] = `is`\n    return o\n}\n\n/**\n *
Exposes the JavaScript
[DOMImplementation](https://developer.mozilla.org/en/docs/Web/API/DOMImplementation) to Kotlin\n
*\n\npublic external abstract class DOMImplementation {\n    fun createDocumentType(qualifiedName: String,
publicId: String, systemId: String): DocumentType\n    fun createDocument(namespace: String?, qualifiedName:
String, doctype: DocumentType? = definedExternally): XMLDocument\n    fun createHTMLDocument(title: String
= definedExternally): Document\n    fun hasFeature(): Boolean\n}\n\n/**\n * Exposes the JavaScript
[DocumentType](https://developer.mozilla.org/en/docs/Web/API/DocumentType) to Kotlin\n
*\n\npublic external
abstract class DocumentType : Node, ChildNode {\n    open val name: String\n    open val publicId: String\n    open
val systemId: String\n\n    companion object {\n        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE:
Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[DocumentFragment](https://developer.mozilla.org/en/docs/Web/API/DocumentFragment) to Kotlin\n
*\n\npublic
external open class DocumentFragment : Node, NonElementParentNode, ParentNode {\n    override val children:
HTMLCollection\n    override val firstElementChild: Element?\n    override val lastElementChild: Element?\n
    override val childElementCount: Int\n    override fun getElementById(elementId: String): Element?\n    override fun
prepend(vararg nodes: dynamic)\n    override fun append(vararg nodes: dynamic)\n    override fun
querySelector(selectors: String): Element?\n    override fun querySelectorAll(selectors: String): NodeList\n\n
    companion object {\n        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE: Short\n        val
TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val ENTITY_REFERENCE_NODE:
Short\n        val ENTITY_NODE: Short\n        val PROCESSING_INSTRUCTION_NODE: Short\n        val
COMMENT_NODE: Short\n        val DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n
        val DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[ShadowRoot](https://developer.mozilla.org/en/docs/Web/API/ShadowRoot) to Kotlin\n
*\n\npublic external open
class ShadowRoot : DocumentFragment, DocumentOrShadowRoot {\n    open val mode: ShadowRootMode\n    open val host: Element\n    override val fullscreenElement: Element?\n\n    companion object {\n        val
ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val
CDATA_SECTION_NODE: Short\n        val ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE:
Short\n        val PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n

```

```

    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n} \n \n /** \n * Exposes the JavaScript
[Element](https://developer.mozilla.org/en/docs/Web/API/Element) to Kotlin \n * \n public external abstract class
Element : Node, ParentNode, NonDocumentTypeChildNode, ChildNode, Slotable, GeometryUtils,
UnionElementOrHTMLCollection, UnionElementOrRadioNodeList, UnionElementOrMouseEvent,
UnionElementOrProcessingInstruction { \n    open val namespaceURI: String? \n    open val prefix: String? \n    open
val localName: String \n    open val tagName: String \n    open var id: String \n    open var className: String \n    open
val classList: DOMTokenList \n    open var slot: String \n    open val attributes: NamedNodeMap \n    open val
shadowRoot: ShadowRoot? \n    open var scrollTop: Double \n    open var scrollLeft: Double \n    open val
scrollWidth: Int \n    open val scrollHeight: Int \n    open val clientTop: Int \n    open val clientLeft: Int \n    open val
clientWidth: Int \n    open val clientHeight: Int \n    open var innerHTML: String \n    open var outerHTML: String \n
fun hasAttributes(): Boolean \n    fun getAttributeNames(): Array<String> \n    fun getAttribute(qualifiedName:
String): String? \n    fun getAttributeNS(namespace: String?, localName: String): String? \n    fun
setAttribute(qualifiedName: String, value: String) \n    fun setAttributeNS(namespace: String?, qualifiedName:
String, value: String) \n    fun removeAttribute(qualifiedName: String) \n    fun removeAttributeNS(namespace:
String?, localName: String) \n    fun hasAttribute(qualifiedName: String): Boolean \n    fun
hasAttributeNS(namespace: String?, localName: String): Boolean \n    fun getAttributeNode(qualifiedName: String):
Attr? \n    fun getAttributeNodeNS(namespace: String?, localName: String): Attr? \n    fun setAttributeNode(attr:
Attr): Attr? \n    fun setAttributeNodeNS(attr: Attr): Attr? \n    fun removeAttributeNode(attr: Attr): Attr \n    fun
attachShadow(init: ShadowRootInit): ShadowRoot \n    fun closest(selectors: String): Element? \n    fun
matches(selectors: String): Boolean \n    fun webkitMatchesSelector(selectors: String): Boolean \n    fun
getElementsByTagName(qualifiedName: String): HTMLCollection \n    fun
getElementsByTagNameNS(namespace: String?, localName: String): HTMLCollection \n    fun
getElementsByClassName(classNames: String): HTMLCollection \n    fun insertAdjacentElement(where: String,
element: Element): Element? \n    fun insertAdjacentText(where: String, data: String) \n    fun getClientRects():
Array<DOMRect> \n    fun getBoundingClientRect(): DOMRect \n    fun scrollIntoView() \n    fun
scrollIntoView(arg: dynamic) \n    fun scroll(options: ScrollToOptions = definedExternally) \n    fun scroll(x: Double,
y: Double) \n    fun scrollTo(options: ScrollToOptions = definedExternally) \n    fun scrollTo(x: Double, y: Double) \n
    fun scrollBy(options: ScrollToOptions = definedExternally) \n    fun scrollBy(x: Double, y: Double) \n    fun
insertAdjacentHTML(position: String, text: String) \n    fun setPointerCapture(pointerId: Int) \n    fun
releasePointerCapture(pointerId: Int) \n    fun hasPointerCapture(pointerId: Int): Boolean \n    fun requestFullscreen():
Promise<Unit> \n \n    companion object { \n        val ELEMENT_NODE: Short \n        val ATTRIBUTE_NODE:
Short \n        val TEXT_NODE: Short \n        val CDATA_SECTION_NODE: Short \n        val
ENTITY_REFERENCE_NODE: Short \n        val ENTITY_NODE: Short \n        val
PROCESSING_INSTRUCTION_NODE: Short \n        val COMMENT_NODE: Short \n        val
DOCUMENT_NODE: Short \n        val DOCUMENT_TYPE_NODE: Short \n        val
DOCUMENT_FRAGMENT_NODE: Short \n        val NOTATION_NODE: Short \n        val
DOCUMENT_POSITION_DISCONNECTED: Short \n        val DOCUMENT_POSITION_PRECEDING: Short \n
        val DOCUMENT_POSITION_FOLLOWING: Short \n        val DOCUMENT_POSITION_CONTAINS: Short \n
        val DOCUMENT_POSITION_CONTAINED_BY: Short \n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short \n    } \n} \n \n public external interface
ShadowRootInit { \n    var mode: ShadowRootMode? \n} \n \n @Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER") \n @kotlin.internal.InlineOnly \n public inline fun ShadowRootInit(mode:
ShadowRootMode?): ShadowRootInit { \n    val o = js("{}") \n    o["mode"] = mode \n    return o \n} \n \n /** \n *
Exposes the JavaScript [NamedNodeMap](https://developer.mozilla.org/en/docs/Web/API/NamedNodeMap) to
Kotlin \n * \n public external abstract class NamedNodeMap : ItemArrayLike<Attr> { \n    fun
getNamedItemNS(namespace: String?, localName: String): Attr? \n    fun setNamedItem(attr: Attr): Attr? \n    fun

```

```
setNamedItemNS(attr: Attr): Attr?\n fun removeNamedItem(qualifiedName: String): Attr\n fun  
removeNamedItemNS(namespace: String?, localName: String): Attr\n override fun item(index: Int): Attr?\n fun  
getNamedItem(qualifiedName: String): Attr?\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",  
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun NamedNodeMap.get(index:  
Int): Attr? = asDynamic()[index]\n\n@Suppress(\"INVISIBLE_REFERENCE\",  
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun  
NamedNodeMap.get(qualifiedName: String): Attr? = asDynamic()[qualifiedName]\n\n/**\n * Exposes the  
JavaScript [Attr](https://developer.mozilla.org/en/docs/Web/API/Attr) to Kotlin\n */\npublic external abstract class  
Attr : Node {\n    open val namespaceURI: String?\n    open val prefix: String?\n    open val localName: String\n    open val name: String\n    open var value: String\n    open val ownerElement: Element?\n    open val specified:  
Boolean\n\n    companion object {\n        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val ENTITY_REFERENCE_NODE:  
Short\n        val ENTITY_NODE: Short\n        val PROCESSING_INSTRUCTION_NODE: Short\n        val  
COMMENT_NODE: Short\n        val DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val  
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val  
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n        val  
DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n        val  
DOCUMENT_POSITION_CONTAINED_BY: Short\n        val  
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript  
[CharacterData](https://developer.mozilla.org/en/docs/Web/API/CharacterData) to Kotlin\n */\npublic external  
abstract class CharacterData : Node, NonDocumentTypeChildNode, ChildNode {\n    open var data: String\n    open  
val length: Int\n    fun substringData(offset: Int, count: Int): String\n    fun appendData(data: String)\n    fun  
insertData(offset: Int, data: String)\n    fun deleteData(offset: Int, count: Int)\n    fun replaceData(offset: Int, count:  
Int, data: String)\n\n    companion object {\n        val ELEMENT_NODE: Short\n        val ATTRIBUTE_NODE:  
Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val  
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val  
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val  
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val  
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val  
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n        val  
DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n        val  
DOCUMENT_POSITION_CONTAINED_BY: Short\n        val  
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript  
[Text](https://developer.mozilla.org/en/docs/Web/API/Text) to Kotlin\n */\npublic external open class Text(data:  
String = definedExternally) : CharacterData, Slotable, GeometryUtils {\n    open val wholeText: String\n    override  
val assignedSlot: HTMLSlotElement?\n    override val previousElementSibling: Element?\n    override val  
nextElementSibling: Element?\n    fun splitText(offset: Int): Text\n    override fun getBoxQuads(options:  
BoxQuadOptions /* = definedExternally */): Array<DOMQuad>\n    override fun convertQuadFromNode(quad:  
dynamic, from: dynamic, options: ConvertCoordinateOptions /* = definedExternally */): DOMQuad\n    override  
fun convertRectFromNode(rect: DOMRectReadOnly, from: dynamic, options: ConvertCoordinateOptions /* =  
definedExternally */): DOMQuad\n    override fun convertPointFromNode(point: DOMPointInit, from: dynamic,  
options: ConvertCoordinateOptions /* = definedExternally */): DOMPoint\n    override fun before(vararg nodes:  
dynamic)\n    override fun after(vararg nodes: dynamic)\n    override fun replaceWith(vararg nodes: dynamic)\n    override  
fun remove()\n\n    companion object {\n        val ELEMENT_NODE: Short\n        val  
ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val  
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val  
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val  
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
```

DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val

DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val

DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }n}\n/n/**\n * Exposes the JavaScript [CDATASection](https://developer.mozilla.org/en/docs/Web/API/CDATASection) to Kotlin\n */\npublic external open class CDATASection : Text {\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }n}\n/n/**\n * Exposes the JavaScript [ProcessingInstruction](https://developer.mozilla.org/en/docs/Web/API/ProcessingInstruction) to Kotlin\n */\npublic external abstract class ProcessingInstruction : CharacterData, LinkStyle, UnionElementOrProcessingInstruction {\n open val target: String\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }n}\n/n/**\n * Exposes the JavaScript [Comment](https://developer.mozilla.org/en/docs/Web/API/Comment) to Kotlin\n */\npublic external open class Comment(data: String = definedExternally) : CharacterData {\n override val previousElementSibling: Element?\n override val nextElementSibling: Element?\n override fun before(vararg nodes: dynamic)\n override fun after(vararg nodes: dynamic)\n override fun replaceWith(vararg nodes: dynamic)\n override fun remove()\n\n companion object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }n}\n/n/**\n * Exposes the JavaScript [Range](https://developer.mozilla.org/en/docs/Web/API/Range) to Kotlin\n */\npublic external open class Range {\n open val startContainer: Node\n open val startOffset: Int\n open val endContainer: Node\n open val endOffset: Int\n open val collapsed: Boolean\n open val commonAncestorContainer: Node\n fun setStart(node: Node, offset: Int)\n fun setEnd(node: Node, offset: Int)\n fun setStartBefore(node: Node)\n fun setStartAfter(node: Node)\n fun setEndBefore(node: Node)\n fun setEndAfter(node: Node)\n fun collapse(toStart: Boolean = definedExternally)\n fun selectNode(node: Node)\n fun selectNodeContents(node: Node)\n fun compareBoundaryPoints(how: Short, sourceRange: Range): Short\n fun deleteContents()\n fun

```

extractContents(): DocumentFragment\n fun cloneContents(): DocumentFragment\n fun insertNode(node:
Node)\n fun surroundContents(newParent: Node)\n fun cloneRange(): Range\n fun detach()\n fun
isPointInRange(node: Node, offset: Int): Boolean\n fun comparePoint(node: Node, offset: Int): Short\n fun
intersectsNode(node: Node): Boolean\n fun getClientRects(): Array<DOMRect>\n fun
getBoundingClientRect(): DOMRect\n fun createContextualFragment(fragment: String): DocumentFragment\n\n
companion object {\n val START_TO_START: Short\n val START_TO_END: Short\n val
END_TO_END: Short\n val END_TO_START: Short\n }\n}\n\n**\n * Exposes the JavaScript
[NodeIterator](https://developer.mozilla.org/en/docs/Web/API/NodeIterator) to Kotlin\n *\n\npublic external abstract
class NodeIterator {\n open val root: Node\n open val referenceNode: Node\n open val
pointerBeforeReferenceNode: Boolean\n open val whatToShow: Int\n open val filter: NodeFilter?\n fun
nextNode(): Node?\n fun previousNode(): Node?\n fun detach()\n}\n}\n\n**\n * Exposes the JavaScript
[TreeWalker](https://developer.mozilla.org/en/docs/Web/API/TreeWalker) to Kotlin\n *\n\npublic external abstract
class TreeWalker {\n open val root: Node\n open val whatToShow: Int\n open val filter: NodeFilter?\n open
var currentNode: Node\n fun parentNode(): Node?\n fun firstChild(): Node?\n fun lastChild(): Node?\n fun
previousSibling(): Node?\n fun nextSibling(): Node?\n fun previousNode(): Node?\n fun nextNode():
Node?\n}\n}\n\n**\n * Exposes the JavaScript
[NodeFilter](https://developer.mozilla.org/en/docs/Web/API/NodeFilter) to Kotlin\n
*\n\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external interface NodeFilter {\n
fun acceptNode(node: Node): Short\n\n companion object {\n val FILTER_ACCEPT: Short\n val
FILTER_REJECT: Short\n val FILTER_SKIP: Short\n val SHOW_ALL: Int\n val
SHOW_ELEMENT: Int\n val SHOW_ATTRIBUTE: Int\n val SHOW_TEXT: Int\n val
SHOW_CDATA_SECTION: Int\n val SHOW_ENTITY_REFERENCE: Int\n val SHOW_ENTITY: Int\n
val SHOW_PROCESSING_INSTRUCTION: Int\n val SHOW_COMMENT: Int\n val
SHOW_DOCUMENT: Int\n val SHOW_DOCUMENT_TYPE: Int\n val
SHOW_DOCUMENT_FRAGMENT: Int\n val SHOW_NOTATION: Int\n }\n}\n}\n\n**\n * Exposes the
JavaScript [DOMTokenList](https://developer.mozilla.org/en/docs/Web/API/DOMTokenList) to Kotlin\n *\n\npublic
external abstract class DOMTokenList : ItemArrayLike<String> {\n open var value: String\n fun contains(token:
String): Boolean\n fun add(vararg tokens: String)\n fun remove(vararg tokens: String)\n fun toggle(token:
String, force: Boolean = definedExternally): Boolean\n fun replace(token: String, newToken: String)\n fun
supports(token: String): Boolean\n override fun item(index: Int):
String?\n}\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n\n@kotlin.internal.InlineOnly\n\npublic inline operator fun DOMTokenList.get(index:
Int): String? = asDynamic()[index]\n}\n}\n\n**\n * Exposes the JavaScript
[DOMPointReadOnly](https://developer.mozilla.org/en/docs/Web/API/DOMPointReadOnly) to Kotlin\n *\n\npublic
external open class DOMPointReadOnly(x: Double, y: Double, z: Double, w: Double) {\n open val x: Double\n
open val y: Double\n open val z: Double\n open val w: Double\n fun matrixTransform(matrix:
DOMMatrixReadOnly): DOMPoint\n}\n}\n\n**\n * Exposes the JavaScript
[DOMPoint](https://developer.mozilla.org/en/docs/Web/API/DOMPoint) to Kotlin\n *\n\npublic external open class
DOMPoint : DOMPointReadOnly {\n constructor(point: DOMPointInit)\n constructor(x: Double =
definedExternally, y: Double = definedExternally, z: Double = definedExternally, w: Double = definedExternally)\n
override var x: Double\n override var y: Double\n override var z: Double\n override var w:
Double\n}\n}\n\n**\n * Exposes the JavaScript
[DOMPointInit](https://developer.mozilla.org/en/docs/Web/API/DOMPointInit) to Kotlin\n *\n\npublic external
interface DOMPointInit {\n var x: Double? /* = 0.0 */\n get() = definedExternally\n set(value) =
definedExternally\n var y: Double? /* = 0.0 */\n get() = definedExternally\n set(value) =
definedExternally\n var z: Double? /* = 0.0 */\n get() = definedExternally\n set(value) =
definedExternally\n var w: Double? /* = 1.0 */\n get() = definedExternally\n set(value) =
definedExternally\n}\n}\n\n@Suppress("INVISIBLE_REFERENCE",

```

```

\@kotlin.internal.InlineOnly\npublic inline fun DOMPointInit(x: Double? = 0.0, y:
Double? = 0.0, z: Double? = 0.0, w: Double? = 1.0): DOMPointInit {\n  val o = js("{}")\n  o["x"] = x\n
o["y"] = y\n  o["z"] = z\n  o["w"] = w\n  return o\n}\n\n/**\n * Exposes the JavaScript
[DOMRect](https://developer.mozilla.org/en/docs/Web/API/DOMRect) to Kotlin\n */\npublic external open class
DOMRect(x: Double = definedExternally, y: Double = definedExternally, width: Double = definedExternally,
height: Double = definedExternally) : DOMRectReadOnly {\n  override var x: Double\n  override var y: Double\n
  override var width: Double\n  override var height: Double\n}\n\n/**\n * Exposes the JavaScript
[DOMRectReadOnly](https://developer.mozilla.org/en/docs/Web/API/DOMRectReadOnly) to Kotlin\n */\npublic
external open class DOMRectReadOnly(x: Double, y: Double, width: Double, height: Double) {\n  open val x:
Double\n  open val y: Double\n  open val width: Double\n  open val height: Double\n  open val top: Double\n
  open val right: Double\n  open val bottom: Double\n  open val left: Double\n}\n\npublic external interface
DOMRectInit {\n  var x: Double? /* = 0.0 */\n    get() = definedExternally\n    set(value) =
definedExternally\n  var y: Double? /* = 0.0 */\n    get() = definedExternally\n    set(value) =
definedExternally\n  var width: Double? /* = 0.0 */\n    get() = definedExternally\n    set(value) =
definedExternally\n  var height: Double? /* = 0.0 */\n    get() = definedExternally\n    set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE"),
\@kotlin.internal.InlineOnly\npublic inline fun DOMRectInit(x: Double? = 0.0, y:
Double? = 0.0, width: Double? = 0.0, height: Double? = 0.0): DOMRectInit {\n  val o = js("{}")\n  o["x"] =
x\n  o["y"] = y\n  o["width"] = width\n  o["height"] = height\n  return o\n}\n\npublic external interface
DOMRectList : ItemArrayLike<DOMRect> {\n  override fun item(index: Int):
DOMRect?\n}\n\n@Suppress("INVISIBLE_REFERENCE"),
\@kotlin.internal.InlineOnly\npublic inline operator fun DOMRectList.get(index: Int):
DOMRect? = asDynamic()[index]\n\n/**\n * Exposes the JavaScript
[DOMQuad](https://developer.mozilla.org/en/docs/Web/API/DOMQuad) to Kotlin\n */\npublic external open class
DOMQuad {\n  constructor(p1: DOMPointInit = definedExternally, p2: DOMPointInit = definedExternally, p3:
DOMPointInit = definedExternally, p4: DOMPointInit = definedExternally)\n  constructor(rect: DOMRectInit)\n
  open val p1: DOMPoint\n  open val p2: DOMPoint\n  open val p3: DOMPoint\n  open val p4: DOMPoint\n
  open val bounds: DOMRectReadOnly\n}\n\n/**\n * Exposes the JavaScript
[DOMMatrixReadOnly](https://developer.mozilla.org/en/docs/Web/API/DOMMatrixReadOnly) to Kotlin\n */\n
public external open class DOMMatrixReadOnly(numberSequence: Array<Double>) {\n  open val a: Double\n
  open val b: Double\n  open val c: Double\n  open val d: Double\n  open val e: Double\n  open val f: Double\n
  open val m11: Double\n  open val m12: Double\n  open val m13: Double\n  open val m14: Double\n  open val
m21: Double\n  open val m22: Double\n  open val m23: Double\n  open val m24: Double\n  open val m31:
Double\n  open val m32: Double\n  open val m33: Double\n  open val m34: Double\n  open val m41: Double\n
  open val m42: Double\n  open val m43: Double\n  open val m44: Double\n  open val is2D: Boolean\n  open
val isIdentity: Boolean\n  fun translate(tx: Double, ty: Double, tz: Double = definedExternally): DOMMatrix\n
  fun scale(scale: Double, originX: Double = definedExternally, originY: Double = definedExternally): DOMMatrix\n
  fun scale3d(scale: Double, originX: Double = definedExternally, originY: Double = definedExternally, originZ:
Double = definedExternally): DOMMatrix\n  fun scaleNonUniform(scaleX: Double, scaleY: Double =
definedExternally, scaleZ: Double = definedExternally, originX: Double = definedExternally, originY: Double =
definedExternally, originZ: Double = definedExternally): DOMMatrix\n  fun rotate(angle: Double, originX:
Double = definedExternally, originY: Double = definedExternally): DOMMatrix\n  fun rotateFromVector(x:
Double, y: Double): DOMMatrix\n  fun rotateAxisAngle(x: Double, y: Double, z: Double, angle: Double):
DOMMatrix\n  fun skewX(sx: Double): DOMMatrix\n  fun skewY(sy: Double): DOMMatrix\n  fun
multiply(other: DOMMatrix): DOMMatrix\n  fun flipX(): DOMMatrix\n  fun flipY(): DOMMatrix\n  fun
inverse(): DOMMatrix\n  fun transformPoint(point: DOMPointInit = definedExternally): DOMPoint\n  fun
toFloat32Array(): Float32Array\n  fun toFloat64Array(): Float64Array\n}\n\n/**\n * Exposes the JavaScript
[DOMMatrix](https://developer.mozilla.org/en/docs/Web/API/DOMMatrix) to Kotlin\n */\npublic external open

```

```

class DOMMatrix() : DOMMatrixReadOnly {
    constructor(transformList: String)
    constructor(other: DOMMatrixReadOnly)
    constructor(array32: Float32Array)
    constructor(array64: Float64Array)
    constructor(numberSequence: Array<Double>)
    override var a: Double
    override var b: Double
    override var c: Double
    override var d: Double
    override var e: Double
    override var f: Double
    override var m11: Double
    override var m12: Double
    override var m13: Double
    override var m14: Double
    override var m21: Double
    override var m22: Double
    override var m23: Double
    override var m24: Double
    override var m31: Double
    override var m32: Double
    override var m33: Double
    override var m34: Double
    override var m41: Double
    override var m42: Double
    override var m43: Double
    override var m44: Double
    fun multiplySelf(other: DOMMatrix): DOMMatrix
    fun preMultiplySelf(other: DOMMatrix): DOMMatrix
    fun translateSelf(tx: Double, ty: Double, tz: Double = definedExternally): DOMMatrix
    fun scaleSelf(scale: Double, originX: Double = definedExternally, originY: Double = definedExternally): DOMMatrix
    fun scale3dSelf(scale: Double, originX: Double = definedExternally, originY: Double = definedExternally, originZ: Double = definedExternally): DOMMatrix
    fun scaleNonUniformSelf(scaleX: Double, scaleY: Double = definedExternally, scaleZ: Double = definedExternally, originX: Double = definedExternally, originY: Double = definedExternally, originZ: Double = definedExternally): DOMMatrix
    fun rotateSelf(angle: Double, originX: Double = definedExternally, originY: Double = definedExternally): DOMMatrix
    fun rotateFromVectorSelf(x: Double, y: Double): DOMMatrix
    fun rotateAxisAngleSelf(x: Double, y: Double, z: Double, angle: Double): DOMMatrix
    fun skewXSelf(sx: Double): DOMMatrix
    fun skewYSelf(sy: Double): DOMMatrix
    fun invertSelf(): DOMMatrix
    fun setMatrixValue(transformList: String): DOMMatrix
}

@public external interface ScrollOptions {
    var behavior: ScrollBehavior? /* = ScrollBehavior.AUTO */
    get() = definedExternally
    set(value) = definedExternally
}

@Suppress("INVISIBLE_REFERENCE", "INVISIBLE_MEMBER")
@kotlin.internal.InlineOnly
@public inline fun ScrollOptions(behavior: ScrollBehavior? = ScrollBehavior.AUTO): ScrollOptions {
    val o = js("{}")
    o["behavior"] = behavior
    return o
}

/**
 * Exposes the JavaScript [ScrollToOptions](https://developer.mozilla.org/en/docs/Web/API/ScrollToOptions) to Kotlin
 */
@public external interface ScrollToOptions : ScrollOptions {
    var left: Double?
    get() = definedExternally
    set(value) = definedExternally
    var top: Double?
    get() = definedExternally
    set(value) = definedExternally
}

@Suppress("INVISIBLE_REFERENCE", "INVISIBLE_MEMBER")
@kotlin.internal.InlineOnly
@public inline fun ScrollToOptions(left: Double? = undefined, top: Double? = undefined, behavior: ScrollBehavior? = ScrollBehavior.AUTO): ScrollToOptions {
    val o = js("{}")
    o["left"] = left
    o["top"] = top
    o["behavior"] = behavior
    return o
}

/**
 * Exposes the JavaScript [MediaQueryList](https://developer.mozilla.org/en/docs/Web/API/MediaQueryList) to Kotlin
 */
@public external abstract class MediaQueryList : EventTarget {
    open val media: String
    open val matches: Boolean
    open var onchange: ((Event) -> dynamic)?
    fun addListener(listener: EventListener?)
    fun addListener(listener: ((Event) -> Unit)?)
    fun removeListener(listener: EventListener?)
    fun removeListener(listener: ((Event) -> Unit)?)
}

/**
 * Exposes the JavaScript [MediaQueryListEvent](https://developer.mozilla.org/en/docs/Web/API/MediaQueryListEvent) to Kotlin
 */
@public external open class MediaQueryListEvent(type: String, eventInitDict: MediaQueryListEventInit = definedExternally) : Event {
    open val media: String
    open val matches: Boolean
}

companion object {
    val NONE: Short
    val CAPTURING_PHASE: Short
    val AT_TARGET: Short
    val BUBBLING_PHASE: Short
}

@public external interface MediaQueryListEventInit : EventInit {
    var media: String? /* = "" */
    get() = definedExternally
    set(value) = definedExternally
    var matches: Boolean? /* = false */
    get() = definedExternally
    set(value) = definedExternally
}

@Suppress("INVISIBLE_REFERENCE", "INVISIBLE_MEMBER")
@kotlin.internal.InlineOnly
@public inline fun MediaQueryListEventInit(media: String? = "", matches: Boolean? = false, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false): MediaQueryListEventInit {
    val o = js("{}")
    o["media"] = media
    o["matches"] = matches
    o["bubbles"] = bubbles
    o["cancelable"] = cancelable
    o["composed"] = composed
    return o
}

```



```

o\n}\n\n/**\n * Exposes the JavaScript [Screen](https://developer.mozilla.org/en/docs/Web/API/Screen) to Kotlin\n *\n\npublic external abstract class Screen {\n    open val availWidth: Int\n    open val availHeight: Int\n    open val width: Int\n    open val height: Int\n    open val colorDepth: Int\n    open val pixelDepth: Int\n}\n\n/**\n * Exposes the JavaScript [CaretPosition](https://developer.mozilla.org/en/docs/Web/API/CaretPosition) to Kotlin\n *\n\npublic external abstract class CaretPosition {\n    open val offsetNode: Node\n    open val offset: Int\n    fun getClientRect(): DOMRect?\n}\n\n\npublic external interface ScrollIntoViewOptions : ScrollOptions {\n    var block: ScrollLogicalPosition? /* = ScrollLogicalPosition.CENTER */\n    get() = definedExternally\n    set(value) = definedExternally\n    var inline: ScrollLogicalPosition? /* = ScrollLogicalPosition.CENTER */\n    get() = definedExternally\n    set(value) = definedExternally\n}\n\n\n@Suppress(\"INVISIBLE_REFERENCE\", \"INVISIBLE_MEMBER\")\n\n@kotlin.internal.InlineOnly\n\npublic inline fun ScrollIntoViewOptions(block: ScrollLogicalPosition? = ScrollLogicalPosition.CENTER, inline: ScrollLogicalPosition? = ScrollLogicalPosition.CENTER, behavior: ScrollBehavior? = ScrollBehavior.AUTO): ScrollIntoViewOptions {\n    val o = js(\"({})\")\n    o[\"block\"] = block\n    o[\"inline\"] = inline\n    o[\"behavior\"] = behavior\n    return o\n}\n\n\npublic external interface BoxQuadOptions {\n    var box: CSSBoxType? /* = CSSBoxType.BORDER */\n    get() = definedExternally\n    set(value) = definedExternally\n    var relativeTo: dynamic\n    get() = definedExternally\n    set(value) = definedExternally\n}\n\n\n@Suppress(\"INVISIBLE_REFERENCE\", \"INVISIBLE_MEMBER\")\n\n@kotlin.internal.InlineOnly\n\npublic inline fun BoxQuadOptions(box: CSSBoxType? = CSSBoxType.BORDER, relativeTo: dynamic = undefined): BoxQuadOptions {\n    val o = js(\"({})\")\n    o[\"box\"] = box\n    o[\"relativeTo\"] = relativeTo\n    return o\n}\n\n\npublic external interface ConvertCoordinateOptions {\n    var fromBox: CSSBoxType? /* = CSSBoxType.BORDER */\n    get() = definedExternally\n    set(value) = definedExternally\n    var toBox: CSSBoxType? /* = CSSBoxType.BORDER */\n    get() = definedExternally\n    set(value) = definedExternally\n}\n\n\n@Suppress(\"INVISIBLE_REFERENCE\", \"INVISIBLE_MEMBER\")\n\n@kotlin.internal.InlineOnly\n\npublic inline fun ConvertCoordinateOptions(fromBox: CSSBoxType? = CSSBoxType.BORDER, toBox: CSSBoxType? = CSSBoxType.BORDER): ConvertCoordinateOptions {\n    val o = js(\"({})\")\n    o[\"fromBox\"] = fromBox\n    o[\"toBox\"] = toBox\n    return o\n}\n\n\n/**\n * Exposes the JavaScript [GeometryUtils](https://developer.mozilla.org/en/docs/Web/API/GeometryUtils) to Kotlin\n *\n\n\npublic external interface GeometryUtils {\n    fun getBoxQuads(options: BoxQuadOptions = definedExternally): Array<DOMQuad>\n    fun convertQuadFromNode(quad: dynamic, from: dynamic, options: ConvertCoordinateOptions = definedExternally): DOMQuad\n    fun convertRectFromNode(rect: DOMRectReadOnly, from: dynamic, options: ConvertCoordinateOptions = definedExternally): DOMQuad\n    fun convertPointFromNode(point: DOMPointInit, from: dynamic, options: ConvertCoordinateOptions = definedExternally): DOMPoint\n}\n\n\n/**\n * Exposes the JavaScript [Touch](https://developer.mozilla.org/en/docs/Web/API/Touch) to Kotlin\n *\n\n\npublic external abstract class Touch {\n    open val identifier: Int\n    open val target: EventTarget\n    open val screenX: Int\n    open val screenY: Int\n    open val clientX: Int\n    open val clientY: Int\n    open val pageX: Int\n    open val pageY: Int\n    open val region: String?\n}\n\n\n\npublic external abstract class TouchList : ItemArrayLike<Touch> {\n    override fun item(index: Int): Touch?\n}\n\n\n\n@Suppress(\"INVISIBLE_REFERENCE\", \"INVISIBLE_MEMBER\")\n\n@kotlin.internal.InlineOnly\n\n\npublic inline operator fun TouchList.get(index: Int): Touch? = asDynamic()[index]\n\n\n\npublic external open class TouchEvent : UIEvent {\n    open val touches: TouchList\n    open val targetTouches: TouchList\n    open val changedTouches: TouchList\n    open val altKey: Boolean\n    open val metaKey: Boolean\n    open val ctrlKey: Boolean\n    open val shiftKey: Boolean\n}\n\n\n\ncompanion object {\n    val NONE: Short\n    val CAPTURING_PHASE: Short\n    val AT_TARGET: Short\n    val BUBBLING_PHASE: Short\n}\n\n\n\n/**\n * Exposes the JavaScript [Image](https://developer.mozilla.org/en/docs/Web/API/Image) to Kotlin\n *\n\n\n\npublic external open class Image(width: Int = definedExternally, height: Int = definedExternally) : HTMLElement {\n    override var onabort: ((Event) -> dynamic)?\n    override var onblur: ((FocusEvent) -> dynamic)?\n    override var oncancel:

```

```

((Event) -> dynamic)?\n  override var oncanplay: ((Event) -> dynamic)?\n  override var oncanplaythrough:
((Event) -> dynamic)?\n  override var onchange: ((Event) -> dynamic)?\n  override var onclick: ((MouseEvent) ->
dynamic)?\n  override var onclose: ((Event) -> dynamic)?\n  override var oncontextmenu: ((MouseEvent) ->
dynamic)?\n  override var oncuechange: ((Event) -> dynamic)?\n  override var ondblclick: ((MouseEvent) ->
dynamic)?\n  override var ondrag: ((DragEvent) -> dynamic)?\n  override var ondragend: ((DragEvent) ->
dynamic)?\n  override var ondragenter: ((DragEvent) -> dynamic)?\n  override var ondragexit: ((DragEvent) ->
dynamic)?\n  override var ondragleave: ((DragEvent) -> dynamic)?\n  override var ondragover: ((DragEvent) ->
dynamic)?\n  override var ondragstart: ((DragEvent) -> dynamic)?\n  override var ondrop: ((DragEvent) ->
dynamic)?\n  override var ondurationchange: ((Event) -> dynamic)?\n  override var onemptied: ((Event) ->
dynamic)?\n  override var onended: ((Event) -> dynamic)?\n  override var onerror: ((dynamic, String, Int, Int,
Any?) -> dynamic)?\n  override var onfocus: ((FocusEvent) -> dynamic)?\n  override var oninput: ((InputEvent) -
> dynamic)?\n  override var oninvalid: ((Event) -> dynamic)?\n  override var onkeydown: ((KeyboardEvent) ->
dynamic)?\n  override var onkeypress: ((KeyboardEvent) -> dynamic)?\n  override var onkeyup:
((KeyboardEvent) -> dynamic)?\n  override var onload: ((Event) -> dynamic)?\n  override var onloadeddata:
((Event) -> dynamic)?\n  override var onloadedmetadata: ((Event) -> dynamic)?\n  override var onloadend:
((Event) -> dynamic)?\n  override var onloadstart: ((ProgressEvent) -> dynamic)?\n  override var onmousedown:
((MouseEvent) -> dynamic)?\n  override var onmouseenter: ((MouseEvent) -> dynamic)?\n  override var
onmouseleave: ((MouseEvent) -> dynamic)?\n  override var onmousemove: ((MouseEvent) -> dynamic)?\n
override var onmouseout: ((MouseEvent) -> dynamic)?\n  override var onmouseover: ((MouseEvent) ->
dynamic)?\n  override var onmouseup: ((MouseEvent) -> dynamic)?\n  override var onwheel: ((WheelEvent) ->
dynamic)?\n  override var onpause: ((Event) -> dynamic)?\n  override var onplay: ((Event) -> dynamic)?\n
override var onplaying: ((Event) -> dynamic)?\n  override var onprogress: ((ProgressEvent) -> dynamic)?\n
override var onratechange: ((Event) -> dynamic)?\n  override var onreset: ((Event) -> dynamic)?\n  override var
onresize: ((Event) -> dynamic)?\n  override var onscroll: ((Event) -> dynamic)?\n  override var onseeked:
((Event) -> dynamic)?\n  override var onseeking: ((Event) -> dynamic)?\n  override var onselect: ((Event) ->
dynamic)?\n  override var onshow: ((Event) -> dynamic)?\n  override var onstalled: ((Event) -> dynamic)?\n
override var onsubmit: ((Event) -> dynamic)?\n  override var onsuspend: ((Event) -> dynamic)?\n  override var
ontimeupdate: ((Event) -> dynamic)?\n  override var ontoggle: ((Event) -> dynamic)?\n  override var
onvolumechange: ((Event) -> dynamic)?\n  override var onwaiting: ((Event) -> dynamic)?\n  override var
ongotpointercapture: ((PointerEvent) -> dynamic)?\n  override var onlostpointercapture: ((PointerEvent) ->
dynamic)?\n  override var onpointerdown: ((PointerEvent) -> dynamic)?\n  override var onpointermove:
((PointerEvent) -> dynamic)?\n  override var onpointerup: ((PointerEvent) -> dynamic)?\n  override var
onpointercancel: ((PointerEvent) -> dynamic)?\n  override var onpointerover: ((PointerEvent) -> dynamic)?\n
override var onpointerout: ((PointerEvent) -> dynamic)?\n  override var onpointerenter: ((PointerEvent) ->
dynamic)?\n  override var onpointerleave: ((PointerEvent) -> dynamic)?\n  override var oncopy:
((ClipboardEvent) -> dynamic)?\n  override var oncut: ((ClipboardEvent) -> dynamic)?\n  override var onpaste:
((ClipboardEvent) -> dynamic)?\n  override var contentEditable: String\n  override val isContentEditable:
Boolean\n  override val style: CSSStyleDeclaration\n  override val children: HTMLCollection\n  override val
firstElementChild: Element?\n  override val lastElementChild: Element?\n  override val childElementCount: Int\n
  override val previousElementSibling: Element?\n  override val nextElementSibling: Element?\n  override val
assignedSlot: HTMLSlotElement?\n  override fun prepend(vararg nodes: dynamic)\n  override fun append(vararg
nodes: dynamic)\n  override fun querySelector(selectors: String): Element?\n  override fun
querySelectorAll(selectors: String): NodeList\n  override fun before(vararg nodes: dynamic)\n  override fun
after(vararg nodes: dynamic)\n  override fun replaceWith(vararg nodes: dynamic)\n  override fun remove()\n
override fun getBoxQuads(options: BoxQuadOptions /* = definedExternally */): Array<DOMQuad>\n  override
fun convertQuadFromNode(quad: dynamic, from: dynamic, options: ConvertCoordinateOptions /* =
definedExternally */): DOMQuad\n  override fun convertRectFromNode(rect: DOMRectReadOnly, from:
dynamic, options: ConvertCoordinateOptions /* = definedExternally */): DOMQuad\n  override fun

```

```

convertPointFromNode(point: DOMPointInit, from: dynamic, options: ConvertCoordinateOptions /* =
definedExternally */): DOMPoint\n\n companion object {\n    val ELEMENT_NODE: Short\n    val
ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val
ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val
PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n } \n} \n\npublic external open class
Audio(src: String = definedExternally) : HTMLAudioElement {\n    override var onabort: ((Event) -> dynamic)?\n
override var onblur: ((FocusEvent) -> dynamic)?\n    override var oncancel: ((Event) -> dynamic)?\n    override var
oncanplay: ((Event) -> dynamic)?\n    override var oncanplaythrough: ((Event) -> dynamic)?\n    override var
onchange: ((Event) -> dynamic)?\n    override var onclick: ((MouseEvent) -> dynamic)?\n    override var onclose:
((Event) -> dynamic)?\n    override var oncontextmenu: ((MouseEvent) -> dynamic)?\n    override var oncuechange:
((Event) -> dynamic)?\n    override var ondblclick: ((MouseEvent) -> dynamic)?\n    override var ondrag:
((DragEvent) -> dynamic)?\n    override var ondragend: ((DragEvent) -> dynamic)?\n    override var ondragenter:
((DragEvent) -> dynamic)?\n    override var ondragexit: ((DragEvent) -> dynamic)?\n    override var ondragleave:
((DragEvent) -> dynamic)?\n    override var ondragover: ((DragEvent) -> dynamic)?\n    override var ondragstart:
((DragEvent) -> dynamic)?\n    override var ondrop: ((DragEvent) -> dynamic)?\n    override var ondurationchange:
((Event) -> dynamic)?\n    override var onemptied: ((Event) -> dynamic)?\n    override var onended: ((Event) ->
dynamic)?\n    override var onerror: ((dynamic, String, Int, Int, Any?) -> dynamic)?\n    override var onfocus:
((FocusEvent) -> dynamic)?\n    override var oninput: ((InputEvent) -> dynamic)?\n    override var oninvalid:
((Event) -> dynamic)?\n    override var onkeydown: ((KeyboardEvent) -> dynamic)?\n    override var onkeypress:
((KeyboardEvent) -> dynamic)?\n    override var onkeyup: ((KeyboardEvent) -> dynamic)?\n    override var onload:
((Event) -> dynamic)?\n    override var onloadeddata: ((Event) -> dynamic)?\n    override var onloadedmetadata:
((Event) -> dynamic)?\n    override var onloadend: ((Event) -> dynamic)?\n    override var onloadstart:
((ProgressEvent) -> dynamic)?\n    override var onmousedown: ((MouseEvent) -> dynamic)?\n    override var
onmouseenter: ((MouseEvent) -> dynamic)?\n    override var onmouseleave: ((MouseEvent) -> dynamic)?\n
override var onmousemove: ((MouseEvent) -> dynamic)?\n    override var onmouseout: ((MouseEvent) ->
dynamic)?\n    override var onmouseover: ((MouseEvent) -> dynamic)?\n    override var onmouseup: ((MouseEvent)
-> dynamic)?\n    override var onwheel: ((WheelEvent) -> dynamic)?\n    override var onpause: ((Event) ->
dynamic)?\n    override var onplay: ((Event) -> dynamic)?\n    override var onplaying: ((Event) -> dynamic)?\n
override var onprogress: ((ProgressEvent) -> dynamic)?\n    override var onratechange: ((Event) -> dynamic)?\n
override var onreset: ((Event) -> dynamic)?\n    override var onresize: ((Event) -> dynamic)?\n    override var
onscroll: ((Event) -> dynamic)?\n    override var onseeked: ((Event) -> dynamic)?\n    override var onseeking:
((Event) -> dynamic)?\n    override var onselect: ((Event) -> dynamic)?\n    override var onshow: ((Event) ->
dynamic)?\n    override var onstalled: ((Event) -> dynamic)?\n    override var onsubmit: ((Event) -> dynamic)?\n
override var onsuspend: ((Event) -> dynamic)?\n    override var ontimeupdate: ((Event) -> dynamic)?\n    override
var ontoggle: ((Event) -> dynamic)?\n    override var onvolumechange: ((Event) -> dynamic)?\n    override var
onwaiting: ((Event) -> dynamic)?\n    override var ongotpointercapture: ((PointerEvent) -> dynamic)?\n    override
var onlostpointercapture: ((PointerEvent) -> dynamic)?\n    override var onpointerdown: ((PointerEvent) ->
dynamic)?\n    override var onpointermove: ((PointerEvent) -> dynamic)?\n    override var onpointerup:
((PointerEvent) -> dynamic)?\n    override var onpointercancel: ((PointerEvent) -> dynamic)?\n    override var
onpointerover: ((PointerEvent) -> dynamic)?\n    override var onpointerout: ((PointerEvent) -> dynamic)?\n
override var onpointerenter: ((PointerEvent) -> dynamic)?\n    override var onpointerleave: ((PointerEvent) ->
dynamic)?\n    override var oncopy: ((ClipboardEvent) -> dynamic)?\n    override var oncut: ((ClipboardEvent) ->

```

```

dynamic)?\n  override var onpaste: ((ClipboardEvent) -> dynamic)?\n  override var contentEditable: String\n  override val isContentEditable: Boolean\n  override val style: CSSStyleDeclaration\n  override val children: HTMLCollection\n  override val firstElementChild: Element?\n  override val lastElementChild: Element?\n  override val childElementCount: Int\n  override val previousElementSibling: Element?\n  override val nextElementSibling: Element?\n  override val assignedSlot: HTMLSlotElement?\n  override fun prepend(vararg nodes: dynamic)\n  override fun append(vararg nodes: dynamic)\n  override fun querySelector(selectors: String): Element?\n  override fun querySelectorAll(selectors: String): NodeList\n  override fun before(vararg nodes: dynamic)\n  override fun after(vararg nodes: dynamic)\n  override fun replaceWith(vararg nodes: dynamic)\n  override fun remove()\n  override fun getBoxQuads(options: BoxQuadOptions /* = definedExternally */): Array<DOMQuad>\n  override fun convertQuadFromNode(quad: dynamic, from: dynamic, options: ConvertCoordinateOptions /* = definedExternally */): DOMQuad\n  override fun convertRectFromNode(rect: DOMRectReadOnly, from: dynamic, options: ConvertCoordinateOptions /* = definedExternally */): DOMQuad\n  override fun convertPointFromNode(point: DOMPointInit, from: dynamic, options: ConvertCoordinateOptions /* = definedExternally */): DOMPoint\n\n  companion object {\n    val NETWORK_EMPTY: Short\n    val NETWORK_IDLE: Short\n    val NETWORK_LOADING: Short\n    val NETWORK_NO_SOURCE: Short\n    val HAVE_NOTHING: Short\n    val HAVE_METADATA: Short\n    val HAVE_CURRENT_DATA: Short\n    val HAVE_FUTURE_DATA: Short\n    val HAVE_ENOUGH_DATA: Short\n    val ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n  }\n}\n\n/**\n * Exposes the JavaScript [Option](https://developer.mozilla.org/en/docs/Web/API/Option) to Kotlin\n */\n\npublic external open class Option(text: String = definedExternally, value: String = definedExternally, defaultSelected: Boolean = definedExternally, selected: Boolean = definedExternally) : HTMLOptionElement {\n  override var onabort: ((Event) -> dynamic)?\n  override var onblur: ((FocusEvent) -> dynamic)?\n  override var oncancel: ((Event) -> dynamic)?\n  override var oncanplay: ((Event) -> dynamic)?\n  override var oncanplaythrough: ((Event) -> dynamic)?\n  override var onchange: ((Event) -> dynamic)?\n  override var onclick: ((MouseEvent) -> dynamic)?\n  override var onclose: ((Event) -> dynamic)?\n  override var oncontextmenu: ((MouseEvent) -> dynamic)?\n  override var oncuechange: ((Event) -> dynamic)?\n  override var ondblclick: ((MouseEvent) -> dynamic)?\n  override var ondrag: ((DragEvent) -> dynamic)?\n  override var ondragend: ((DragEvent) -> dynamic)?\n  override var ondragenter: ((DragEvent) -> dynamic)?\n  override var ondragexit: ((DragEvent) -> dynamic)?\n  override var ondragleave: ((DragEvent) -> dynamic)?\n  override var ondragover: ((DragEvent) -> dynamic)?\n  override var ondragstart: ((DragEvent) -> dynamic)?\n  override var ondrop: ((DragEvent) -> dynamic)?\n  override var ondurationchange: ((Event) -> dynamic)?\n  override var onemptied: ((Event) -> dynamic)?\n  override var onended: ((Event) -> dynamic)?\n  override var onerror: ((dynamic, String, Int, Int, Any?) -> dynamic)?\n  override var onfocus: ((FocusEvent) -> dynamic)?\n  override var oninput: ((InputEvent) -> dynamic)?\n  override var oninvalid: ((Event) -> dynamic)?\n  override var onkeydown: ((KeyboardEvent) -> dynamic)?\n  override var onkeypress: ((KeyboardEvent) -> dynamic)?\n  override var onkeyup: ((KeyboardEvent) -> dynamic)?\n  override var onkeypress: ((KeyboardEvent) -> dynamic)?\n  override var onkeyup: ((KeyboardEvent) -> dynamic)?\n  override var onload: ((Event) -> dynamic)?\n  override var onloadeddata: ((Event) -> dynamic)?\n  override var onloadedmetadata: ((Event) -> dynamic)?\n  override var onloadend: ((Event) -> dynamic)?\n  override var onloadstart: ((ProgressEvent) -> dynamic)?\n  override var onmousedown: ((MouseEvent) -> dynamic)?\n  override var onmouseenter: ((MouseEvent) -> dynamic)?\n  override var onmouseleave: ((MouseEvent) -> dynamic)?\n  override var onmousemove: ((MouseEvent) -> dynamic)?\n
```

```

override var onmouseout: ((MouseEvent) -> dynamic)?\n  override var onmouseover: ((MouseEvent) ->
dynamic)?\n  override var onmouseup: ((MouseEvent) -> dynamic)?\n  override var onwheel: ((WheelEvent) ->
dynamic)?\n  override var onpause: ((Event) -> dynamic)?\n  override var onplay: ((Event) -> dynamic)?\n
override var onplaying: ((Event) -> dynamic)?\n  override var onprogress: ((ProgressEvent) -> dynamic)?\n
override var onratechange: ((Event) -> dynamic)?\n  override var onreset: ((Event) -> dynamic)?\n  override var
onresize: ((Event) -> dynamic)?\n  override var onscroll: ((Event) -> dynamic)?\n  override var onseeked:
((Event) -> dynamic)?\n  override var onseeking: ((Event) -> dynamic)?\n  override var onselect: ((Event) ->
dynamic)?\n  override var onshow: ((Event) -> dynamic)?\n  override var onstalled: ((Event) -> dynamic)?\n
override var onsubmit: ((Event) -> dynamic)?\n  override var onsuspend: ((Event) -> dynamic)?\n  override var
ontimeupdate: ((Event) -> dynamic)?\n  override var ontoggle: ((Event) -> dynamic)?\n  override var
onvolumechange: ((Event) -> dynamic)?\n  override var onwaiting: ((Event) -> dynamic)?\n  override var
ongotpointercapture: ((PointerEvent) -> dynamic)?\n  override var onlostpointercapture: ((PointerEvent) ->
dynamic)?\n  override var onpointerdown: ((PointerEvent) -> dynamic)?\n  override var onpointermove:
((PointerEvent) -> dynamic)?\n  override var onpointerup: ((PointerEvent) -> dynamic)?\n  override var
onpointercancel: ((PointerEvent) -> dynamic)?\n  override var onpointerover: ((PointerEvent) -> dynamic)?\n
override var onpointerout: ((PointerEvent) -> dynamic)?\n  override var onpointerenter: ((PointerEvent) ->
dynamic)?\n  override var onpointerleave: ((PointerEvent) -> dynamic)?\n  override var oncopy:
((ClipboardEvent) -> dynamic)?\n  override var oncut: ((ClipboardEvent) -> dynamic)?\n  override var onpaste:
((ClipboardEvent) -> dynamic)?\n  override var contentEditable: String\n  override val isContentEditable:
Boolean\n  override val style: CSSStyleDeclaration\n  override val children: HTMLCollection\n  override val
firstElementChild: Element?\n  override val lastElementChild: Element?\n  override val childElementCount: Int\n
  override val previousElementSibling: Element?\n  override val nextElementSibling: Element?\n  override val
assignedSlot: HTMLSlotElement?\n  override fun prepend(vararg nodes: dynamic)\n  override fun append(vararg
nodes: dynamic)\n  override fun querySelector(selectors: String): Element?\n  override fun
querySelectorAll(selectors: String): NodeList\n  override fun before(vararg nodes: dynamic)\n  override fun
after(vararg nodes: dynamic)\n  override fun replaceWith(vararg nodes: dynamic)\n  override fun remove()\n
override fun getBoxQuads(options: BoxQuadOptions /* = definedExternally */): Array<DOMQuad>\n  override
fun convertQuadFromNode(quad: dynamic, from: dynamic, options: ConvertCoordinateOptions /* =
definedExternally */): DOMQuad\n  override fun convertRectFromNode(rect: DOMRectReadOnly, from:
dynamic, options: ConvertCoordinateOptions /* = definedExternally */): DOMQuad\n  override fun
convertPointFromNode(point: DOMPointInit, from: dynamic, options: ConvertCoordinateOptions /* =
definedExternally */): DOMPoint\n\n  companion object {\n    val ELEMENT_NODE: Short\n    val
ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val
ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val
PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n  }\n\n  public external interface
UnionElementOrHTMLCollection\n  public external interface UnionElementOrRadioNodeList\n  public external
interface UnionHTMLOptGroupElementOrHTMLOptionElement\n  public external interface
UnionAudioTrackOrTextTrackOrVideoTrack\n  public external interface UnionElementOrMouseEvent\n  public
external interface UnionMessagePortOrWindowProxy\n  public external interface MediaPlayer\n  public
external interface RenderingContext\n  public external interface HTMLOrSVGImageElement :
CanvasImageSource\n  public external interface CanvasImageSource : ImageBitmapSource\n  public external
interface ImageBitmapSource\n  public external interface HTMLOrSVGScriptElement\n  /* please, don't

```

implement this interface!

```
*\n@jsname("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic external
interface DocumentReadyState {\n    companion object\n}\n\npublic inline val
DocumentReadyState.Companion.LOADING: DocumentReadyState get() =
"loading".asDynamic().unsafeCast<DocumentReadyState>()\n\npublic inline val
DocumentReadyState.Companion.INTERACTIVE: DocumentReadyState get() =
"interactive".asDynamic().unsafeCast<DocumentReadyState>()\n\npublic inline val
DocumentReadyState.Companion.COMPLETE: DocumentReadyState get() =
"complete".asDynamic().unsafeCast<DocumentReadyState>()\n\n/* please, don't implement this interface!
*\n@jsname("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic external
interface CanPlayTypeResult {\n    companion object\n}\n\npublic inline val
CanPlayTypeResult.Companion.EMPTY: CanPlayTypeResult get() =
""\n\n.asDynamic().unsafeCast<CanPlayTypeResult>()\n\npublic inline val
CanPlayTypeResult.Companion.MAYBE: CanPlayTypeResult get() = "maybe".asDynamic().unsafeCast<CanPlayTypeResult>()\n\npublic inline val
CanPlayTypeResult.Companion.PROBABLY: CanPlayTypeResult get() =
"probably".asDynamic().unsafeCast<CanPlayTypeResult>()\n\n/* please, don't implement this interface!
*\n@jsname("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic external
interface TextTrackMode {\n    companion object\n}\n\npublic inline val
TextTrackMode.Companion.DISABLED: TextTrackMode get() = "disabled".asDynamic().unsafeCast<TextTrackMode>()\n\npublic inline val
TextTrackMode.Companion.HIDDEN: TextTrackMode get() =
"hidden".asDynamic().unsafeCast<TextTrackMode>()\n\npublic inline val
TextTrackMode.Companion.SHOWING: TextTrackMode get() =
"showing".asDynamic().unsafeCast<TextTrackMode>()\n\n/* please, don't implement this interface!
*\n@jsname("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic external
interface TextTrackKind {\n    companion object\n}\n\npublic inline val
TextTrackKind.Companion.SUBTITLES: TextTrackKind get() = "subtitles".asDynamic().unsafeCast<TextTrackKind>()\n\npublic inline val
TextTrackKind.Companion.CAPTIONS: TextTrackKind get() =
"captions".asDynamic().unsafeCast<TextTrackKind>()\n\npublic inline val
TextTrackKind.Companion.DESCRPTIONS: TextTrackKind get() =
"descriptions".asDynamic().unsafeCast<TextTrackKind>()\n\npublic inline val
TextTrackKind.Companion.CHAPTERS: TextTrackKind get() =
"chapters".asDynamic().unsafeCast<TextTrackKind>()\n\npublic inline val
TextTrackKind.Companion.METADATA: TextTrackKind get() =
"metadata".asDynamic().unsafeCast<TextTrackKind>()\n\n/* please, don't implement this interface!
*\n@jsname("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic external
interface SelectionMode {\n    companion object\n}\n\npublic inline val
SelectionMode.Companion.SELECT: SelectionMode get() = "select".asDynamic().unsafeCast<SelectionMode>()\n\npublic inline val
SelectionMode.Companion.START: SelectionMode get() =
"start".asDynamic().unsafeCast<SelectionMode>()\n\npublic inline val
SelectionMode.Companion.END: SelectionMode get() = "end".asDynamic().unsafeCast<SelectionMode>()\n\npublic inline val
SelectionMode.Companion.PRESERVE: SelectionMode get() =
"preserve".asDynamic().unsafeCast<SelectionMode>()\n\n/* please, don't implement this interface!
*\n@jsname("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic external
interface CanvasFillRule {\n    companion object\n}\n\npublic inline val
CanvasFillRule.Companion.NONZERO: CanvasFillRule get() = "nonzero".asDynamic().unsafeCast<CanvasFillRule>()\n\npublic inline val
CanvasFillRule.Companion.EVENODD: CanvasFillRule get() =
"evenodd".asDynamic().unsafeCast<CanvasFillRule>()\n\n/* please, don't implement this interface!
*\n@jsname("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic external
```

```

interface ImageSmoothingQuality {\n  companion object\n}\n\npublic inline val
ImageSmoothingQuality.Companion.LOW: ImageSmoothingQuality get() =
`low`.asDynamic().unsafeCast<ImageSmoothingQuality>()\n\npublic inline val
ImageSmoothingQuality.Companion.MEDIUM: ImageSmoothingQuality get() =
`medium`.asDynamic().unsafeCast<ImageSmoothingQuality>()\n\npublic inline val
ImageSmoothingQuality.Companion.HIGH: ImageSmoothingQuality get() =
`high`.asDynamic().unsafeCast<ImageSmoothingQuality>()\n\n/* please, don't implement this interface!
*\n@JsName(`null`)\n@Suppress(`NESTED_CLASS_IN_EXTERNAL_INTERFACE`)\n\npublic external
interface CanvasLineCap {\n  companion object\n}\n\npublic inline val CanvasLineCap.Companion.BUTT:
CanvasLineCap get() = `butt`.asDynamic().unsafeCast<CanvasLineCap>()\n\npublic inline val
CanvasLineCap.Companion.ROUND: CanvasLineCap get() =
`round`.asDynamic().unsafeCast<CanvasLineCap>()\n\npublic inline val CanvasLineCap.Companion.SQUARE:
CanvasLineCap get() = `square`.asDynamic().unsafeCast<CanvasLineCap>()\n\n/* please, don't implement this
interface! *\n@JsName(`null`)\n@Suppress(`NESTED_CLASS_IN_EXTERNAL_INTERFACE`)\n\npublic
external interface CanvasLineJoin {\n  companion object\n}\n\npublic inline val
CanvasLineJoin.Companion.ROUND: CanvasLineJoin get() =
`round`.asDynamic().unsafeCast<CanvasLineJoin>()\n\npublic inline val CanvasLineJoin.Companion.BEVEL:
CanvasLineJoin get() = `bevel`.asDynamic().unsafeCast<CanvasLineJoin>()\n\npublic inline val
CanvasLineJoin.Companion.MITER: CanvasLineJoin get() =
`miter`.asDynamic().unsafeCast<CanvasLineJoin>()\n\n/* please, don't implement this interface!
*\n@JsName(`null`)\n@Suppress(`NESTED_CLASS_IN_EXTERNAL_INTERFACE`)\n\npublic external
interface CanvasTextAlign {\n  companion object\n}\n\npublic inline val CanvasTextAlign.Companion.START:
CanvasTextAlign get() = `start`.asDynamic().unsafeCast<CanvasTextAlign>()\n\npublic inline val
CanvasTextAlign.Companion.END: CanvasTextAlign get() =
`end`.asDynamic().unsafeCast<CanvasTextAlign>()\n\npublic inline val CanvasTextAlign.Companion.LEFT:
CanvasTextAlign get() = `left`.asDynamic().unsafeCast<CanvasTextAlign>()\n\npublic inline val
CanvasTextAlign.Companion.RIGHT: CanvasTextAlign get() =
`right`.asDynamic().unsafeCast<CanvasTextAlign>()\n\npublic inline val
CanvasTextAlign.Companion.CENTER: CanvasTextAlign get() =
`center`.asDynamic().unsafeCast<CanvasTextAlign>()\n\n/* please, don't implement this interface!
*\n@JsName(`null`)\n@Suppress(`NESTED_CLASS_IN_EXTERNAL_INTERFACE`)\n\npublic external
interface CanvasTextBaseline {\n  companion object\n}\n\npublic inline val CanvasTextBaseline.Companion.TOP:
CanvasTextBaseline get() = `top`.asDynamic().unsafeCast<CanvasTextBaseline>()\n\npublic inline val
CanvasTextBaseline.Companion.HANGING: CanvasTextBaseline get() =
`hanging`.asDynamic().unsafeCast<CanvasTextBaseline>()\n\npublic inline val
CanvasTextBaseline.Companion.MIDDLE: CanvasTextBaseline get() =
`middle`.asDynamic().unsafeCast<CanvasTextBaseline>()\n\npublic inline val
CanvasTextBaseline.Companion.ALPHABETIC: CanvasTextBaseline get() =
`alphabetic`.asDynamic().unsafeCast<CanvasTextBaseline>()\n\npublic inline val
CanvasTextBaseline.Companion.IDEOGRAPHIC: CanvasTextBaseline get() =
`ideographic`.asDynamic().unsafeCast<CanvasTextBaseline>()\n\npublic inline val
CanvasTextBaseline.Companion.BOTTOM: CanvasTextBaseline get() =
`bottom`.asDynamic().unsafeCast<CanvasTextBaseline>()\n\n/* please, don't implement this interface!
*\n@JsName(`null`)\n@Suppress(`NESTED_CLASS_IN_EXTERNAL_INTERFACE`)\n\npublic external
interface CanvasDirection {\n  companion object\n}\n\npublic inline val CanvasDirection.Companion.LTR:
CanvasDirection get() = `ltr`.asDynamic().unsafeCast<CanvasDirection>()\n\npublic inline val
CanvasDirection.Companion.RTL: CanvasDirection get() =
`rtl`.asDynamic().unsafeCast<CanvasDirection>()\n\npublic inline val CanvasDirection.Companion.INHERIT:

```

```

CanvasDirection get() = "inherit".asDynamic().unsafeCast<CanvasDirection>()\n\n/* please, don't implement this
interface! *\n\n@JsName("null")\n\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic
external interface ScrollRestoration {\n  companion object\n}\n\npublic inline val
ScrollRestoration.Companion.AUTO: ScrollRestoration get() =
"auto".asDynamic().unsafeCast<ScrollRestoration>()\n\npublic inline val
ScrollRestoration.Companion.MANUAL: ScrollRestoration get() =
"manual".asDynamic().unsafeCast<ScrollRestoration>()\n\n/* please, don't implement this interface!
*\n\n@JsName("null")\n\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface ImageOrientation {\n  companion object\n}\n\npublic inline val ImageOrientation.Companion.NONE:
ImageOrientation get() = "none".asDynamic().unsafeCast<ImageOrientation>()\n\npublic inline val
ImageOrientation.Companion.FLIPY: ImageOrientation get() =
"flipY".asDynamic().unsafeCast<ImageOrientation>()\n\n/* please, don't implement this interface!
*\n\n@JsName("null")\n\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface PremultiplyAlpha {\n  companion object\n}\n\npublic inline val PremultiplyAlpha.Companion.NONE:
PremultiplyAlpha get() = "none".asDynamic().unsafeCast<PremultiplyAlpha>()\n\npublic inline val
PremultiplyAlpha.Companion.PREMULTIPLY: PremultiplyAlpha get() =
"premultiply".asDynamic().unsafeCast<PremultiplyAlpha>()\n\npublic inline val
PremultiplyAlpha.Companion.DEFAULT: PremultiplyAlpha get() =
"default".asDynamic().unsafeCast<PremultiplyAlpha>()\n\n/* please, don't implement this interface!
*\n\n@JsName("null")\n\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface ColorSpaceConversion {\n  companion object\n}\n\npublic inline val
ColorSpaceConversion.Companion.NONE: ColorSpaceConversion get() =
"none".asDynamic().unsafeCast<ColorSpaceConversion>()\n\npublic inline val
ColorSpaceConversion.Companion.DEFAULT: ColorSpaceConversion get() =
"default".asDynamic().unsafeCast<ColorSpaceConversion>()\n\n/* please, don't implement this interface!
*\n\n@JsName("null")\n\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface ResizeQuality {\n  companion object\n}\n\npublic inline val ResizeQuality.Companion.PIXELATED:
ResizeQuality get() = "pixelated".asDynamic().unsafeCast<ResizeQuality>()\n\npublic inline val
ResizeQuality.Companion.LOW: ResizeQuality get() =
"low".asDynamic().unsafeCast<ResizeQuality>()\n\npublic inline val ResizeQuality.Companion.MEDIUM:
ResizeQuality get() = "medium".asDynamic().unsafeCast<ResizeQuality>()\n\npublic inline val
ResizeQuality.Companion.HIGH: ResizeQuality get() = "high".asDynamic().unsafeCast<ResizeQuality>()\n\n/*
please, don't implement this interface!
*\n\n@JsName("null")\n\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface BinaryType {\n  companion object\n}\n\npublic inline val BinaryType.Companion.BLOB: BinaryType
get() = "blob".asDynamic().unsafeCast<BinaryType>()\n\npublic inline val
BinaryType.Companion.ARRAYBUFFER: BinaryType get() =
"arraybuffer".asDynamic().unsafeCast<BinaryType>()\n\n/* please, don't implement this interface!
*\n\n@JsName("null")\n\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface WorkerType {\n  companion object\n}\n\npublic inline val WorkerType.Companion.CLASSIC:
WorkerType get() = "classic".asDynamic().unsafeCast<WorkerType>()\n\npublic inline val
WorkerType.Companion.MODULE: WorkerType get() =
"module".asDynamic().unsafeCast<WorkerType>()\n\n/* please, don't implement this interface!
*\n\n@JsName("null")\n\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface ShadowRootMode {\n  companion object\n}\n\npublic inline val ShadowRootMode.Companion.OPEN:
ShadowRootMode get() = "open".asDynamic().unsafeCast<ShadowRootMode>()\n\npublic inline val
ShadowRootMode.Companion.CLOSED: ShadowRootMode get() =
"closed".asDynamic().unsafeCast<ShadowRootMode>()\n\n/* please, don't implement this interface!

```



```

*\n@JsName("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic external
interface ScrollBehavior {\n  companion object\n}\n\npublic inline val ScrollBehavior.Companion.AUTO:
ScrollBehavior get() = "auto".asDynamic().unsafeCast<ScrollBehavior>()\n\npublic inline val
ScrollBehavior.Companion.INSTANT: ScrollBehavior get() =
"instant".asDynamic().unsafeCast<ScrollBehavior>()\n\npublic inline val ScrollBehavior.Companion.SMOOTH:
ScrollBehavior get() = "smooth".asDynamic().unsafeCast<ScrollBehavior>()\n\n/* please, don't implement this
interface! *\n@JsName("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic
external interface ScrollLogicalPosition {\n  companion object\n}\n\npublic inline val
ScrollLogicalPosition.Companion.START: ScrollLogicalPosition get() =
"start".asDynamic().unsafeCast<ScrollLogicalPosition>()\n\npublic inline val
ScrollLogicalPosition.Companion.CENTER: ScrollLogicalPosition get() =
"center".asDynamic().unsafeCast<ScrollLogicalPosition>()\n\npublic inline val
ScrollLogicalPosition.Companion.END: ScrollLogicalPosition get() =
"end".asDynamic().unsafeCast<ScrollLogicalPosition>()\n\npublic inline val
ScrollLogicalPosition.Companion.NEAREST: ScrollLogicalPosition get() =
"nearest".asDynamic().unsafeCast<ScrollLogicalPosition>()\n\n/* please, don't implement this interface!
*\n@JsName("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic external
interface CSSBoxType {\n  companion object\n}\n\npublic inline val CSSBoxType.Companion.MARGIN:
CSSBoxType get() = "margin".asDynamic().unsafeCast<CSSBoxType>()\n\npublic inline val
CSSBoxType.Companion.BORDER: CSSBoxType get() =
"border".asDynamic().unsafeCast<CSSBoxType>()\n\npublic inline val CSSBoxType.Companion.PADDING:
CSSBoxType get() = "padding".asDynamic().unsafeCast<CSSBoxType>()\n\npublic inline val
CSSBoxType.Companion.CONTENT: CSSBoxType get() =
"content".asDynamic().unsafeCast<CSSBoxType>()"/**\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n *\n\n// NOTE: THIS FILE IS AUTO-GENERATED, DO NOT EDIT!\n//
See github.com/kotlin/dukat for details\n\npackage org.w3c.fetch\n\nimport kotlin.js.*\nimport
org.khronos.webgl.*\nimport org.w3c.files.*\nimport org.w3c.xhr.*\n\n/**\n * Exposes the JavaScript
[Headers](https://developer.mozilla.org/en/docs/Web/API/Headers) to Kotlin\n *\n\npublic external open class
Headers(init: dynamic = definedExternally) {\n  fun append(name: String, value: String)\n  fun delete(name:
String)\n  fun get(name: String): String?\n  fun has(name: String): Boolean\n  fun set(name: String, value:
String)\n}\n\n/**\n * Exposes the JavaScript [Body](https://developer.mozilla.org/en/docs/Web/API/Body) to
Kotlin\n *\n\npublic external interface Body {\n  val bodyUsed: Boolean\n  fun arrayBuffer():
Promise<ArrayBuffer>\n  fun blob(): Promise<Blob>\n  fun formData(): Promise<FormData>\n  fun json():
Promise<Any?>\n  fun text(): Promise<String>\n}\n\n/**\n * Exposes the JavaScript
[Request](https://developer.mozilla.org/en/docs/Web/API/Request) to Kotlin\n *\n\npublic external open class
Request(input: dynamic, init: RequestInit = definedExternally) : Body {\n  open val method: String\n  open val
url: String\n  open val headers: Headers\n  open val type: RequestType\n  open val destination:
RequestDestination\n  open val referrer: String\n  open val referrerPolicy: dynamic\n  open val mode:
RequestMode\n  open val credentials: RequestCredentials\n  open val cache: RequestCache\n  open val redirect:
RequestRedirect\n  open val integrity: String\n  open val keepalive: Boolean\n  override val bodyUsed:
Boolean\n  fun clone(): Request\n  override fun arrayBuffer(): Promise<ArrayBuffer>\n  override fun blob():
Promise<Blob>\n  override fun formData(): Promise<FormData>\n  override fun json(): Promise<Any?>\n
  override fun text(): Promise<String>\n}\n\n\npublic external interface RequestInit {\n  var method: String?\n
  get() = definedExternally\n  set(value) = definedExternally\n  var headers: dynamic\n  get() =
definedExternally\n  set(value) = definedExternally\n  var body: dynamic\n  get() = definedExternally\n
  set(value) = definedExternally\n  var referrer: String?\n  get() = definedExternally\n  set(value) =
definedExternally\n  var referrerPolicy: dynamic\n  get() = definedExternally\n  set(value) =

```

```

definedExternally\n var mode: RequestMode?\n get() = definedExternally\n set(value) =
definedExternally\n var credentials: RequestCredentials?\n get() = definedExternally\n set(value) =
definedExternally\n var cache: RequestCache?\n get() = definedExternally\n set(value) =
definedExternally\n var redirect: RequestRedirect?\n get() = definedExternally\n set(value) =
definedExternally\n var integrity: String?\n get() = definedExternally\n set(value) = definedExternally\n
var keepalive: Boolean?\n get() = definedExternally\n set(value) = definedExternally\n var window:
Any?\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun RequestInit(method: String? =
undefined, headers: dynamic = undefined, body: dynamic = undefined, referrer: String? = undefined, referrerPolicy:
dynamic = undefined, mode: RequestMode? = undefined, credentials: RequestCredentials? = undefined, cache:
RequestCache? = undefined, redirect: RequestRedirect? = undefined, integrity: String? = undefined, keepalive:
Boolean? = undefined, window: Any? = undefined): RequestInit {\n val o = js(\"({})\")\n o[\"method\"] =
method\n o[\"headers\"] = headers\n o[\"body\"] = body\n o[\"referrer\"] = referrer\n o[\"referrerPolicy\"] =
referrerPolicy\n o[\"mode\"] = mode\n o[\"credentials\"] = credentials\n o[\"cache\"] = cache\n o[\"redirect\"]
= redirect\n o[\"integrity\"] = integrity\n o[\"keepalive\"] = keepalive\n o[\"window\"] = window\n return
o\n}\n\n/**\n * Exposes the JavaScript [Response](https://developer.mozilla.org/en/docs/Web/API/Response) to
Kotlin\n */\npublic external open class Response(body: dynamic = definedExternally, init: ResponseInit =
definedExternally) : Body {\n open val type: ResponseType\n open val url: String\n open val redirected:
Boolean\n open val status: Short\n open val ok: Boolean\n open val statusText: String\n open val headers:
Headers\n open val body: dynamic\n open val trailer: Promise<Headers>\n override val bodyUsed: Boolean\n
fun clone(): Response\n override fun ArrayBuffer(): Promise<ArrayBuffer>\n override fun blob():
Promise<Blob>\n override fun formData(): Promise<FormData>\n override fun json(): Promise<Any?>\n
override fun text(): Promise<String>\n\n companion object {\n fun error(): Response\n fun redirect(url:
String, status: Short = definedExternally): Response\n }\n}\n\npublic external interface ResponseInit {\n var
status: Short? /* = 200 */\n get() = definedExternally\n set(value) = definedExternally\n var statusText:
String? /* = \"OK\" */\n get() = definedExternally\n set(value) = definedExternally\n var headers:
dynamic\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun ResponseInit(status: Short? = 200,
statusText: String? = \"OK\", headers: dynamic = undefined): ResponseInit {\n val o = js(\"({})\")\n o[\"status\"]
= status\n o[\"statusText\"] = statusText\n o[\"headers\"] = headers\n return o\n}\n\n/* please, don't implement
this interface! */\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\npublic
external interface RequestType {\n companion object\n}\n\npublic inline val RequestType.Companion.EMPTY:
RequestType get() = \"\".asDynamic().unsafeCast<RequestType>()\n\npublic inline val
RequestType.Companion.AUDIO: RequestType get() =
\"audio\".asDynamic().unsafeCast<RequestType>()\n\npublic inline val RequestType.Companion.FONT:
RequestType get() = \"font\".asDynamic().unsafeCast<RequestType>()\n\npublic inline val
RequestType.Companion.IMAGE: RequestType get() =
\"image\".asDynamic().unsafeCast<RequestType>()\n\npublic inline val RequestType.Companion.SCRIPT:
RequestType get() = \"script\".asDynamic().unsafeCast<RequestType>()\n\npublic inline val
RequestType.Companion.STYLE: RequestType get() =
\"style\".asDynamic().unsafeCast<RequestType>()\n\npublic inline val RequestType.Companion.TRACK:
RequestType get() = \"track\".asDynamic().unsafeCast<RequestType>()\n\npublic inline val
RequestType.Companion.VIDEO: RequestType get() = \"video\".asDynamic().unsafeCast<RequestType>()\n\n/*
please, don't implement this interface!
*/\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\npublic external
interface RequestDestination {\n companion object\n}\n\npublic inline val

```

```

RequestDestination.Companion.EMPTY: RequestDestination get() =
    \"\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.DOCUMENT: RequestDestination get() =
    \"document\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.EMBED: RequestDestination get() =
    \"embed\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.FONT: RequestDestination get() =
    \"font\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.IMAGE: RequestDestination get() =
    \"image\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.MANIFEST: RequestDestination get() =
    \"manifest\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.MEDIA: RequestDestination get() =
    \"media\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.OBJECT: RequestDestination get() =
    \"object\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.REPORT: RequestDestination get() =
    \"report\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.SCRIPT: RequestDestination get() =
    \"script\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.SERVICEWORKER: RequestDestination get() =
    \"serviceworker\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.SHAREDWORKER: RequestDestination get() =
    \"sharedworker\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.STYLE: RequestDestination get() =
    \"style\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.WORKER: RequestDestination get() =
    \"worker\".asDynamic().unsafeCast<RequestDestination>()\n\npublic inline val
RequestDestination.Companion.XSLT: RequestDestination get() =
    \"xslt\".asDynamic().unsafeCast<RequestDestination>()\n\n/* please, don't implement this interface!
*\n\n@JsName(\"null\")\n\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\n\npublic external
interface RequestMode {\n    companion object\n}\n\npublic inline val RequestMode.Companion.NAVIGATE:
RequestMode get() = \"navigate\".asDynamic().unsafeCast<RequestMode>()\n\npublic inline val
RequestMode.Companion.SAME_ORIGIN: RequestMode get() = \"same-
origin\".asDynamic().unsafeCast<RequestMode>()\n\npublic inline val RequestMode.Companion.NO_CORS:
RequestMode get() = \"no-cors\".asDynamic().unsafeCast<RequestMode>()\n\npublic inline val
RequestMode.Companion.CORS: RequestMode get() = \"cors\".asDynamic().unsafeCast<RequestMode>()\n\n/*
please, don't implement this interface!
*\n\n@JsName(\"null\")\n\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\n\npublic external
interface RequestCredentials {\n    companion object\n}\n\npublic inline val RequestCredentials.Companion.OMIT:
RequestCredentials get() = \"omit\".asDynamic().unsafeCast<RequestCredentials>()\n\npublic inline val
RequestCredentials.Companion.SAME_ORIGIN: RequestCredentials get() = \"same-
origin\".asDynamic().unsafeCast<RequestCredentials>()\n\npublic inline val
RequestCredentials.Companion.INCLUDE: RequestCredentials get() =
    \"include\".asDynamic().unsafeCast<RequestCredentials>()\n\n/* please, don't implement this interface!
*\n\n@JsName(\"null\")\n\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\n\npublic external
interface RequestCache {\n    companion object\n}\n\npublic inline val RequestCache.Companion.DEFAULT:
RequestCache get() = \"default\".asDynamic().unsafeCast<RequestCache>()\n\npublic inline val

```

```

RequestCache.Companion.NO_STORE: RequestCache get() = \"no-
store\".asDynamic().unsafeCast<RequestCache>()\n\npublic inline val RequestCache.Companion.RELOAD:
RequestCache get() = \"reload\".asDynamic().unsafeCast<RequestCache>()\n\npublic inline val
RequestCache.Companion.NO_CACHE: RequestCache get() = \"no-
cache\".asDynamic().unsafeCast<RequestCache>()\n\npublic inline val
RequestCache.Companion.FORCE_CACHE: RequestCache get() = \"force-
cache\".asDynamic().unsafeCast<RequestCache>()\n\npublic inline val
RequestCache.Companion.ONLY_IF_CACHED: RequestCache get() = \"only-if-
cached\".asDynamic().unsafeCast<RequestCache>()\n\n/* please, don't implement this interface!
*\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\n\npublic external
interface RequestRedirect {\n    companion object\n}\n\npublic inline val RequestRedirect.Companion.FOLLOW:
RequestRedirect get() = \"follow\".asDynamic().unsafeCast<RequestRedirect>()\n\npublic inline val
RequestRedirect.Companion.ERROR: RequestRedirect get() =
\"error\".asDynamic().unsafeCast<RequestRedirect>()\n\npublic inline val RequestRedirect.Companion.MANUAL:
RequestRedirect get() = \"manual\".asDynamic().unsafeCast<RequestRedirect>()\n\n/* please, don't implement this
interface! *\n@JsName(\"null\")\n@Suppress(\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\n\npublic
external interface ResponseType {\n    companion object\n}\n\npublic inline val ResponseType.Companion.BASIC:
ResponseType get() = \"basic\".asDynamic().unsafeCast<ResponseType>()\n\npublic inline val
ResponseType.Companion.CORS: ResponseType get() =
\"cors\".asDynamic().unsafeCast<ResponseType>()\n\npublic inline val ResponseType.Companion.DEFAULT:
ResponseType get() = \"default\".asDynamic().unsafeCast<ResponseType>()\n\npublic inline val
ResponseType.Companion.ERROR: ResponseType get() =
\"error\".asDynamic().unsafeCast<ResponseType>()\n\npublic inline val ResponseType.Companion.OPAQUE:
ResponseType get() = \"opaque\".asDynamic().unsafeCast<ResponseType>()\n\npublic inline val
ResponseType.Companion.OPAQUEREDIRECT: ResponseType get() =
\"opaqueredirect\".asDynamic().unsafeCast<ResponseType>()", /*\n * Copyright 2010-2021 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n *\n@n// NOTE: THIS FILE IS AUTO-GENERATED, DO NOT
EDIT!\n// See github.com/kotlin/dukat for details\n\npackage org.w3c.dom.mediacapture\n\nimport
kotlin.js.*\nimport org.khronos.webgl.*\nimport org.w3c.dom.*\nimport org.w3c.dom.events.*\n\n/**\n * Exposes
the JavaScript [MediaStream](https://developer.mozilla.org/en/docs/Web/API/MediaStream) to Kotlin\n *\n\npublic
external open class MediaStream() : EventTarget, MediaProvider {\n    constructor(stream: MediaStream)\n
    constructor(tracks: Array<MediaStreamTrack>)\n    open val id: String\n    open val active: Boolean\n    var
onaddtrack: ((MediaStreamTrackEvent) -> dynamic)?\n    var onremovetrack: ((MediaStreamTrackEvent) ->
dynamic)?\n    fun getAudioTracks(): Array<MediaStreamTrack>\n    fun getVideoTracks():
Array<MediaStreamTrack>\n    fun getTracks(): Array<MediaStreamTrack>\n    fun getTrackById(trackId: String):
MediaStreamTrack?\n    fun addTrack(track: MediaStreamTrack)\n    fun removeTrack(track: MediaStreamTrack)\n
    fun clone(): MediaStream\n}\n\n/**\n * Exposes the JavaScript
[MediaStreamTrack](https://developer.mozilla.org/en/docs/Web/API/MediaStreamTrack) to Kotlin\n *\n\npublic
external abstract class MediaStreamTrack : EventTarget {\n    open val kind: String\n    open val id: String\n    open
val label: String\n    open var enabled: Boolean\n    open val muted: Boolean\n    open var onmute: ((Event) ->
dynamic)?\n    open var onunmute: ((Event) -> dynamic)?\n    open val readyState: MediaStreamTrackState\n
    open var onended: ((Event) -> dynamic)?\n    open var onoverconstrained: ((Event) -> dynamic)?\n    fun clone():
MediaStreamTrack\n    fun stop()\n    fun getCapabilities(): MediaTrackCapabilities\n    fun getConstraints():
MediaTrackConstraints\n    fun getSettings(): MediaTrackSettings\n    fun applyConstraints(constraints:
MediaTrackConstraints = definedExternally): Promise<Unit>\n}\n\n/**\n * Exposes the JavaScript
[MediaTrackSupportedConstraints](https://developer.mozilla.org/en/docs/Web/API/MediaTrackSupportedConstrain
ts) to Kotlin\n *\n\npublic external interface MediaTrackSupportedConstraints {\n    var width: Boolean? /* = true

```

```

*^n    get() = definedExternally^n    set(value) = definedExternally^n    var height: Boolean? /* = true */^n
get() = definedExternally^n    set(value) = definedExternally^n    var aspectRatio: Boolean? /* = true */^n    get()
= definedExternally^n    set(value) = definedExternally^n    var frameRate: Boolean? /* = true */^n    get() =
definedExternally^n    set(value) = definedExternally^n    var facingMode: Boolean? /* = true */^n    get() =
definedExternally^n    set(value) = definedExternally^n    var resizeMode: Boolean? /* = true */^n    get() =
definedExternally^n    set(value) = definedExternally^n    var volume: Boolean? /* = true */^n    get() =
definedExternally^n    set(value) = definedExternally^n    var sampleRate: Boolean? /* = true */^n    get() =
definedExternally^n    set(value) = definedExternally^n    var sampleSize: Boolean? /* = true */^n    get() =
definedExternally^n    set(value) = definedExternally^n    var echoCancellation: Boolean? /* = true */^n    get()
= definedExternally^n    set(value) = definedExternally^n    var autoGainControl: Boolean? /* = true */^n    get()
= definedExternally^n    set(value) = definedExternally^n    var noiseSuppression: Boolean? /* = true */^n
get() = definedExternally^n    set(value) = definedExternally^n    var latency: Boolean? /* = true */^n    get() =
definedExternally^n    set(value) = definedExternally^n    var channelCount: Boolean? /* = true */^n    get() =
definedExternally^n    set(value) = definedExternally^n    var deviceId: Boolean? /* = true */^n    get() =
definedExternally^n    set(value) = definedExternally^n    var groupId: Boolean? /* = true */^n    get() =
definedExternally^n    set(value) = definedExternally^n}}^n^n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")^n^n@kotlin.internal.InlineOnly^npublic inline fun
MediaTrackSupportedConstraints(width: Boolean? = true, height: Boolean? = true, aspectRatio: Boolean? = true,
frameRate: Boolean? = true, facingMode: Boolean? = true, resizeMode: Boolean? = true, volume: Boolean? = true,
sampleRate: Boolean? = true, sampleSize: Boolean? = true, echoCancellation: Boolean? = true, autoGainControl:
Boolean? = true, noiseSuppression: Boolean? = true, latency: Boolean? = true, channelCount: Boolean? = true,
deviceId: Boolean? = true, groupId: Boolean? = true): MediaTrackSupportedConstraints {^n    val o = js("{}")^n
o["width"] = width^n    o["height"] = height^n    o["aspectRatio"] = aspectRatio^n    o["frameRate"] =
frameRate^n    o["facingMode"] = facingMode^n    o["resizeMode"] = resizeMode^n    o["volume"] = volume^n
o["sampleRate"] = sampleRate^n    o["sampleSize"] = sampleSize^n    o["echoCancellation"] =
echoCancellation^n    o["autoGainControl"] = autoGainControl^n    o["noiseSuppression"] = noiseSuppression^n
o["latency"] = latency^n    o["channelCount"] = channelCount^n    o["deviceId"] = deviceId^n    o["groupId"] =
groupId^n    return o^n}}^n^npublic external interface MediaTrackCapabilities {^n    var width: ULongRange?^n
get() = definedExternally^n    set(value) = definedExternally^n    var height: ULongRange?^n    get() =
definedExternally^n    set(value) = definedExternally^n    var aspectRatio: DoubleRange?^n    get() =
definedExternally^n    set(value) = definedExternally^n    var frameRate: DoubleRange?^n    get() =
definedExternally^n    set(value) = definedExternally^n    var facingMode: Array<String>?^n    get() =
definedExternally^n    set(value) = definedExternally^n    var resizeMode: Array<String>?^n    get() =
definedExternally^n    set(value) = definedExternally^n    var volume: DoubleRange?^n    get() =
definedExternally^n    set(value) = definedExternally^n    var sampleRate: ULongRange?^n    get() =
definedExternally^n    set(value) = definedExternally^n    var sampleSize: ULongRange?^n    get() =
definedExternally^n    set(value) = definedExternally^n    var echoCancellation: Array<Boolean>?^n    get() =
definedExternally^n    set(value) = definedExternally^n    var autoGainControl: Array<Boolean>?^n    get() =
definedExternally^n    set(value) = definedExternally^n    var noiseSuppression: Array<Boolean>?^n    get() =
definedExternally^n    set(value) = definedExternally^n    var latency: DoubleRange?^n    get() =
definedExternally^n    set(value) = definedExternally^n    var channelCount: ULongRange?^n    get() =
definedExternally^n    set(value) = definedExternally^n    var deviceId: String?^n    get() = definedExternally^n
set(value) = definedExternally^n    var groupId: String?^n    get() = definedExternally^n    set(value) =
definedExternally^n}}^n^n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")^n^n@kotlin.internal.InlineOnly^npublic inline fun MediaTrackCapabilities(width:
ULongRange? = undefined, height: ULongRange? = undefined, aspectRatio: DoubleRange? = undefined,
frameRate: DoubleRange? = undefined, facingMode: Array<String>? = undefined, resizeMode: Array<String>? =
undefined, volume: DoubleRange? = undefined, sampleRate: ULongRange? = undefined, sampleSize:

```

```

ULongRange? = undefined, echoCancellation: Array<Boolean>? = undefined, autoGainControl: Array<Boolean>?
= undefined, noiseSuppression: Array<Boolean>? = undefined, latency: DoubleRange? = undefined, channelCount:
ULongRange? = undefined, deviceId: String? = undefined, groupId: String? = undefined): MediaTrackCapabilities
{
    val o = js("{}")
    o["width"] = width
    o["height"] = height
    o["aspectRatio"] = aspectRatio
    o["frameRate"] = frameRate
    o["facingMode"] = facingMode
    o["resizeMode"] = resizeMode
    o["volume"] = volume
    o["sampleRate"] = sampleRate
    o["sampleSize"] = sampleSize
    o["echoCancellation"] = echoCancellation
    o["autoGainControl"] = autoGainControl
    o["noiseSuppression"] = noiseSuppression
    o["latency"] = latency
    o["channelCount"] = channelCount
    o["deviceId"] = deviceId
    o["groupId"] = groupId
    return o
}

** Exposes the JavaScript
[MediaTrackConstraints](https://developer.mozilla.org/en/docs/Web/API/MediaTrackConstraints) to Kotlin

* \npublic external interface MediaTrackConstraints : MediaTrackConstraintSet {
    var advanced:
Array<MediaTrackConstraintSet>?
    get() = definedExternally
    set(value) =
definedExternally
}

@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")
@kotlin.internal.InlineOnly
npublic inline fun MediaTrackConstraints(advanced:
Array<MediaTrackConstraintSet>? = undefined, width: dynamic = undefined, height: dynamic = undefined,
aspectRatio: dynamic = undefined, frameRate: dynamic = undefined, facingMode: dynamic = undefined,
resizeMode: dynamic = undefined, volume: dynamic = undefined, sampleRate: dynamic = undefined, sampleSize:
dynamic = undefined, echoCancellation: dynamic = undefined, autoGainControl: dynamic = undefined,
noiseSuppression: dynamic = undefined, latency: dynamic = undefined, channelCount: dynamic = undefined,
deviceId: dynamic = undefined, groupId: dynamic = undefined): MediaTrackConstraints {
    val o = js("{}")
    o["advanced"] = advanced
    o["width"] = width
    o["height"] = height
    o["aspectRatio"] =
aspectRatio
    o["frameRate"] = frameRate
    o["facingMode"] = facingMode
    o["resizeMode"] =
resizeMode
    o["volume"] = volume
    o["sampleRate"] = sampleRate
    o["sampleSize"] = sampleSize
    o["echoCancellation"] = echoCancellation
    o["autoGainControl"] = autoGainControl
    o["noiseSuppression"] = noiseSuppression
    o["latency"] = latency
    o["channelCount"] = channelCount
    o["deviceId"] = deviceId
    o["groupId"] = groupId
    return o
}

npublic external interface
MediaTrackConstraintSet {
    var width: dynamic
    get() = definedExternally
    set(value) =
definedExternally
    var height: dynamic
    get() = definedExternally
    set(value) = definedExternally
    var aspectRatio: dynamic
    get() = definedExternally
    set(value) = definedExternally
    var frameRate:
dynamic
    get() = definedExternally
    set(value) = definedExternally
    var facingMode: dynamic
    get() = definedExternally
    set(value) = definedExternally
    var resizeMode: dynamic
    get() =
definedExternally
    set(value) = definedExternally
    var volume: dynamic
    get() = definedExternally
    set(value) =
definedExternally
    var sampleRate: dynamic
    get() = definedExternally
    set(value) =
definedExternally
    var sampleSize: dynamic
    get() = definedExternally
    set(value) =
definedExternally
    var echoCancellation: dynamic
    get() = definedExternally
    set(value) =
definedExternally
    var autoGainControl: dynamic
    get() = definedExternally
    set(value) =
definedExternally
    var noiseSuppression: dynamic
    get() = definedExternally
    set(value) =
definedExternally
    var latency: dynamic
    get() = definedExternally
    set(value) = definedExternally
    var channelCount: dynamic
    get() = definedExternally
    set(value) = definedExternally
    var deviceId:
dynamic
    get() = definedExternally
    set(value) = definedExternally
    var groupId: dynamic
    get()
= definedExternally
    set(value) = definedExternally
}

@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")
@kotlin.internal.InlineOnly
npublic inline fun MediaTrackConstraintSet(width:
dynamic = undefined, height: dynamic = undefined, aspectRatio: dynamic = undefined, frameRate: dynamic =
undefined, facingMode: dynamic = undefined, resizeMode: dynamic = undefined, volume: dynamic = undefined,
sampleRate: dynamic = undefined, sampleSize: dynamic = undefined, echoCancellation: dynamic = undefined,
autoGainControl: dynamic = undefined, noiseSuppression: dynamic = undefined, latency: dynamic = undefined,
channelCount: dynamic = undefined, deviceId: dynamic = undefined, groupId: dynamic = undefined):
MediaTrackConstraintSet {
    val o = js("{}")
    o["width"] = width
    o["height"] = height

```

```

o["aspectRatio"] = aspectRatio\n  o["frameRate"] = frameRate\n  o["facingMode"] = facingMode\n
o["resizeMode"] = resizeMode\n  o["volume"] = volume\n  o["sampleRate"] = sampleRate\n
o["sampleSize"] = sampleSize\n  o["echoCancellation"] = echoCancellation\n  o["autoGainControl"] =
autoGainControl\n  o["noiseSuppression"] = noiseSuppression\n  o["latency"] = latency\n
o["channelCount"] = channelCount\n  o["deviceId"] = deviceId\n  o["groupId"] = groupId\n  return
o\n}\n\n/**\n * Exposes the JavaScript
[MediaTrackSettings](https://developer.mozilla.org/en/docs/Web/API/MediaTrackSettings) to Kotlin\n
*\npublic external interface MediaTrackSettings {\n  var width: Int?\n    get() = definedExternally\n    set(value) =
definedExternally\n  var height: Int?\n    get() = definedExternally\n    set(value) = definedExternally\n  var
aspectRatio: Double?\n    get() = definedExternally\n    set(value) = definedExternally\n  var frameRate:
Double?\n    get() = definedExternally\n    set(value) = definedExternally\n  var facingMode: String?\n
get() = definedExternally\n    set(value) = definedExternally\n  var resizeMode: String?\n    get() =
definedExternally\n    set(value) = definedExternally\n  var volume: Double?\n    get() = definedExternally\n
set(value) = definedExternally\n  var sampleRate: Int?\n    get() = definedExternally\n    set(value) =
definedExternally\n  var sampleSize: Int?\n    get() = definedExternally\n    set(value) = definedExternally\n
var echoCancellation: Boolean?\n    get() = definedExternally\n    set(value) = definedExternally\n  var
autoGainControl: Boolean?\n    get() = definedExternally\n    set(value) = definedExternally\n  var
noiseSuppression: Boolean?\n    get() = definedExternally\n    set(value) = definedExternally\n  var latency:
Double?\n    get() = definedExternally\n    set(value) = definedExternally\n  var channelCount: Int?\n
get() = definedExternally\n    set(value) = definedExternally\n  var deviceId: String?\n    get() =
definedExternally\n    set(value) = definedExternally\n  var groupId: String?\n    get() = definedExternally\n
set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n\n@kotlin.internal.InlineOnly\npublic inline fun MediaTrackSettings(width: Int? =
undefined, height: Int? = undefined, aspectRatio: Double? = undefined, frameRate: Double? = undefined,
facingMode: String? = undefined, resizeMode: String? = undefined, volume: Double? = undefined, sampleRate: Int?
= undefined, sampleSize: Int? = undefined, echoCancellation: Boolean? = undefined, autoGainControl: Boolean? =
undefined, noiseSuppression: Boolean? = undefined, latency: Double? = undefined, channelCount: Int? = undefined,
deviceId: String? = undefined, groupId: String? = undefined): MediaTrackSettings {\n  val o = js("{}")\n
o["width"] = width\n  o["height"] = height\n  o["aspectRatio"] = aspectRatio\n  o["frameRate"] =
frameRate\n  o["facingMode"] = facingMode\n  o["resizeMode"] = resizeMode\n  o["volume"] = volume\n
o["sampleRate"] = sampleRate\n  o["sampleSize"] = sampleSize\n  o["echoCancellation"] =
echoCancellation\n  o["autoGainControl"] = autoGainControl\n  o["noiseSuppression"] = noiseSuppression\n
o["latency"] = latency\n  o["channelCount"] = channelCount\n  o["deviceId"] = deviceId\n  o["groupId"] =
groupId\n  return o\n}\n\n/**\n * Exposes the JavaScript
[MediaStreamTrackEvent](https://developer.mozilla.org/en/docs/Web/API/MediaStreamTrackEvent) to Kotlin\n
*\npublic external open class MediaStreamTrackEvent(type: String, eventInitDict: MediaStreamTrackEventInit) :
Event {\n  open val track: MediaStreamTrack\n\n  companion object {\n    val NONE: Short\n    val
CAPTURING_PHASE: Short\n    val AT_TARGET: Short\n    val BUBBLING_PHASE: Short\n
}\n}\n\npublic external interface MediaStreamTrackEventInit : EventInit {\n  var track:
MediaStreamTrack?\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n\n@kotlin.internal.InlineOnly\npublic inline fun MediaStreamTrackEventInit(track:
MediaStreamTrack?, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false):
MediaStreamTrackEventInit {\n  val o = js("{}")\n  o["track"] = track\n  o["bubbles"] = bubbles\n
o["cancelable"] = cancelable\n  o["composed"] = composed\n  return o\n}\n\npublic external open class
OverconstrainedErrorEvent(type: String, eventInitDict: OverconstrainedErrorEventInit) : Event {\n  open val error:
dynamic\n\n  companion object {\n    val NONE: Short\n    val CAPTURING_PHASE: Short\n    val
AT_TARGET: Short\n    val BUBBLING_PHASE: Short\n  }\n}\n\npublic external interface
OverconstrainedErrorEventInit : EventInit {\n  var error: dynamic /* = null */\n    get() = definedExternally\n

```

```

set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun OverconstrainedErrorEventInit(error:
dynamic = null, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false):
OverconstrainedErrorEventInit {\n val o = js(\"({})\")\n o[\"error\"] = error\n o[\"bubbles\"] = bubbles\n
o[\"cancelable\"] = cancelable\n o[\"composed\"] = composed\n return o\n}\n\n/**\n * Exposes the JavaScript
[MediaDevices](https://developer.mozilla.org/en/docs/Web/API/MediaDevices) to Kotlin\n */\npublic external
abstract class MediaDevices : EventTarget {\n open var ondevicechange: ((Event) -> dynamic)?\n fun
enumerateDevices(): Promise<Array<MediaDeviceInfo>>\n fun getSupportedConstraints():
MediaTrackSupportedConstraints\n fun getUserMedia(constraints: MediaStreamConstraints = definedExternally):
Promise<MediaStream>\n}\n\n/**\n * Exposes the JavaScript
[MediaDeviceInfo](https://developer.mozilla.org/en/docs/Web/API/MediaDeviceInfo) to Kotlin\n */\npublic
external abstract class MediaDeviceInfo {\n open val deviceId: String\n open val kind: MediaDeviceKind\n
open val label: String\n open val groupId: String\n fun toJSON(): dynamic\n}\n\npublic external abstract class
InputDeviceInfo : MediaDeviceInfo {\n fun getCapabilities(): MediaTrackCapabilities\n}\n\n/**\n * Exposes the
JavaScript [MediaStreamConstraints](https://developer.mozilla.org/en/docs/Web/API/MediaStreamConstraints) to
Kotlin\n */\npublic external interface MediaStreamConstraints {\n var video: dynamic /* = false */\n get() =
definedExternally\n set(value) = definedExternally\n var audio: dynamic /* = false */\n get() =
definedExternally\n set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun MediaStreamConstraints(video:
dynamic = false, audio: dynamic = false): MediaStreamConstraints {\n val o = js(\"({})\")\n o[\"video\"] =
video\n o[\"audio\"] = audio\n return o\n}\n\npublic external interface ConstrainingPattern {\n var
onoverconstrained: ((Event) -> dynamic)?\n get() = definedExternally\n set(value) = definedExternally\n
fun getCapabilities(): Capabilities\n fun getConstraints(): Constraints\n fun getSettings(): Settings\n fun
applyConstraints(constraints: Constraints = definedExternally): Promise<Unit>\n}\n\n/**\n * Exposes the
JavaScript [DoubleRange](https://developer.mozilla.org/en/docs/Web/API/DoubleRange) to Kotlin\n */\npublic
external interface DoubleRange {\n var max: Double?\n get() = definedExternally\n set(value) =
definedExternally\n var min: Double?\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun DoubleRange(max: Double? =
undefined, min: Double? = undefined): DoubleRange {\n val o = js(\"({})\")\n o[\"max\"] = max\n o[\"min\"] =
min\n return o\n}\n\npublic external interface ConstrainDoubleRange : DoubleRange {\n var exact: Double?\n
get() = definedExternally\n set(value) = definedExternally\n var ideal: Double?\n get() =
definedExternally\n set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun ConstrainDoubleRange(exact: Double?
= undefined, ideal: Double? = undefined, max: Double? = undefined, min: Double? = undefined):
ConstrainDoubleRange {\n val o = js(\"({})\")\n o[\"exact\"] = exact\n o[\"ideal\"] = ideal\n o[\"max\"] =
max\n o[\"min\"] = min\n return o\n}\n\npublic external interface ULongRange {\n var max: Int?\n get() =
definedExternally\n set(value) = definedExternally\n var min: Int?\n get() = definedExternally\n
set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun ULongRange(max: Int? = undefined,
min: Int? = undefined): ULongRange {\n val o = js(\"({})\")\n o[\"max\"] = max\n o[\"min\"] = min\n return
o\n}\n\npublic external interface ConstrainULongRange : ULongRange {\n var exact: Int?\n get() =
definedExternally\n set(value) = definedExternally\n var ideal: Int?\n get() = definedExternally\n
set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun ConstrainULongRange(exact: Int? =
undefined, ideal: Int? = undefined, max: Int? = undefined, min: Int? = undefined): ConstrainULongRange {\n
val o = js(\"({})\")\n o[\"exact\"] = exact\n o[\"ideal\"] = ideal\n o[\"max\"] = max\n o[\"min\"] = min\n
return o\n}\n\n/**\n * Exposes the JavaScript

```



```

[ConstrainBooleanParameters](https://developer.mozilla.org/en/docs/Web/API/ConstrainBooleanParameters) to
Kotlin\n *^\\npublic external interface ConstrainBooleanParameters {\n  var exact: Boolean?\n  get() =
definedExternally\n  set(value) = definedExternally\n  var ideal: Boolean?\n  get() = definedExternally\n
set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun ConstrainBooleanParameters(exact:
Boolean? = undefined, ideal: Boolean? = undefined): ConstrainBooleanParameters {\n  val o = js("{}")\n
o["exact"] = exact\n  o["ideal"] = ideal\n  return o\n}\n\n/**\n * Exposes the JavaScript
[ConstrainDOMStringParameters](https://developer.mozilla.org/en/docs/Web/API/ConstrainDOMStringParameters)
to Kotlin\n *^\\npublic external interface ConstrainDOMStringParameters {\n  var exact: dynamic\n  get() =
definedExternally\n  set(value) = definedExternally\n  var ideal: dynamic\n  get() = definedExternally\n
set(value) = definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun
ConstrainDOMStringParameters(exact: dynamic = undefined, ideal: dynamic = undefined):
ConstrainDOMStringParameters {\n  val o = js("{}")\n  o["exact"] = exact\n  o["ideal"] = ideal\n  return
o\n}\n\npublic external interface Capabilities\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun Capabilities(): Capabilities {\n  val o
= js("{}")\n  return o\n}\n\npublic external interface Settings\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun Settings(): Settings {\n  val o =
js("{}")\n  return o\n}\n\npublic external interface ConstraintSet\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun ConstraintSet(): ConstraintSet {\n
val o = js("{}")\n  return o\n}\n\npublic external interface Constraints : ConstraintSet {\n  var advanced:
Array<ConstraintSet>?\n  get() = definedExternally\n  set(value) =
definedExternally\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline fun Constraints(advanced:
Array<ConstraintSet>? = undefined): Constraints {\n  val o = js("{}")\n  o["advanced"] = advanced\n
return o\n}\n\n/* please, don't implement this interface!
*\n\n@JsName("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic external
interface MediaStreamTrackState {\n  companion object\n}\n\npublic inline val
MediaStreamTrackState.Companion.LIVE: MediaStreamTrackState get() =
"live".asDynamic().unsafeCast<MediaStreamTrackState>()\n\npublic inline val
MediaStreamTrackState.Companion.ENDED: MediaStreamTrackState get() =
"ended".asDynamic().unsafeCast<MediaStreamTrackState>()\n\n/* please, don't implement this interface!
*\n\n@JsName("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic external
interface VideoFacingModeEnum {\n  companion object\n}\n\npublic inline val
VideoFacingModeEnum.Companion.USER: VideoFacingModeEnum get() =
"user".asDynamic().unsafeCast<VideoFacingModeEnum>()\n\npublic inline val
VideoFacingModeEnum.Companion.ENVIRONMENT: VideoFacingModeEnum get() =
"environment".asDynamic().unsafeCast<VideoFacingModeEnum>()\n\npublic inline val
VideoFacingModeEnum.Companion.LEFT: VideoFacingModeEnum get() =
"left".asDynamic().unsafeCast<VideoFacingModeEnum>()\n\npublic inline val
VideoFacingModeEnum.Companion.RIGHT: VideoFacingModeEnum get() =
"right".asDynamic().unsafeCast<VideoFacingModeEnum>()\n\n/* please, don't implement this interface!
*\n\n@JsName("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic external
interface VideoResizeModeEnum {\n  companion object\n}\n\npublic inline val
VideoResizeModeEnum.Companion.NONE: VideoResizeModeEnum get() =
"none".asDynamic().unsafeCast<VideoResizeModeEnum>()\n\npublic inline val
VideoResizeModeEnum.Companion.CROP_AND_SCALE: VideoResizeModeEnum get() = "crop-and-
scale".asDynamic().unsafeCast<VideoResizeModeEnum>()\n\n/* please, don't implement this interface!

```

```

*\n@jsname("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic external
interface MediaDeviceKind {\n    companion object\n}\n\npublic inline val
MediaDeviceKind.Companion.AUDIOINPUT: MediaDeviceKind get() =
"audioinput".asDynamic().unsafeCast<MediaDeviceKind>()\n\npublic inline val
MediaDeviceKind.Companion.AUDIOOUTPUT: MediaDeviceKind get() =
"audiooutput".asDynamic().unsafeCast<MediaDeviceKind>()\n\npublic inline val
MediaDeviceKind.Companion.VIDEOINPUT: MediaDeviceKind get() =
"videoinput".asDynamic().unsafeCast<MediaDeviceKind>()"/*\n * Copyright 2010-2021 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n */\n\n// NOTE: THIS FILE IS AUTO-GENERATED, DO NOT
EDIT!\n\n See github.com/kotlin/dukat for details\n\npackage org.w3c.dom.mediasource\n\nimport
kotlin.js.*\nimport org.khronos.webgl.*\nimport org.w3c.dom.*\nimport org.w3c.dom.events.*\n\n/**\n * Exposes
the JavaScript [MediaSource](https://developer.mozilla.org/en/docs/Web/API/MediaSource) to Kotlin\n */\n\npublic
external open class MediaSource : EventTarget, MediaProvider {\n    open val sourceBuffers: SourceBufferList\n
open val activeSourceBuffers: SourceBufferList\n    open val readyState: ReadyState\n    var duration: Double\n
var onsourceopen: ((Event) -> dynamic)?\n    var onsourceended: ((Event) -> dynamic)?\n    var onsourceclose:
((Event) -> dynamic)?\n    fun addSourceBuffer(type: String): SourceBuffer\n    fun
removeSourceBuffer(sourceBuffer: SourceBuffer)\n    fun endOfStream(error: EndOfStreamError =
definedExternally)\n    fun setLiveSeekableRange(start: Double, end: Double)\n    fun clearLiveSeekableRange()\n
companion object {\n    fun isTypeSupported(type: String): Boolean\n    }\n}\n\n/**\n * Exposes the JavaScript
[SourceBuffer](https://developer.mozilla.org/en/docs/Web/API/SourceBuffer) to Kotlin\n */\n\npublic external
abstract class SourceBuffer : EventTarget {\n    open var mode: AppendMode\n    open val updating: Boolean\n
open val buffered: TimeRanges\n    open var timestampOffset: Double\n    open val audioTracks: AudioTrackList\n
open val videoTracks: VideoTrackList\n    open val textTracks: TextTrackList\n    open var appendWindowStart:
Double\n    open var appendWindowEnd: Double\n    open var onupdatestart: ((Event) -> dynamic)?\n    open var
onupdate: ((Event) -> dynamic)?\n    open var onupdateend: ((Event) -> dynamic)?\n    open var onerror: ((Event) ->
dynamic)?\n    open var onabort: ((Event) -> dynamic)?\n    fun appendBuffer(data: dynamic)\n    fun abort()\n    fun
remove(start: Double, end: Double)\n}\n\n/**\n * Exposes the JavaScript
[SourceBufferList](https://developer.mozilla.org/en/docs/Web/API/SourceBufferList) to Kotlin\n */\n\npublic
external abstract class SourceBufferList : EventTarget {\n    open val length: Int\n    open var onaddsourcebuffer:
((Event) -> dynamic)?\n    open var onremovesourcebuffer: ((Event) ->
dynamic)?\n}\n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\npublic inline operator fun SourceBufferList.get(index:
Int): SourceBuffer? = asDynamic()[index]\n\n/* please, don't implement this interface!
*\n */\n\n*\n@jsname("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic external
interface ReadyState {\n    companion object\n}\n\npublic inline val ReadyState.Companion.CLOSED: ReadyState
get() = "closed".asDynamic().unsafeCast<ReadyState>()\n\npublic inline val ReadyState.Companion.OPEN:
ReadyState get() = "open".asDynamic().unsafeCast<ReadyState>()\n\npublic inline val
ReadyState.Companion.ENDED: ReadyState get() = "ended".asDynamic().unsafeCast<ReadyState>()\n\n/*
please, don't implement this interface!
*\n */\n\n*\n@jsname("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic external
interface EndOfStreamError {\n    companion object\n}\n\npublic inline val
EndOfStreamError.Companion.NETWORK: EndOfStreamError get() =
"network".asDynamic().unsafeCast<EndOfStreamError>()\n\npublic inline val
EndOfStreamError.Companion.DECODE: EndOfStreamError get() =
"decode".asDynamic().unsafeCast<EndOfStreamError>()\n\n/* please, don't implement this interface!
*\n */\n\n*\n@jsname("null")\n@Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\npublic external
interface AppendMode {\n    companion object\n}\n\npublic inline val AppendMode.Companion.SEGMENTS:

```

```

AppendMode get() = \"segments\".asDynamic().unsafeCast<AppendMode>()\n\npublic inline val
AppendMode.Companion.SEQUENCE: AppendMode get() =
\"sequence\".asDynamic().unsafeCast<AppendMode>()\"/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n */\n\n// NOTE: THIS FILE IS AUTO-GENERATED, DO NOT EDIT!\n//
See github.com/kotlin/dukat for details\n\npackage org.w3c.dom.pointerevents\n\nimport kotlin.js.*\nimport
org.khronos.webgl.*\nimport org.w3c.dom.*\nimport org.w3c.dom.events.*\n\npublic external interface
PointerEventInit : MouseEventInit {\n    var pointerId: Int? /* = 0 */\n        get() = definedExternally\n
set(value) = definedExternally\n    var width: Double? /* = 1.0 */\n        get() = definedExternally\n    set(value) =
definedExternally\n    var height: Double? /* = 1.0 */\n        get() = definedExternally\n    set(value) =
definedExternally\n    var pressure: Float? /* = 0f */\n        get() = definedExternally\n    set(value) =
definedExternally\n    var tangentialPressure: Float? /* = 0f */\n        get() = definedExternally\n    set(value) =
definedExternally\n    var tiltX: Int? /* = 0 */\n        get() = definedExternally\n    set(value) = definedExternally\n
var tiltY: Int? /* = 0 */\n        get() = definedExternally\n    set(value) = definedExternally\n    var twist: Int? /* =
0 */\n        get() = definedExternally\n    set(value) = definedExternally\n    var pointerType: String? /* = \"\" */\n
        get() = definedExternally\n    set(value) = definedExternally\n    var isPrimary: Boolean? /* = false */\n
        get() = definedExternally\n    set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun PointerEventInit(pointerId: Int? = 0,
width: Double? = 1.0, height: Double? = 1.0, pressure: Float? = 0f, tangentialPressure: Float? = 0f, tiltX: Int? = 0,
tiltY: Int? = 0, twist: Int? = 0, pointerType: String? = \"\", isPrimary: Boolean? = false, screenX: Int? = 0, screenY:
Int? = 0, clientX: Int? = 0, clientY: Int? = 0, button: Short? = 0, buttons: Short? = 0, relatedTarget: EventTarget? =
null, region: String? = null, ctrlKey: Boolean? = false, shiftKey: Boolean? = false, altKey: Boolean? = false,
metaKey: Boolean? = false, modifierAltGraph: Boolean? = false, modifierCapsLock: Boolean? = false, modifierFn:
Boolean? = false, modifierFnLock: Boolean? = false, modifierHyper: Boolean? = false, modifierNumLock:
Boolean? = false, modifierScrollLock: Boolean? = false, modifierSuper: Boolean? = false, modifierSymbol:
Boolean? = false, modifierSymbolLock: Boolean? = false, view: Window? = null, detail: Int? = 0, bubbles:
Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false): PointerEventInit {\n    val o =
js(\"({})\")\n    o[\"pointerId\"] = pointerId\n    o[\"width\"] = width\n    o[\"height\"] = height\n    o[\"pressure\"] =
pressure\n    o[\"tangentialPressure\"] = tangentialPressure\n    o[\"tiltX\"] = tiltX\n    o[\"tiltY\"] = tiltY\n
o[\"twist\"] = twist\n    o[\"pointerType\"] = pointerType\n    o[\"isPrimary\"] = isPrimary\n    o[\"screenX\"] =
screenX\n    o[\"screenY\"] = screenY\n    o[\"clientX\"] = clientX\n    o[\"clientY\"] = clientY\n    o[\"button\"] =
button\n    o[\"buttons\"] = buttons\n    o[\"relatedTarget\"] = relatedTarget\n    o[\"region\"] = region\n
o[\"ctrlKey\"] = ctrlKey\n    o[\"shiftKey\"] = shiftKey\n    o[\"altKey\"] = altKey\n    o[\"metaKey\"] = metaKey\n
o[\"modifierAltGraph\"] = modifierAltGraph\n    o[\"modifierCapsLock\"] = modifierCapsLock\n
o[\"modifierFn\"] = modifierFn\n    o[\"modifierFnLock\"] = modifierFnLock\n    o[\"modifierHyper\"] =
modifierHyper\n    o[\"modifierNumLock\"] = modifierNumLock\n    o[\"modifierScrollLock\"] =
modifierScrollLock\n    o[\"modifierSuper\"] = modifierSuper\n    o[\"modifierSymbol\"] = modifierSymbol\n
o[\"modifierSymbolLock\"] = modifierSymbolLock\n    o[\"view\"] = view\n    o[\"detail\"] = detail\n
o[\"bubbles\"] = bubbles\n    o[\"cancelable\"] = cancelable\n    o[\"composed\"] = composed\n    return
o\n}\n\n/*\n * Exposes the JavaScript
[PointerEvent](https://developer.mozilla.org/en/docs/Web/API/PointerEvent) to Kotlin\n */\n\npublic external open
class PointerEvent(type: String, eventInitDict: PointerEventInit = definedExternally) : MouseEvent {\n    open val
pointerId: Int\n    open val width: Double\n    open val height: Double\n    open val pressure: Float\n    open val
tangentialPressure: Float\n    open val tiltX: Int\n    open val tiltY: Int\n    open val twist: Int\n    open val
pointerType: String\n    open val isPrimary: Boolean\n\n    companion object {\n        val NONE: Short\n        val
CAPTURING_PHASE: Short\n        val AT_TARGET: Short\n        val BUBBLING_PHASE: Short\n    }\n}\n\n/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code
is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n// NOTE: THIS

```

```

FILE IS AUTO-GENERATED, DO NOT EDIT!\n// See github.com/kotlin/dukat for details\n\npackage
org.w3c.dom.svg\n\nimport kotlin.js.*\nimport org.khronos.webgl.*\nimport org.w3c.dom.*\nimport
org.w3c.dom.css.*\n\n/**\n * Exposes the JavaScript
[SVGElement](https://developer.mozilla.org/en/docs/Web/API/SVGElement) to Kotlin\n\n * public external
abstract class SVGElement : Element, ElementCSSInlineStyle, GlobalEventHandlers, SVGElementInstance {\n
open val dataset: DOMStringMap\n open val ownerSVGElement: SVGSVGElement?\n open val
viewportElement: SVGElement?\n open var tabIndex: Int\n fun focus()\n fun blur()\n\n companion object
{\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n
val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val
ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE:
Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\npublic external interface
SVGBoundingBoxOptions {\n var fill: Boolean? /* = true */\n get() = definedExternally\n set(value) =
definedExternally\n var stroke: Boolean? /* = false */\n get() = definedExternally\n set(value) =
definedExternally\n var markers: Boolean? /* = false */\n get() = definedExternally\n set(value) =
definedExternally\n var clipped: Boolean? /* = false */\n get() = definedExternally\n set(value) =
definedExternally\n}\n\n@Suppress("\nINVISIBLE_REFERENCE",
"\nINVISIBLE_MEMBER")\n\n@kotlin.internal.InlineOnly\n\npublic inline fun SVGBoundingBoxOptions(fill:
Boolean? = true, stroke: Boolean? = false, markers: Boolean? = false, clipped: Boolean? = false):
SVGBoundingBoxOptions {\n val o = js("\n({})")\n o["fill"] = fill\n o["stroke"] = stroke\n o["markers"] =
markers\n o["clipped"] = clipped\n return o\n}\n\n/**\n * Exposes the JavaScript
[SVGGraphicsElement](https://developer.mozilla.org/en/docs/Web/API/SVGGraphicsElement) to Kotlin\n\n
* public external abstract class SVGGraphicsElement : SVGElement, SVGTests {\n open val transform:
SVGAnimatedTransformList\n fun getBBox(options: SVGBoundingBoxOptions = definedExternally):
DOMRect\n fun getCTM(): DOMMatrix?\n fun getScreenCTM(): DOMMatrix?\n\n companion object {\n
val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n * Exposes the JavaScript
[SVGGeometryElement](https://developer.mozilla.org/en/docs/Web/API/SVGGeometryElement) to Kotlin\n\n
* public external abstract class SVGGeometryElement : SVGGraphicsElement {\n open val pathLength:
SVGAnimatedNumber\n fun isPointInFill(point: DOMPoint): Boolean\n fun isPointInStroke(point: DOMPoint):
Boolean\n fun getTotalLength(): Float\n fun getPointAtLength(distance: Float): DOMPoint\n\n companion
object {\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE:
Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val
ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE:
Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n

```

```

    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n} \n \n /** \n * Exposes the JavaScript
[SVGNumber](https://developer.mozilla.org/en/docs/Web/API/SVGNumber) to Kotlin \n * \n \n public external
abstract class SVGNumber { \n    open var value: Float \n} \n \n /** \n * Exposes the JavaScript
[SVGLength](https://developer.mozilla.org/en/docs/Web/API/SVGLength) to Kotlin \n * \n \n public external
abstract class SVGLength { \n    open val unitType: Short\n    open var value: Float\n    open var valueInSpecifiedUnits:
Float\n    open var valueAsString: String\n    fun newValueSpecifiedUnits(unitType: Short, valueInSpecifiedUnits:
Float)\n    fun convertToSpecifiedUnits(unitType: Short)\n\n    companion object { \n        val
SVG_LENGTHTYPE_UNKNOWN: Short\n        val SVG_LENGTHTYPE_NUMBER: Short\n        val
SVG_LENGTHTYPE_PERCENTAGE: Short\n        val SVG_LENGTHTYPE_EMS: Short\n        val
SVG_LENGTHTYPE_EXS: Short\n        val SVG_LENGTHTYPE_PX: Short\n        val
SVG_LENGTHTYPE_CM: Short\n        val SVG_LENGTHTYPE_MM: Short\n        val
SVG_LENGTHTYPE_IN: Short\n        val SVG_LENGTHTYPE_PT: Short\n        val SVG_LENGTHTYPE_PC:
Short\n    } \n} \n \n /** \n * Exposes the JavaScript
[SVGAngle](https://developer.mozilla.org/en/docs/Web/API/SVGAngle) to Kotlin \n * \n \n public external
abstract class SVGAngle { \n    open val unitType: Short\n    open var value: Float\n    open var valueInSpecifiedUnits:
Float\n    open var valueAsString: String\n    fun newValueSpecifiedUnits(unitType: Short, valueInSpecifiedUnits:
Float)\n    fun convertToSpecifiedUnits(unitType: Short)\n\n    companion object { \n        val
SVG_ANGLETYPE_UNKNOWN: Short\n        val SVG_ANGLETYPE_UNSPECIFIED: Short\n        val
SVG_ANGLETYPE_DEG: Short\n        val SVG_ANGLETYPE_RAD: Short\n        val
SVG_ANGLETYPE_GRAD: Short\n    } \n} \n \n public external abstract class SVGNameList { \n    open val length:
Int\n    open val numberOfItems: Int\n    fun clear()\n    fun initialize(newItem: dynamic): dynamic\n    fun
insertItemBefore(newItem: dynamic, index: Int): dynamic\n    fun replaceItem(newItem: dynamic, index: Int):
dynamic\n    fun removeItem(index: Int): dynamic\n    fun appendItem(newItem: dynamic): dynamic\n    fun
getItem(index: Int): dynamic\n} \n \n @Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER") \n @kotlin.internal.InlineOnly \n public inline operator fun SVGNameList.get(index: Int):
dynamic = asDynamic()[index] \n \n @Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER") \n @kotlin.internal.InlineOnly \n public inline operator fun SVGNameList.set(index: Int,
newItem: dynamic) { asDynamic()[index] = newItem } \n \n /** \n * Exposes the JavaScript
[SVGNumberList](https://developer.mozilla.org/en/docs/Web/API/SVGNumberList) to Kotlin \n * \n \n public external
abstract class SVGNumberList { \n    open val length: Int\n    open val numberOfItems: Int\n    fun clear()\n    fun
initialize(newItem: SVGNumber): SVGNumber\n    fun insertItemBefore(newItem: SVGNumber, index: Int):
SVGNumber\n    fun replaceItem(newItem: SVGNumber, index: Int): SVGNumber\n    fun removeItem(index: Int):
SVGNumber\n    fun appendItem(newItem: SVGNumber): SVGNumber\n    fun getItem(index: Int):
SVGNumber\n} \n \n @Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER") \n @kotlin.internal.InlineOnly \n public inline operator fun SVGNumberList.get(index:
Int): SVGNumber? = asDynamic()[index] \n \n @Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER") \n @kotlin.internal.InlineOnly \n public inline operator fun SVGNumberList.set(index:
Int, newItem: SVGNumber) { asDynamic()[index] = newItem } \n \n /** \n * Exposes the JavaScript
[SVGLengthList](https://developer.mozilla.org/en/docs/Web/API/SVGLengthList) to Kotlin \n * \n \n public external
abstract class SVGLengthList { \n    open val length: Int\n    open val numberOfItems: Int\n    fun clear()\n    fun
initialize(newItem: SVGLength): SVGLength\n    fun insertItemBefore(newItem: SVGLength, index: Int):
SVGLength\n    fun replaceItem(newItem: SVGLength, index: Int): SVGLength\n    fun removeItem(index: Int):
SVGLength\n    fun appendItem(newItem: SVGLength): SVGLength\n    fun getItem(index: Int):
SVGLength\n} \n \n @Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER") \n @kotlin.internal.InlineOnly \n public inline operator fun SVGLengthList.get(index:
Int): SVGLength? = asDynamic()[index] \n \n @Suppress("INVISIBLE_REFERENCE",

```

```

\@kotlin.internal.InlineOnly\npublic inline operator fun SVGLengthList.set(index: Int,
newItem: SVGLength) { asDynamic()[index] = newItem }\n\n/**\n * Exposes the JavaScript
[SVGAnimatedBoolean](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedBoolean) to Kotlin\n
*\npublic external abstract class SVGAnimatedBoolean {\n  open var baseVal: Boolean\n  open val animVal:
Boolean\n}\n\n/**\n * Exposes the JavaScript
[SVGAnimatedEnumeration](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedEnumeration) to
Kotlin\n *\npublic external abstract class SVGAnimatedEnumeration {\n  open var baseVal: Short\n  open val
animVal: Short\n}\n\n/**\n * Exposes the JavaScript
[SVGAnimatedInteger](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedInteger) to Kotlin\n
*\npublic external abstract class SVGAnimatedInteger {\n  open var baseVal: Int\n  open val animVal:
Int\n}\n\n/**\n * Exposes the JavaScript
[SVGAnimatedNumber](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedNumber) to Kotlin\n
*\npublic external abstract class SVGAnimatedNumber {\n  open var baseVal: Float\n  open val animVal:
Float\n}\n\n/**\n * Exposes the JavaScript
[SVGAnimatedLength](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedLength) to Kotlin\n
*\npublic external abstract class SVGAnimatedLength {\n  open val baseVal: SVGLength\n  open val animVal:
SVGLength\n}\n\n/**\n * Exposes the JavaScript
[SVGAnimatedAngle](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedAngle) to Kotlin\n *\npublic
external abstract class SVGAnimatedAngle {\n  open val baseVal: SVGAngle\n  open val animVal:
SVGAngle\n}\n\n/**\n * Exposes the JavaScript
[SVGAnimatedString](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedString) to Kotlin\n *\npublic
external abstract class SVGAnimatedString {\n  open var baseVal: String\n  open val animVal: String\n}\n\n/**\n
 * Exposes the JavaScript [SVGAnimatedRect](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedRect)
to Kotlin\n *\npublic external abstract class SVGAnimatedRect {\n  open val baseVal: DOMRect\n  open val
animVal: DOMRectReadOnly\n}\n\n/**\n * Exposes the JavaScript
[SVGAnimatedNumberList](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedNumberList) to Kotlin\n
*\npublic external abstract class SVGAnimatedNumberList {\n  open val baseVal: SVGNumberList\n  open val
animVal: SVGNumberList\n}\n\n/**\n * Exposes the JavaScript
[SVGAnimatedLengthList](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedLengthList) to Kotlin\n
*\npublic external abstract class SVGAnimatedLengthList {\n  open val baseVal: SVGLengthList\n  open val
animVal: SVGLengthList\n}\n\n/**\n * Exposes the JavaScript
[SVGStringList](https://developer.mozilla.org/en/docs/Web/API/SVGStringList) to Kotlin\n *\npublic external
abstract class SVGStringList {\n  open val length: Int\n  open val numberOfItems: Int\n  fun clear()\n  fun
initialize(newItem: String): String\n  fun insertItemBefore(newItem: String, index: Int): String\n  fun
replaceItem(newItem: String, index: Int): String\n  fun removeItem(index: Int): String\n  fun
appendItem(newItem: String): String\n  fun getItem(index: Int):
String\n}\n\n@Suppress(\\"INVISIBLE_REFERENCE\",
\\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun SVGStringList.get(index:
Int): String? = asDynamic()[index]\n\n@Suppress(\\"INVISIBLE_REFERENCE\",
\\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun SVGStringList.set(index: Int,
newItem: String) { asDynamic()[index] = newItem }\n\n/**\n * Exposes the JavaScript
[SVGUnitTypes](https://developer.mozilla.org/en/docs/Web/API/SVGUnitTypes) to Kotlin\n
*\n@Suppress(\\"NESTED_CLASS_IN_EXTERNAL_INTERFACE\")\npublic external interface SVGUnitTypes
{\n  companion object {\n    val SVG_UNIT_TYPE_UNKNOWN: Short\n    val
SVG_UNIT_TYPE_USERSPACEONUSE: Short\n    val SVG_UNIT_TYPE_OBJECTBOUNDINGBOX:
Short\n  }\n}\n\n/**\n * Exposes the JavaScript
[SVGTTests](https://developer.mozilla.org/en/docs/Web/API/SVGTTests) to Kotlin\n *\npublic external interface
SVGTTests {\n  val requiredExtensions: SVGStringList\n  val systemLanguage: SVGStringList\n}\n\npublic

```

```

external interface SVGFitToViewBox {\n  val viewBox: SVGAnimatedRect\n  val preserveAspectRatio:
SVGAnimatedPreserveAspectRatio}\n\n/**\n * Exposes the JavaScript
[SVGZoomAndPan](https://developer.mozilla.org/en/docs/Web/API/SVGZoomAndPan) to Kotlin\n
*\n @Suppress("NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n public external interface
SVGZoomAndPan {\n  var zoomAndPan: Short\n\n  companion object {\n  val
SVG_ZOOMANDPAN_UNKNOWN: Short\n  val SVG_ZOOMANDPAN_DISABLE: Short\n  val
SVG_ZOOMANDPAN_MAGNIFY: Short\n  }\n\n /**\n * Exposes the JavaScript
[SVGURIReference](https://developer.mozilla.org/en/docs/Web/API/SVGURIReference) to Kotlin\n
*\n public
external interface SVGURIReference {\n  val href: SVGAnimatedString}\n\n /**\n * Exposes the JavaScript
[SVGSVGElement](https://developer.mozilla.org/en/docs/Web/API/SVGSVGElement) to Kotlin\n
*\n public
external abstract class SVGSVGElement : SVGGraphicsElement, SVGFitToViewBox, SVGZoomAndPan,
WindowEventHandlers {\n  open val x: SVGAnimatedLength\n  open val y: SVGAnimatedLength\n  open val
width: SVGAnimatedLength\n  open val height: SVGAnimatedLength\n  open var currentScale: Float\n  open
val currentTranslate: DOMPointReadOnly\n  fun getIntersectionList(rect: DOMRectReadOnly, referenceElement:
SVGElement?): NodeList\n  fun getEnclosureList(rect: DOMRectReadOnly, referenceElement: SVGElement?):
NodeList\n  fun checkIntersection(element: SVGElement, rect: DOMRectReadOnly): Boolean\n  fun
checkEnclosure(element: SVGElement, rect: DOMRectReadOnly): Boolean\n  fun deselectAll()\n  fun
createSVGNumber(): SVGNumber\n  fun createSVGLength(): SVGLength\n  fun createSVGAngle():
SVGAngle\n  fun createSVGPoint(): DOMPoint\n  fun createSVGMatrix(): DOMMatrix\n  fun
createSVGRect(): DOMRect\n  fun createSVGTransform(): SVGTransform\n  fun
createSVGTransformFromMatrix(matrix: DOMMatrixReadOnly): SVGTransform\n  fun
getElementById(elementId: String): Element\n  fun suspendRedraw(maxWaitMilliseconds: Int): Int\n  fun
unsuspendRedraw(suspendHandleID: Int)\n  fun unsuspendRedrawAll()\n  fun forceRedraw()\n\n  companion
object {\n  val SVG_ZOOMANDPAN_UNKNOWN: Short\n  val SVG_ZOOMANDPAN_DISABLE:
Short\n  val SVG_ZOOMANDPAN_MAGNIFY: Short\n  val ELEMENT_NODE: Short\n  val
ATTRIBUTE_NODE: Short\n  val TEXT_NODE: Short\n  val CDATA_SECTION_NODE: Short\n  val
ENTITY_REFERENCE_NODE: Short\n  val ENTITY_NODE: Short\n  val
PROCESSING_INSTRUCTION_NODE: Short\n  val COMMENT_NODE: Short\n  val
DOCUMENT_NODE: Short\n  val DOCUMENT_TYPE_NODE: Short\n  val
DOCUMENT_FRAGMENT_NODE: Short\n  val NOTATION_NODE: Short\n  val
DOCUMENT_POSITION_DISCONNECTED: Short\n  val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n  val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n  val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n  }\n\n /**\n * Exposes the JavaScript
[SVGGElement](https://developer.mozilla.org/en/docs/Web/API/SVGGElement) to Kotlin\n
*\n public external
abstract class SVGGElement : SVGGraphicsElement {\n  companion object {\n  val ELEMENT_NODE:
Short\n  val ATTRIBUTE_NODE: Short\n  val TEXT_NODE: Short\n  val CDATA_SECTION_NODE:
Short\n  val ENTITY_REFERENCE_NODE: Short\n  val ENTITY_NODE: Short\n  val
PROCESSING_INSTRUCTION_NODE: Short\n  val COMMENT_NODE: Short\n  val
DOCUMENT_NODE: Short\n  val DOCUMENT_TYPE_NODE: Short\n  val
DOCUMENT_FRAGMENT_NODE: Short\n  val NOTATION_NODE: Short\n  val
DOCUMENT_POSITION_DISCONNECTED: Short\n  val DOCUMENT_POSITION_PRECEDING: Short\n
val DOCUMENT_POSITION_FOLLOWING: Short\n  val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n  val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n  }\n\n public external abstract class
SVGUnknownElement : SVGGraphicsElement {\n  companion object {\n  val ELEMENT_NODE: Short\n
val ATTRIBUTE_NODE: Short\n  val TEXT_NODE: Short\n  val CDATA_SECTION_NODE: Short\n
val ENTITY_REFERENCE_NODE: Short\n  val ENTITY_NODE: Short\n  val

```

```

PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[SVGDefsElement](https://developer.mozilla.org/en/docs/Web/API/SVGDefsElement) to Kotlin\n */\npublic
external abstract class SVGDefsElement : SVGGraphicsElement {\n    companion object {\n    val
ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val
CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE:
Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[SVGDescElement](https://developer.mozilla.org/en/docs/Web/API/SVGDescElement) to Kotlin\n */\npublic
external abstract class SVGDescElement : SVGElement {\n    companion object {\n    val ELEMENT_NODE:
Short\n    val ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE:
Short\n    val ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val
PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[SVGMetadataElement](https://developer.mozilla.org/en/docs/Web/API/SVGMetadataElement) to Kotlin\n
*/\npublic external abstract class SVGMetadataElement : SVGElement {\n    companion object {\n    val
ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val
CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE:
Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[SVGTitleElement](https://developer.mozilla.org/en/docs/Web/API/SVGTitleElement) to Kotlin\n */\npublic
external abstract class SVGTitleElement : SVGElement {\n    companion object {\n    val ELEMENT_NODE:
Short\n    val ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE:
Short\n    val ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val
PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n

```



```

val DOCUMENT_POSITION_FOLLOWING: Short\n      val DOCUMENT_POSITION_CONTAINS: Short\n
val DOCUMENT_POSITION_CONTAINED_BY: Short\n      val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n      } \n } \n / ** \n * Exposes the JavaScript
[SVGSymbolElement](https://developer.mozilla.org/en/docs/Web/API/SVGSymbolElement) to Kotlin \n * \n public
external abstract class SVGSymbolElement : SVGGraphicsElement, SVGFitToViewBox { \n      companion object
{ \n      val ELEMENT_NODE: Short\n      val ATTRIBUTE_NODE: Short\n      val TEXT_NODE: Short\n
val CDATA_SECTION_NODE: Short\n      val ENTITY_REFERENCE_NODE: Short\n      val
ENTITY_NODE: Short\n      val PROCESSING_INSTRUCTION_NODE: Short\n      val COMMENT_NODE:
Short\n      val DOCUMENT_NODE: Short\n      val DOCUMENT_TYPE_NODE: Short\n      val
DOCUMENT_FRAGMENT_NODE: Short\n      val NOTATION_NODE: Short\n      val
DOCUMENT_POSITION_DISCONNECTED: Short\n      val DOCUMENT_POSITION_PRECEDING: Short\n
      val DOCUMENT_POSITION_FOLLOWING: Short\n      val DOCUMENT_POSITION_CONTAINS: Short\n
      val DOCUMENT_POSITION_CONTAINED_BY: Short\n      val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n      } \n } \n / ** \n * Exposes the JavaScript
[SVGUseElement](https://developer.mozilla.org/en/docs/Web/API/SVGUseElement) to Kotlin \n * \n public external
abstract class SVGUseElement : SVGGraphicsElement, SVGURIReference { \n      open val x:
SVGAnimatedLength\n      open val y: SVGAnimatedLength\n      open val width: SVGAnimatedLength\n      open val
height: SVGAnimatedLength\n      open val instanceRoot: SVGElement?\n      open val animatedInstanceRoot:
SVGElement?\n      companion object { \n      val ELEMENT_NODE: Short\n      val ATTRIBUTE_NODE:
Short\n      val TEXT_NODE: Short\n      val CDATA_SECTION_NODE: Short\n      val
ENTITY_REFERENCE_NODE: Short\n      val ENTITY_NODE: Short\n      val
PROCESSING_INSTRUCTION_NODE: Short\n      val COMMENT_NODE: Short\n      val
DOCUMENT_NODE: Short\n      val DOCUMENT_TYPE_NODE: Short\n      val
DOCUMENT_FRAGMENT_NODE: Short\n      val NOTATION_NODE: Short\n      val
DOCUMENT_POSITION_DISCONNECTED: Short\n      val DOCUMENT_POSITION_PRECEDING: Short\n
      val DOCUMENT_POSITION_FOLLOWING: Short\n      val DOCUMENT_POSITION_CONTAINS: Short\n
      val DOCUMENT_POSITION_CONTAINED_BY: Short\n      val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n      } \n } \n public external open class
SVGUseElementShadowRoot : ShadowRoot { \n      companion object { \n      val ELEMENT_NODE: Short\n
val ATTRIBUTE_NODE: Short\n      val TEXT_NODE: Short\n      val CDATA_SECTION_NODE: Short\n
val ENTITY_REFERENCE_NODE: Short\n      val ENTITY_NODE: Short\n      val
PROCESSING_INSTRUCTION_NODE: Short\n      val COMMENT_NODE: Short\n      val
DOCUMENT_NODE: Short\n      val DOCUMENT_TYPE_NODE: Short\n      val
DOCUMENT_FRAGMENT_NODE: Short\n      val NOTATION_NODE: Short\n      val
DOCUMENT_POSITION_DISCONNECTED: Short\n      val DOCUMENT_POSITION_PRECEDING: Short\n
      val DOCUMENT_POSITION_FOLLOWING: Short\n      val DOCUMENT_POSITION_CONTAINS: Short\n
      val DOCUMENT_POSITION_CONTAINED_BY: Short\n      val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n      } \n } \n public external interface
SVGElementInstance { \n      val correspondingElement: SVGElement?\n      get() = definedExternally\n      val
correspondingUseElement: SVGUseElement?\n      get() = definedExternally\n      } \n } \n public external open class
ShadowAnimation(source: dynamic, newTarget: dynamic) { \n      open val sourceAnimation: dynamic\n      } \n } \n / ** \n *
Exposes the JavaScript [SVGSwitchElement](https://developer.mozilla.org/en/docs/Web/API/SVGSwitchElement)
to Kotlin \n * \n public external abstract class SVGSwitchElement : SVGGraphicsElement { \n      companion object
{ \n      val ELEMENT_NODE: Short\n      val ATTRIBUTE_NODE: Short\n      val TEXT_NODE: Short\n
val CDATA_SECTION_NODE: Short\n      val ENTITY_REFERENCE_NODE: Short\n      val
ENTITY_NODE: Short\n      val PROCESSING_INSTRUCTION_NODE: Short\n      val COMMENT_NODE:
Short\n      val DOCUMENT_NODE: Short\n      val DOCUMENT_TYPE_NODE: Short\n      val
DOCUMENT_FRAGMENT_NODE: Short\n      val NOTATION_NODE: Short\n      val
DOCUMENT_POSITION_DISCONNECTED: Short\n      val DOCUMENT_POSITION_PRECEDING: Short\n
      val DOCUMENT_POSITION_FOLLOWING: Short\n      val DOCUMENT_POSITION_CONTAINS: Short\n
      val DOCUMENT_POSITION_CONTAINED_BY: Short\n      val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n      } \n } \n

```

```

DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n } \n} \n\npublic external interface
GetSVGDocument { \n    fun getSVGDocument(): Document \n} \n\n/** \n * Exposes the JavaScript
[SVGStyleElement](https://developer.mozilla.org/en/docs/Web/API/SVGStyleElement) to Kotlin \n * \n\npublic
external abstract class SVGStyleElement : SVGElement, LinkStyle { \n    open var type: String \n    open var media:
String \n    open var title: String \n\n    companion object { \n        val ELEMENT_NODE: Short\n        val
ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n} \n\n/** \n * Exposes the JavaScript
[SVGTransform](https://developer.mozilla.org/en/docs/Web/API/SVGTransform) to Kotlin \n * \n\npublic external
abstract class SVGTransform { \n    open val type: Short\n    open val matrix: DOMMatrix \n    open val angle:
Float \n    fun setMatrix(matrix: DOMMatrixReadOnly) \n    fun setTranslate(tx: Float, ty: Float) \n    fun setScale(sx:
Float, sy: Float) \n    fun setRotate(angle: Float, cx: Float, cy: Float) \n    fun setSkewX(angle: Float) \n    fun
setSkewY(angle: Float) \n\n    companion object { \n        val SVG_TRANSFORM_UNKNOWN: Short\n        val
SVG_TRANSFORM_MATRIX: Short\n        val SVG_TRANSFORM_TRANSLATE: Short\n        val
SVG_TRANSFORM_SCALE: Short\n        val SVG_TRANSFORM_ROTATE: Short\n        val
SVG_TRANSFORM_SKEWX: Short\n        val SVG_TRANSFORM_SKEWY: Short\n    } \n} \n\n/** \n * Exposes
the JavaScript [SVGTransformList](https://developer.mozilla.org/en/docs/Web/API/SVGTransformList) to Kotlin \n
* \n\npublic external abstract class SVGTransformList { \n    open val length: Int \n    open val numberOfItems: Int \n
fun clear() \n    fun initialize(newItem: SVGTransform): SVGTransform \n    fun insertItemBefore(newItem:
SVGTransform, index: Int): SVGTransform \n    fun replaceItem(newItem: SVGTransform, index: Int):
SVGTransform \n    fun removeItem(index: Int): SVGTransform \n    fun appendItem(newItem: SVGTransform):
SVGTransform \n    fun createSVGTransformFromMatrix(matrix: DOMMatrixReadOnly): SVGTransform \n    fun
consolidate(): SVGTransform? \n    fun getItem(index: Int):
SVGTransform \n} \n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER") \n\n@kotlin.internal.InlineOnly \n\npublic inline operator fun SVGTransformList.get(index:
Int): SVGTransform? = asDynamic()[index] \n\n@Suppress("INVISIBLE_REFERENCE",
"INVISIBLE_MEMBER") \n\n@kotlin.internal.InlineOnly \n\npublic inline operator fun SVGTransformList.set(index:
Int, newItem: SVGTransform) { asDynamic()[index] = newItem } \n\n/** \n * Exposes the JavaScript
[SVGAnimatedTransformList](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedTransformList) to
Kotlin \n * \n\npublic external abstract class SVGAnimatedTransformList { \n    open val baseVal:
SVGTransformList \n    open val animVal: SVGTransformList \n} \n\n/** \n * Exposes the JavaScript
[SVGPreserveAspectRatio](https://developer.mozilla.org/en/docs/Web/API/SVGPreserveAspectRatio) to Kotlin \n
* \n\npublic external abstract class SVGPreserveAspectRatio { \n    open var align: Short\n    open var meetOrSlice:
Short \n\n    companion object { \n        val SVG_PRESERVEASPECTRATIO_UNKNOWN: Short\n        val
SVG_PRESERVEASPECTRATIO_NONE: Short\n        val SVG_PRESERVEASPECTRATIO_XMINYMIN:
Short\n        val SVG_PRESERVEASPECTRATIO_XMIDYMIN: Short\n        val
SVG_PRESERVEASPECTRATIO_XMAXYMIN: Short\n        val
SVG_PRESERVEASPECTRATIO_XMINYMID: Short\n        val
SVG_PRESERVEASPECTRATIO_XMIDYMID: Short\n        val

```

SVG_PRESERVEASPECTRATIO_XMAXYMID: Short\n val
 SVG_PRESERVEASPECTRATIO_XMINYMAX: Short\n val
 SVG_PRESERVEASPECTRATIO_XMIDYMAX: Short\n val
 SVG_PRESERVEASPECTRATIO_XMAXYMAX: Short\n val SVG_MEETORSLICE_UNKNOWN: Short\n
 val SVG_MEETORSLICE_MEET: Short\n val SVG_MEETORSLICE_SLICE: Short\n }\n}\n\n/**\n *

Exposes the JavaScript

[SVGAnimatedPreserveAspectRatio](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedPreserveAspect
 Ratio) to Kotlin\n */\npublic external abstract class SVGAnimatedPreserveAspectRatio {\n open val baseVal:

SVGPreserveAspectRatio\n open val animVal: SVGPreserveAspectRatio\n}\n\n/**\n *

Exposes the JavaScript

[SVGPathElement](https://developer.mozilla.org/en/docs/Web/API/SVGPathElement) to Kotlin\n */\npublic
 external abstract class SVGPathElement : SVGGeometryElement {\n companion object {\n val
 ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
 CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
 Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
 DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
 DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
 DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val

DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n *

Exposes the JavaScript

[SVGRectElement](https://developer.mozilla.org/en/docs/Web/API/SVGRectElement) to Kotlin\n */\npublic
 external abstract class SVGRectElement : SVGGeometryElement {\n open val x: SVGAnimatedLength\n open
 val y: SVGAnimatedLength\n open val width: SVGAnimatedLength\n open val height: SVGAnimatedLength\n
 open val rx: SVGAnimatedLength\n open val ry: SVGAnimatedLength\n\n companion object {\n val
 ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
 CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
 Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
 DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
 DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
 DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val

DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n *

Exposes the JavaScript

[SVGCircleElement](https://developer.mozilla.org/en/docs/Web/API/SVGCircleElement) to Kotlin\n */\npublic
 external abstract class SVGCircleElement : SVGGeometryElement {\n open val cx: SVGAnimatedLength\n
 open val cy: SVGAnimatedLength\n open val r: SVGAnimatedLength\n\n companion object {\n val
 ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val
 CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE:
 Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val
 DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val
 DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val
 DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n
 val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n
 val DOCUMENT_POSITION_CONTAINED_BY: Short\n val

DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }\n}\n\n/**\n *

Exposes the JavaScript

[SVGEllipseElement](https://developer.mozilla.org/en/docs/Web/API/SVGEllipseElement) to Kotlin\n */\npublic
 external abstract class SVGEllipseElement : SVGGeometryElement {\n open val cx: SVGAnimatedLength\n
 open val cy: SVGAnimatedLength\n open val rx: SVGAnimatedLength\n open val ry: SVGAnimatedLength\n\n

```

companion object {
    val ELEMENT_NODE: Short
    val ATTRIBUTE_NODE: Short
    val TEXT_NODE: Short
    val CDATA_SECTION_NODE: Short
    val ENTITY_REFERENCE_NODE: Short
    val ENTITY_NODE: Short
    val PROCESSING_INSTRUCTION_NODE: Short
    val COMMENT_NODE: Short
    val DOCUMENT_NODE: Short
    val DOCUMENT_TYPE_NODE: Short
    val DOCUMENT_FRAGMENT_NODE: Short
    val NOTATION_NODE: Short
    val DOCUMENT_POSITION_DISCONNECTED: Short
    val DOCUMENT_POSITION_PRECEDING: Short
    val DOCUMENT_POSITION_FOLLOWING: Short
    val DOCUMENT_POSITION_CONTAINS: Short
    val DOCUMENT_POSITION_CONTAINED_BY: Short
}

DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short }
}

/** Exposes the JavaScript [SVGLineElement](https://developer.mozilla.org/en/docs/Web/API/SVGLineElement) to Kotlin
 */
@public external abstract class SVGLineElement : SVGGeometryElement {
    open val x1: SVGAnimatedLength
    open val y1: SVGAnimatedLength
    open val x2: SVGAnimatedLength
    open val y2: SVGAnimatedLength
}

companion object {
    val ELEMENT_NODE: Short
    val ATTRIBUTE_NODE: Short
    val TEXT_NODE: Short
    val CDATA_SECTION_NODE: Short
    val ENTITY_REFERENCE_NODE: Short
    val ENTITY_NODE: Short
    val PROCESSING_INSTRUCTION_NODE: Short
    val COMMENT_NODE: Short
    val DOCUMENT_NODE: Short
    val DOCUMENT_TYPE_NODE: Short
    val DOCUMENT_FRAGMENT_NODE: Short
    val NOTATION_NODE: Short
    val DOCUMENT_POSITION_DISCONNECTED: Short
    val DOCUMENT_POSITION_PRECEDING: Short
    val DOCUMENT_POSITION_FOLLOWING: Short
    val DOCUMENT_POSITION_CONTAINS: Short
    val DOCUMENT_POSITION_CONTAINED_BY: Short
}

DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short }
}

/** Exposes the JavaScript [SVGMeshElement](https://developer.mozilla.org/en/docs/Web/API/SVGMeshElement) to Kotlin
 */
@public external abstract class SVGMeshElement : SVGGeometryElement, SVGURIReference {
    companion object {
        val ELEMENT_NODE: Short
        val ATTRIBUTE_NODE: Short
        val TEXT_NODE: Short
        val CDATA_SECTION_NODE: Short
        val ENTITY_REFERENCE_NODE: Short
        val ENTITY_NODE: Short
        val PROCESSING_INSTRUCTION_NODE: Short
        val COMMENT_NODE: Short
        val DOCUMENT_NODE: Short
        val DOCUMENT_TYPE_NODE: Short
        val DOCUMENT_FRAGMENT_NODE: Short
        val NOTATION_NODE: Short
        val DOCUMENT_POSITION_DISCONNECTED: Short
        val DOCUMENT_POSITION_PRECEDING: Short
        val DOCUMENT_POSITION_FOLLOWING: Short
        val DOCUMENT_POSITION_CONTAINS: Short
        val DOCUMENT_POSITION_CONTAINED_BY: Short
    }

    DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short }
}

/** Exposes the JavaScript [SVGAnimatedPoints](https://developer.mozilla.org/en/docs/Web/API/SVGAnimatedPoints) to Kotlin
 */
@public external interface SVGAnimatedPoints {
    val points: SVGPointList
    val animatedPoints: SVGPointList
}

@public external abstract class SVGPointList {
    open val length: Int
    open val numberOfItems: Int
    fun clear(): Unit
    fun initialize(newItem: DOMPoint): DOMPoint
    fun insertItemBefore(newItem: DOMPoint, index: Int): DOMPoint
    fun replaceItem(newItem: DOMPoint, index: Int): DOMPoint
    fun removeItem(index: Int): DOMPoint
    fun appendItem(newItem: DOMPoint): DOMPoint
    fun getItem(index: Int): DOMPoint
}

@Suppress("INVISIBLE_REFERENCE", "INVISIBLE_MEMBER")
@kotlin.internal.InlineOnly
@public inline operator fun SVGPointList.get(index: Int): DOMPoint? = asDynamic()[index]

@Suppress("INVISIBLE_REFERENCE", "INVISIBLE_MEMBER")
@kotlin.internal.InlineOnly
@public inline operator fun SVGPointList.set(index: Int, newItem: DOMPoint) { asDynamic()[index] = newItem }

/** Exposes the JavaScript [SVGPolylineElement](https://developer.mozilla.org/en/docs/Web/API/SVGPolylineElement) to Kotlin
 */
@public external abstract class SVGPolylineElement : SVGGeometryElement, SVGAnimatedPoints {
    companion object {
        val ELEMENT_NODE: Short
        val ATTRIBUTE_NODE: Short
        val TEXT_NODE: Short
        val CDATA_SECTION_NODE: Short
        val ENTITY_REFERENCE_NODE: Short
        val ENTITY_NODE: Short
        val PROCESSING_INSTRUCTION_NODE: Short
        val COMMENT_NODE: Short
        val DOCUMENT_NODE: Short
        val DOCUMENT_TYPE_NODE: Short
        val DOCUMENT_FRAGMENT_NODE: Short
        val NOTATION_NODE: Short
        val DOCUMENT_POSITION_DISCONNECTED: Short
        val DOCUMENT_POSITION_PRECEDING: Short
        val DOCUMENT_POSITION_FOLLOWING: Short
        val DOCUMENT_POSITION_CONTAINS: Short
        val DOCUMENT_POSITION_CONTAINED_BY: Short
    }

    DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short }
}

```

```

COMMENT_NODE: Short\n    val DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n
    val DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[SVGPolygonElement](https://developer.mozilla.org/en/docs/Web/API/SVGPolygonElement) to Kotlin\n
*\npublic external abstract class SVGPolygonElement : SVGGeometryElement, SVGAnimatedPoints {\n
companion object {\n    val ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val
TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE:
Short\n    val ENTITY_NODE: Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val
COMMENT_NODE: Short\n    val DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n
    val DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[SVGTextContentElement](https://developer.mozilla.org/en/docs/Web/API/SVGTextContentElement) to Kotlin\n
*\npublic external abstract class SVGTextContentElement : SVGGraphicsElement {\n    open val textLength:
SVGAnimatedLength\n    open val lengthAdjust: SVGAnimatedEnumeration\n    fun getNumberOfChars(): Int\n
fun getComputedTextLength(): Float\n    fun getSubStringLength(charnum: Int, nchars: Int): Float\n    fun
getStartPositionOfChar(charnum: Int): DOMPoint\n    fun getEndPositionOfChar(charnum: Int): DOMPoint\n    fun
getExtentOfChar(charnum: Int): DOMRect\n    fun getRotationOfChar(charnum: Int): Float\n    fun
getCharNumAtPosition(point: DOMPoint): Int\n    fun selectSubString(charnum: Int, nchars: Int)\n\n    companion
object {\n    val LENGTHADJUST_UNKNOWN: Short\n    val LENGTHADJUST_SPACING: Short\n
    val LENGTHADJUST_SPACINGANDGLYPHS: Short\n    val ELEMENT_NODE: Short\n    val
ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val
ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val
PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[SVGTextPositioningElement](https://developer.mozilla.org/en/docs/Web/API/SVGTextPositioningElement) to
Kotlin\n
*\npublic external abstract class SVGTextPositioningElement : SVGTextContentElement {\n    open val x:
SVGAnimatedLengthList\n    open val y: SVGAnimatedLengthList\n    open val dx: SVGAnimatedLengthList\n
open val dy: SVGAnimatedLengthList\n    open val rotate: SVGAnimatedNumberList\n\n    companion object {\n
    val LENGTHADJUST_UNKNOWN: Short\n    val LENGTHADJUST_SPACING: Short\n    val
LENGTHADJUST_SPACINGANDGLYPHS: Short\n    val ELEMENT_NODE: Short\n    val
ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val
ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val
PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n

```

```

    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[SVGTextElement](https://developer.mozilla.org/en/docs/Web/API/SVGTextElement) to Kotlin\n *\npublic
external abstract class SVGTextElement : SVGTextPositioningElement {\n    companion object {\n        val
LENGTHADJUST_UNKNOWN: Short\n        val LENGTHADJUST_SPACING: Short\n        val
LENGTHADJUST_SPACINGANDGLYPHS: Short\n        val ELEMENT_NODE: Short\n        val
ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[SVGTSpanElement](https://developer.mozilla.org/en/docs/Web/API/SVGTSpanElement) to Kotlin\n *\npublic
external abstract class SVGTSpanElement : SVGTextPositioningElement {\n    companion object {\n        val
LENGTHADJUST_UNKNOWN: Short\n        val LENGTHADJUST_SPACING: Short\n        val
LENGTHADJUST_SPACINGANDGLYPHS: Short\n        val ELEMENT_NODE: Short\n        val
ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[SVGTextPathElement](https://developer.mozilla.org/en/docs/Web/API/SVGTextPathElement) to Kotlin\n
*\npublic external abstract class SVGTextPathElement : SVGTextContentElement, SVGURIReference {\n    open
val startOffset: SVGAnimatedLength\n    open val method: SVGAnimatedEnumeration\n    open val spacing:
SVGAnimatedEnumeration\n\n    companion object {\n        val TEXTPATH_METHODTYPE_UNKNOWN:
Short\n        val TEXTPATH_METHODTYPE_ALIGN: Short\n        val
TEXTPATH_METHODTYPE_STRETCH: Short\n        val TEXTPATH_SPACINGTYPE_UNKNOWN: Short\n
        val TEXTPATH_SPACINGTYPE_AUTO: Short\n        val TEXTPATH_SPACINGTYPE_EXACT: Short\n
        val LENGTHADJUST_UNKNOWN: Short\n        val LENGTHADJUST_SPACING: Short\n        val
LENGTHADJUST_SPACINGANDGLYPHS: Short\n        val ELEMENT_NODE: Short\n        val
ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[SVGImageElement](https://developer.mozilla.org/en/docs/Web/API/SVGImageElement) to Kotlin\n *\npublic
external abstract class SVGImageElement : SVGGraphicsElement, SVGURIReference,

```

```

HTMLorSVGImageElement {\n  open val x: SVGAnimatedLength\n  open val y: SVGAnimatedLength\n  open val width: SVGAnimatedLength\n  open val height: SVGAnimatedLength\n  open val preserveAspectRatio: SVGAnimatedPreserveAspectRatio\n  open var crossOrigin: String?\n\n  companion object {\n    val ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n  }\n}\n\n/**\n * Exposes the JavaScript [SVGForeignObjectElement](https://developer.mozilla.org/en/docs/Web/API/SVGForeignObjectElement) to Kotlin\n *\npublic external abstract class SVGForeignObjectElement : SVGGraphicsElement {\n  open val x: SVGAnimatedLength\n  open val y: SVGAnimatedLength\n  open val width: SVGAnimatedLength\n  open val height: SVGAnimatedLength\n\n  companion object {\n    val ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n  }\n}\n\npublic external abstract class SVGMarkerElement : SVGElement, SVGFitToViewBox {\n  open val refX: SVGAnimatedLength\n  open val refY: SVGAnimatedLength\n  open val markerUnits: SVGAnimatedEnumeration\n  open val markerWidth: SVGAnimatedLength\n  open val markerHeight: SVGAnimatedLength\n  open val orientType: SVGAnimatedEnumeration\n  open val orientAngle: SVGAnimatedAngle\n  open var orient: String\n  fun setOrientToAuto()\n  fun setOrientToAngle(angle: SVGAngle)\n\n  companion object {\n    val SVG_MARKERUNITS_UNKNOWN: Short\n    val SVG_MARKERUNITS_USERSPACEONUSE: Short\n    val SVG_MARKERUNITS_STROKEWIDTH: Short\n    val SVG_MARKER_ORIENT_UNKNOWN: Short\n    val SVG_MARKER_ORIENT_AUTO: Short\n    val SVG_MARKER_ORIENT_ANGLE: Short\n    val ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n  }\n}\n\n/**\n * Exposes the JavaScript [SVGSolidcolorElement](https://developer.mozilla.org/en/docs/Web/API/SVGSolidcolorElement) to Kotlin\n *\npublic external abstract class SVGSolidcolorElement : SVGElement {\n  companion object {\n    val ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n  }\n}

```

DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val

DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val

DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }n}\n/n/**\n * Exposes the JavaScript [SVGGradientElement](https://developer.mozilla.org/en/docs/Web/API/SVGGradientElement) to Kotlin\n */\npublic external abstract class SVGGradientElement : SVGElement, SVGURIReference, SVGUnitTypes {\n open val gradientUnits: SVGAnimatedEnumeration\n open val gradientTransform: SVGAnimatedTransformList\n open val spreadMethod: SVGAnimatedEnumeration\n\n companion object {\n val

SVG_SPREADMETHOD_UNKNOWN: Short\n val SVG_SPREADMETHOD_PAD: Short\n val

SVG_SPREADMETHOD_REFLECT: Short\n val SVG_SPREADMETHOD_REPEAT: Short\n val

SVG_UNIT_TYPE_UNKNOWN: Short\n val SVG_UNIT_TYPE_USERSPACEONUSE: Short\n val

SVG_UNIT_TYPE_OBJECTBOUNDINGBOX: Short\n val ELEMENT_NODE: Short\n val

ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val

ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val

PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val

DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val

DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val

DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val

DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }n}\n/n/**\n * Exposes the JavaScript [SVGLinearGradientElement](https://developer.mozilla.org/en/docs/Web/API/SVGLinearGradientElement) to Kotlin\n */\npublic external abstract class SVGLinearGradientElement : SVGGradientElement {\n open val x1: SVGAnimatedLength\n open val y1: SVGAnimatedLength\n open val x2: SVGAnimatedLength\n open val y2: SVGAnimatedLength\n\n companion object {\n val SVG_SPREADMETHOD_UNKNOWN: Short\n val SVG_SPREADMETHOD_PAD: Short\n val SVG_SPREADMETHOD_REFLECT: Short\n val SVG_SPREADMETHOD_REPEAT: Short\n val SVG_UNIT_TYPE_UNKNOWN: Short\n val SVG_UNIT_TYPE_USERSPACEONUSE: Short\n val SVG_UNIT_TYPE_OBJECTBOUNDINGBOX: Short\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val PROCESSING_INSTRUCTION_NODE: Short\n val COMMENT_NODE: Short\n val DOCUMENT_NODE: Short\n val DOCUMENT_TYPE_NODE: Short\n val DOCUMENT_FRAGMENT_NODE: Short\n val NOTATION_NODE: Short\n val DOCUMENT_POSITION_DISCONNECTED: Short\n val DOCUMENT_POSITION_PRECEDING: Short\n val DOCUMENT_POSITION_FOLLOWING: Short\n val DOCUMENT_POSITION_CONTAINS: Short\n val DOCUMENT_POSITION_CONTAINED_BY: Short\n val

DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n }n}\n/n/**\n * Exposes the JavaScript [SVGRadialGradientElement](https://developer.mozilla.org/en/docs/Web/API/SVGRadialGradientElement) to Kotlin\n */\npublic external abstract class SVGRadialGradientElement : SVGGradientElement {\n open val cx: SVGAnimatedLength\n open val cy: SVGAnimatedLength\n open val r: SVGAnimatedLength\n open val fx: SVGAnimatedLength\n open val fy: SVGAnimatedLength\n open val fr: SVGAnimatedLength\n\n companion object {\n val SVG_SPREADMETHOD_UNKNOWN: Short\n val SVG_SPREADMETHOD_PAD: Short\n val SVG_SPREADMETHOD_REFLECT: Short\n val SVG_SPREADMETHOD_REPEAT: Short\n val SVG_UNIT_TYPE_UNKNOWN: Short\n val SVG_UNIT_TYPE_USERSPACEONUSE: Short\n val SVG_UNIT_TYPE_OBJECTBOUNDINGBOX: Short\n val ELEMENT_NODE: Short\n val ATTRIBUTE_NODE: Short\n val TEXT_NODE: Short\n val CDATA_SECTION_NODE: Short\n val ENTITY_REFERENCE_NODE: Short\n val ENTITY_NODE: Short\n val


```

PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\npublic external abstract class
SVGMeshGradientElement : SVGGradientElement {\n    companion object {\n    val
SVG_SPREADMETHOD_UNKNOWN: Short\n    val SVG_SPREADMETHOD_PAD: Short\n    val
SVG_SPREADMETHOD_REFLECT: Short\n    val SVG_SPREADMETHOD_REPEAT: Short\n    val
SVG_UNIT_TYPE_UNKNOWN: Short\n    val SVG_UNIT_TYPE_USERSPACEONUSE: Short\n    val
SVG_UNIT_TYPE_OBJECTBOUNDINGBOX: Short\n    val ELEMENT_NODE: Short\n    val
ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val
ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val
PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\npublic external abstract class
SVGMeshrowElement : SVGElement {\n    companion object {\n    val ELEMENT_NODE: Short\n    val
ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val
ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val
PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\npublic external abstract class
SVGMeshpatchElement : SVGElement {\n    companion object {\n    val ELEMENT_NODE: Short\n    val
ATTRIBUTE_NODE: Short\n    val TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val
ENTITY_REFERENCE_NODE: Short\n    val ENTITY_NODE: Short\n    val
PROCESSING_INSTRUCTION_NODE: Short\n    val COMMENT_NODE: Short\n    val
DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n    val
DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val
DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    }\n}\n\n/**\n * Exposes the JavaScript
[SVGStopElement](https://developer.mozilla.org/en/docs/Web/API/SVGStopElement) to Kotlin\n */\n\npublic
external abstract class SVGStopElement : SVGElement {\n    open val offset: SVGAnimatedNumber\n\n    companion object {\n    val ELEMENT_NODE: Short\n    val ATTRIBUTE_NODE: Short\n    val
TEXT_NODE: Short\n    val CDATA_SECTION_NODE: Short\n    val ENTITY_REFERENCE_NODE:
Short\n    val ENTITY_NODE: Short\n    val PROCESSING_INSTRUCTION_NODE: Short\n    val
COMMENT_NODE: Short\n    val DOCUMENT_NODE: Short\n    val DOCUMENT_TYPE_NODE: Short\n
    val DOCUMENT_FRAGMENT_NODE: Short\n    val NOTATION_NODE: Short\n    val

```

```

DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n} \n \n /** \n * Exposes the JavaScript
[SVGPatternElement](https://developer.mozilla.org/en/docs/Web/API/SVGPatternElement) to Kotlin \n * \n public
external abstract class SVGPatternElement : SVGElement, SVGFitToViewBox, SVGURIReference,
SVGUnitTypes { \n    open val patternUnits: SVGAnimatedEnumeration \n    open val patternContentUnits:
SVGAnimatedEnumeration \n    open val patternTransform: SVGAnimatedTransformList \n    open val x:
SVGAnimatedLength \n    open val y: SVGAnimatedLength \n    open val width: SVGAnimatedLength \n    open val
height: SVGAnimatedLength \n \n    companion object { \n        val SVG_UNIT_TYPE_UNKNOWN: Short \n
        val SVG_UNIT_TYPE_USERSPACEONUSE: Short \n        val SVG_UNIT_TYPE_OBJECTBOUNDINGBOX:
Short \n        val ELEMENT_NODE: Short \n        val ATTRIBUTE_NODE: Short \n        val TEXT_NODE: Short \n
        val CDATA_SECTION_NODE: Short \n        val ENTITY_REFERENCE_NODE: Short \n        val
ENTITY_NODE: Short \n        val PROCESSING_INSTRUCTION_NODE: Short \n        val COMMENT_NODE:
Short \n        val DOCUMENT_NODE: Short \n        val DOCUMENT_TYPE_NODE: Short \n        val
DOCUMENT_FRAGMENT_NODE: Short \n        val NOTATION_NODE: Short \n        val
DOCUMENT_POSITION_DISCONNECTED: Short \n        val DOCUMENT_POSITION_PRECEDING: Short \n
        val DOCUMENT_POSITION_FOLLOWING: Short \n        val DOCUMENT_POSITION_CONTAINS: Short \n
        val DOCUMENT_POSITION_CONTAINED_BY: Short \n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short \n    } \n} \n \n public external abstract class
SVGHatchElement : SVGElement { \n    companion object { \n        val ELEMENT_NODE: Short \n        val
ATTRIBUTE_NODE: Short \n        val TEXT_NODE: Short \n        val CDATA_SECTION_NODE: Short \n        val
ENTITY_REFERENCE_NODE: Short \n        val ENTITY_NODE: Short \n        val
PROCESSING_INSTRUCTION_NODE: Short \n        val COMMENT_NODE: Short \n        val
DOCUMENT_NODE: Short \n        val DOCUMENT_TYPE_NODE: Short \n        val
DOCUMENT_FRAGMENT_NODE: Short \n        val NOTATION_NODE: Short \n        val
DOCUMENT_POSITION_DISCONNECTED: Short \n        val DOCUMENT_POSITION_PRECEDING: Short \n
        val DOCUMENT_POSITION_FOLLOWING: Short \n        val DOCUMENT_POSITION_CONTAINS: Short \n
        val DOCUMENT_POSITION_CONTAINED_BY: Short \n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short \n    } \n} \n \n public external abstract class
SVGHatchpathElement : SVGElement { \n    companion object { \n        val ELEMENT_NODE: Short \n        val
ATTRIBUTE_NODE: Short \n        val TEXT_NODE: Short \n        val CDATA_SECTION_NODE: Short \n        val
ENTITY_REFERENCE_NODE: Short \n        val ENTITY_NODE: Short \n        val
PROCESSING_INSTRUCTION_NODE: Short \n        val COMMENT_NODE: Short \n        val
DOCUMENT_NODE: Short \n        val DOCUMENT_TYPE_NODE: Short \n        val
DOCUMENT_FRAGMENT_NODE: Short \n        val NOTATION_NODE: Short \n        val
DOCUMENT_POSITION_DISCONNECTED: Short \n        val DOCUMENT_POSITION_PRECEDING: Short \n
        val DOCUMENT_POSITION_FOLLOWING: Short \n        val DOCUMENT_POSITION_CONTAINS: Short \n
        val DOCUMENT_POSITION_CONTAINED_BY: Short \n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short \n    } \n} \n \n /** \n * Exposes the JavaScript
[SVGCursorElement](https://developer.mozilla.org/en/docs/Web/API/SVGCursorElement) to Kotlin \n * \n public
external abstract class SVGCursorElement : SVGElement, SVGURIReference { \n    open val x:
SVGAnimatedLength \n    open val y: SVGAnimatedLength \n \n    companion object { \n        val
ELEMENT_NODE: Short \n        val ATTRIBUTE_NODE: Short \n        val TEXT_NODE: Short \n        val
CDATA_SECTION_NODE: Short \n        val ENTITY_REFERENCE_NODE: Short \n        val ENTITY_NODE:
Short \n        val PROCESSING_INSTRUCTION_NODE: Short \n        val COMMENT_NODE: Short \n        val
DOCUMENT_NODE: Short \n        val DOCUMENT_TYPE_NODE: Short \n        val
DOCUMENT_FRAGMENT_NODE: Short \n        val NOTATION_NODE: Short \n        val

```

```

DOCUMENT_POSITION_DISCONNECTED: Short\n    val DOCUMENT_POSITION_PRECEDING: Short\n
    val DOCUMENT_POSITION_FOLLOWING: Short\n    val DOCUMENT_POSITION_CONTAINS: Short\n
    val DOCUMENT_POSITION_CONTAINED_BY: Short\n    val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n} \n \n /** \n * Exposes the JavaScript
[SVGScriptElement](https://developer.mozilla.org/en/docs/Web/API/SVGScriptElement) to Kotlin \n * \n public
external abstract class SVGScriptElement : SVGElement, SVGURIReference, HTMLOrSVGScriptElement { \n
open var type: String \n    open var crossOrigin: String? \n \n    companion object { \n        val ELEMENT_NODE:
Short\n        val ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE:
Short\n        val ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n} \n \n /** \n * Exposes the JavaScript
[SVGElement](https://developer.mozilla.org/en/docs/Web/API/SVGElement) to Kotlin \n * \n public external
abstract class SVGElement : SVGGraphicsElement, SVGURIReference { \n    open val target:
SVGAnimatedString \n    open val download: SVGAnimatedString \n    open val rel: SVGAnimatedString \n    open
val relList: SVGAnimatedString \n    open val hreflang: SVGAnimatedString \n    open val type:
SVGAnimatedString \n \n    companion object { \n        val ELEMENT_NODE: Short\n        val
ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n} \n \n /** \n * Exposes the JavaScript
[SVGViewElement](https://developer.mozilla.org/en/docs/Web/API/SVGViewElement) to Kotlin \n * \n public
external abstract class SVGViewElement : SVGElement, SVGFitToViewBox, SVGZoomAndPan { \n    companion
object { \n        val SVG_ZOOMANDPAN_UNKNOWN: Short\n        val SVG_ZOOMANDPAN_DISABLE:
Short\n        val SVG_ZOOMANDPAN_MAGNIFY: Short\n        val ELEMENT_NODE: Short\n        val
ATTRIBUTE_NODE: Short\n        val TEXT_NODE: Short\n        val CDATA_SECTION_NODE: Short\n        val
ENTITY_REFERENCE_NODE: Short\n        val ENTITY_NODE: Short\n        val
PROCESSING_INSTRUCTION_NODE: Short\n        val COMMENT_NODE: Short\n        val
DOCUMENT_NODE: Short\n        val DOCUMENT_TYPE_NODE: Short\n        val
DOCUMENT_FRAGMENT_NODE: Short\n        val NOTATION_NODE: Short\n        val
DOCUMENT_POSITION_DISCONNECTED: Short\n        val DOCUMENT_POSITION_PRECEDING: Short\n
        val DOCUMENT_POSITION_FOLLOWING: Short\n        val DOCUMENT_POSITION_CONTAINS: Short\n
        val DOCUMENT_POSITION_CONTAINED_BY: Short\n        val
DOCUMENT_POSITION_IMPLEMENTATION_SPECIFIC: Short\n    } \n} \n \n /** \n * Copyright 2010-2021
JetBrains s.r.o. and Kotlin Programming Language contributors. \n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file. \n * \n \n // NOTE: THIS FILE IS AUTO-
GENERATED, DO NOT EDIT! \n // See github.com/kotlin/dukat for details \n \n package org.w3c.files \n \n import
kotlin.js.* \n import org.khronos.webgl.* \n import org.w3c.dom.* \n import org.w3c.dom.events.* \n import
org.w3c.xhr.* \n \n /** \n * Exposes the JavaScript [Blob](https://developer.mozilla.org/en/docs/Web/API/Blob) to

```

```

Kotlin\n *\npublic external open class Blob(blobParts: Array<dynamic> = definedExternally, options:
BlobPropertyBag = definedExternally) : MediaPlayer, ImageBitmapSource {\n  open val size: Number\n  open
val type: String\n  open val isClosed: Boolean\n  fun slice(start: Int = definedExternally, end: Int =
definedExternally, contentType: String = definedExternally): Blob\n  fun close()\n}\n\npublic external interface
BlobPropertyBag {\n  var type: String? /* = \"\" */\n  get() = definedExternally\n  set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun BlobPropertyBag(type: String? = \"\"):
BlobPropertyBag {\n  val o = js(\"({})\")\n  o[\"type\"] = type\n  return o\n}\n\n/**\n * Exposes the JavaScript
[File](https://developer.mozilla.org/en/docs/Web/API/File) to Kotlin\n *\npublic external open class File(fileBits:
Array<dynamic>, fileName: String, options: FilePropertyBag = definedExternally) : Blob {\n  open val name:
String\n  open val lastModified: Int\n}\n\npublic external interface FilePropertyBag : BlobPropertyBag {\n  var
lastModified: Int?\n  get() = definedExternally\n  set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun FilePropertyBag(lastModified: Int? =
undefined, type: String? = \"\"): FilePropertyBag {\n  val o = js(\"({})\")\n  o[\"lastModified\"] = lastModified\n
o[\"type\"] = type\n  return o\n}\n\n/**\n * Exposes the JavaScript
[FileList](https://developer.mozilla.org/en/docs/Web/API/FileList) to Kotlin\n *\npublic external abstract class
FileList : ItemArrayLike<File> {\n  override fun item(index: Int):
File?\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline operator fun FileList.get(index: Int): File?
= asDynamic()[index]\n\n/**\n * Exposes the JavaScript
[FileReader](https://developer.mozilla.org/en/docs/Web/API/FileReader) to Kotlin\n *\npublic external open class
FileReader : EventTarget {\n  open val readyState: Short\n  open val result: dynamic\n  open val error:
dynamic\n  var onloadstart: ((ProgressEvent) -> dynamic)?\n  var onprogress: ((ProgressEvent) -> dynamic)?\n
var onload: ((Event) -> dynamic)?\n  var onabort: ((Event) -> dynamic)?\n  var onerror: ((Event) -> dynamic)?\n
var onloadend: ((Event) -> dynamic)?\n  fun readAsArrayBuffer(blob: Blob)\n  fun readAsBinaryString(blob:
Blob)\n  fun readAsText(blob: Blob, label: String = definedExternally)\n  fun readAsDataURL(blob: Blob)\n
fun abort()\n\n  companion object {\n    val EMPTY: Short\n    val LOADING: Short\n    val DONE:
Short\n  }\n}\n\n/**\n * Exposes the JavaScript
[FileReaderSync](https://developer.mozilla.org/en/docs/Web/API/FileReaderSync) to Kotlin\n *\npublic external
open class FileReaderSync {\n  fun readAsArrayBuffer(blob: Blob): ArrayBuffer\n  fun readAsBinaryString(blob:
Blob): String\n  fun readAsText(blob: Blob, label: String = definedExternally): String\n  fun
readAsDataURL(blob: Blob): String\n}\n\n/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n *\n// NOTE: THIS FILE IS AUTO-GENERATED, DO NOT EDIT!\n// See
github.com/kotlin/dukat for details\n\npackage org.w3c.notifications\n\nimport kotlin.js.*\nimport
org.khronos.webgl.*\nimport org.w3c.dom.events.*\nimport org.w3c.workers.*\n\n/**\n * Exposes the JavaScript
[Notification](https://developer.mozilla.org/en/docs/Web/API/Notification) to Kotlin\n *\npublic external open
class Notification(title: String, options: NotificationOptions = definedExternally) : EventTarget {\n  var onclick:
((MouseEvent) -> dynamic)?\n  var onerror: ((Event) -> dynamic)?\n  open val title: String\n  open val dir:
NotificationDirection\n  open val lang: String\n  open val body: String\n  open val tag: String\n  open val
image: String\n  open val icon: String\n  open val badge: String\n  open val sound: String\n  open val vibrate:
Array<out Int>\n  open val timestamp: Number\n  open val renotify: Boolean\n  open val silent: Boolean\n
open val noscreen: Boolean\n  open val requireInteraction: Boolean\n  open val sticky: Boolean\n  open val data:
Any?\n  open val actions: Array<out NotificationAction>\n  fun close()\n\n  companion object {\n    val
permission: NotificationPermission\n    val maxActions: Int\n    fun requestPermission(deprecatedCallback:
(NotificationPermission) -> Unit = definedExternally): Promise<NotificationPermission>\n  }\n}\n\npublic
external interface NotificationOptions {\n  var dir: NotificationDirection? /* = NotificationDirection.AUTO */\n

```

```

get() = definedExternally\n    set(value) = definedExternally\n    var lang: String? /* = \"\" */\n    get() =
definedExternally\n    set(value) = definedExternally\n    var body: String? /* = \"\" */\n    get() =
definedExternally\n    set(value) = definedExternally\n    var tag: String? /* = \"\" */\n    get() =
definedExternally\n    set(value) = definedExternally\n    var image: String?\n    get() = definedExternally\n
set(value) = definedExternally\n    var icon: String?\n    get() = definedExternally\n    set(value) =
definedExternally\n    var badge: String?\n    get() = definedExternally\n    set(value) = definedExternally\n
var sound: String?\n    get() = definedExternally\n    set(value) = definedExternally\n    var vibrate: dynamic\n
    get() = definedExternally\n    set(value) = definedExternally\n    var timestamp: Number?\n    get() =
definedExternally\n    set(value) = definedExternally\n    var renotify: Boolean? /* = false */\n    get() =
definedExternally\n    set(value) = definedExternally\n    var silent: Boolean? /* = false */\n    get() =
definedExternally\n    set(value) = definedExternally\n    var noscreen: Boolean? /* = false */\n    get() =
definedExternally\n    set(value) = definedExternally\n    var requireInteraction: Boolean? /* = false */\n    get()
= definedExternally\n    set(value) = definedExternally\n    var sticky: Boolean? /* = false */\n    get() =
definedExternally\n    set(value) = definedExternally\n    var data: Any? /* = null */\n    get() =
definedExternally\n    set(value) = definedExternally\n    var actions: Array<NotificationAction>? /* = arrayOf()
*/\n    get() = definedExternally\n    set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun NotificationOptions(dir:
NotificationDirection? = NotificationDirection.AUTO, lang: String? = \"\", body: String? = \"\", tag: String? = \"\",
image: String? = undefined, icon: String? = undefined, badge: String? = undefined, sound: String? = undefined,
vibrate: dynamic = undefined, timestamp: Number? = undefined, renotify: Boolean? = false, silent: Boolean? =
false, noscreen: Boolean? = false, requireInteraction: Boolean? = false, sticky: Boolean? = false, data: Any? = null,
actions: Array<NotificationAction>? = arrayOf()): NotificationOptions {\n    val o = js(\"({})\")\n    o[\"dir\"] = dir\n
    o[\"lang\"] = lang\n    o[\"body\"] = body\n    o[\"tag\"] = tag\n    o[\"image\"] = image\n    o[\"icon\"] = icon\n
    o[\"badge\"] = badge\n    o[\"sound\"] = sound\n    o[\"vibrate\"] = vibrate\n    o[\"timestamp\"] = timestamp\n
    o[\"renotify\"] = renotify\n    o[\"silent\"] = silent\n    o[\"noscreen\"] = noscreen\n    o[\"requireInteraction\"] =
requireInteraction\n    o[\"sticky\"] = sticky\n    o[\"data\"] = data\n    o[\"actions\"] = actions\n    return
o\n}\n\npublic external interface NotificationAction {\n    var action: String?\n    var title: String?\n    var icon:
String?\n    get() = definedExternally\n    set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun NotificationAction(action: String?,
title: String?, icon: String? = undefined): NotificationAction {\n    val o = js(\"({})\")\n    o[\"action\"] = action\n
    o[\"title\"] = title\n    o[\"icon\"] = icon\n    return o\n}\n\npublic external interface GetNotificationOptions {\n    var
tag: String? /* = \"\" */\n    get() = definedExternally\n    set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun GetNotificationOptions(tag: String? =
\" \"): GetNotificationOptions {\n    val o = js(\"({})\")\n    o[\"tag\"] = tag\n    return o\n}\n\n/**\n * Exposes the
JavaScript [NotificationEvent](https://developer.mozilla.org/en/docs/Web/API/NotificationEvent) to Kotlin\n
*/\n\npublic external open class NotificationEvent(type: String, eventInitDict: NotificationEventInit) :
ExtendableEvent {\n    open val notification: Notification\n    open val action: String\n\n    companion object {\n
val NONE: Short\n    val CAPTURING_PHASE: Short\n    val AT_TARGET: Short\n    val
BUBBLING_PHASE: Short\n    }\n}\n\npublic external interface NotificationEventInit : ExtendableEventInit {\n
var notification: Notification?\n    var action: String? /* = \"\" */\n    get() = definedExternally\n    set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun NotificationEventInit(notification:
Notification?, action: String? = \"\", bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? =
false): NotificationEventInit {\n    val o = js(\"({})\")\n    o[\"notification\"] = notification\n    o[\"action\"] =
action\n    o[\"bubbles\"] = bubbles\n    o[\"cancelable\"] = cancelable\n    o[\"composed\"] = composed\n    return

```

```

o\n}\n\n/* please, don't implement this interface!
*\n@JsName("\null")\n@Suppress("\NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface NotificationPermission {\n    companion object\n}\n\npublic inline val
NotificationPermission.Companion.DEFAULT: NotificationPermission get() =
"\default".asDynamic().unsafeCast<NotificationPermission>()\n\npublic inline val
NotificationPermission.Companion.DENIED: NotificationPermission get() =
"\denied".asDynamic().unsafeCast<NotificationPermission>()\n\npublic inline val
NotificationPermission.Companion.GRANTED: NotificationPermission get() =
"\granted".asDynamic().unsafeCast<NotificationPermission>()\n\n/* please, don't implement this interface!
*\n@JsName("\null")\n@Suppress("\NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface NotificationDirection {\n    companion object\n}\n\npublic inline val
NotificationDirection.Companion.AUTO: NotificationDirection get() =
"\auto".asDynamic().unsafeCast<NotificationDirection>()\n\npublic inline val
NotificationDirection.Companion.LTR: NotificationDirection get() =
"\ltr".asDynamic().unsafeCast<NotificationDirection>()\n\npublic inline val
NotificationDirection.Companion.RTL: NotificationDirection get() =
"\rtl".asDynamic().unsafeCast<NotificationDirection>()"}\n\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n *\n\n// NOTE: THIS FILE IS AUTO-GENERATED, DO NOT EDIT!\n\n//
See github.com/kotlin/dukat for details\n\npackage org.w3c.workers\n\nimport kotlin.js.*\nimport
org.khronos.webgl.*\nimport org.w3c.dom.*\nimport org.w3c.dom.events.*\nimport org.w3c.fetch.*\nimport
org.w3c.notifications.*\n\n/**\n * Exposes the JavaScript
[ServiceWorker](https://developer.mozilla.org/en/docs/Web/API/ServiceWorker) to Kotlin\n *\n\npublic external
abstract class ServiceWorker : EventTarget, AbstractWorker, UnionMessagePortOrServiceWorker,
UnionClientOrMessagePortOrServiceWorker {\n    open val scriptURL: String\n    open val state:
ServiceWorkerState\n    open var onstatechange: ((Event) -> dynamic)?\n    fun postMessage(message: Any?,
transfer: Array<dynamic> = definedExternally)\n}\n\n/**\n * Exposes the JavaScript
[ServiceWorkerRegistration](https://developer.mozilla.org/en/docs/Web/API/ServiceWorkerRegistration) to
Kotlin\n *\n\npublic external abstract class ServiceWorkerRegistration : EventTarget {\n    open val installing:
ServiceWorker?\n    open val waiting: ServiceWorker?\n    open val active: ServiceWorker?\n    open val scope:
String\n    open var onupdatefound: ((Event) -> dynamic)?\n    open val APISpace: dynamic\n    fun update():
Promise<Unit>\n    fun unregister(): Promise<Boolean>\n    fun showNotification(title: String, options:
NotificationOptions = definedExternally): Promise<Unit>\n    fun getNotifications(filter: GetNotificationOptions =
definedExternally): Promise<Array<Notification>>\n    fun methodName(): Promise<dynamic>\n}\n\n/**\n *
Exposes the JavaScript
[ServiceWorkerContainer](https://developer.mozilla.org/en/docs/Web/API/ServiceWorkerContainer) to Kotlin\n
*\n\npublic external abstract class ServiceWorkerContainer : EventTarget {\n    open val controller:
ServiceWorker?\n    open val ready: Promise<ServiceWorkerRegistration>\n    open var oncontrollerchange:
((Event) -> dynamic)?\n    open var onmessage: ((MessageEvent) -> dynamic)?\n    fun register(scriptURL: String,
options: RegistrationOptions = definedExternally): Promise<ServiceWorkerRegistration>\n    fun
getRegistration(clientURL: String = definedExternally): Promise<Any?>\n    fun getRegistrations():
Promise<Array<ServiceWorkerRegistration>>\n    fun startMessages()\n}\n\n\npublic external interface
RegistrationOptions {\n    var scope: String?\n    get() = definedExternally\n    set(value) = definedExternally\n
var type: WorkerType? /* = WorkerType.CLASSIC *\n    get() = definedExternally\n    set(value) =
definedExternally\n}\n\n@Suppress("\INVISIBLE_REFERENCE",
"\INVISIBLE_MEMBER")\n@kotlin.internal.InlineOnly\n\npublic inline fun RegistrationOptions(scope: String? =
undefined, type: WorkerType? = WorkerType.CLASSIC): RegistrationOptions {\n    val o = js("{}")\n    o["scope"] = scope\n    o["type"] = type\n    return o\n}\n\n/**\n * Exposes the JavaScript

```

[ServiceWorkerMessageEvent](https://developer.mozilla.org/en/docs/Web/API/ServiceWorkerMessageEvent) to Kotlin

```

public external open class ServiceWorkerMessageEvent(type: String, eventInitDict: ServiceWorkerMessageEventInit = definedExternally) : Event {
    open val data: Any?
    open val origin: String
    open val lastEventId: String
    open val source: UnionMessagePortOrServiceWorker?
    open val ports: Array<out MessagePort>?
    companion object {
        val NONE: Short
        val CAPTURING_PHASE: Short
        val AT_TARGET: Short
        val BUBBLING_PHASE: Short
    }
    public external interface ServiceWorkerMessageEventInit : EventInit {
        var data: Any?
        get() = definedExternally
        set(value) = definedExternally
        var origin: String?
        get() = definedExternally
        set(value) = definedExternally
        var lastEventId: String?
        get() = definedExternally
        set(value) = definedExternally
        var source: UnionMessagePortOrServiceWorker?
        get() = definedExternally
        set(value) = definedExternally
        var ports: Array<MessagePort>?
        get() = definedExternally
        set(value) = definedExternally
    }
}
@Suppress("INVISIBLE_REFERENCE", "INVISIBLE_MEMBER")
@kotlin.internal.InlineOnly
public inline fun ServiceWorkerMessageEventInit(data: Any? = undefined, origin: String? = undefined, lastEventId: String? = undefined, source: UnionMessagePortOrServiceWorker? = undefined, ports: Array<MessagePort>? = undefined, bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false): ServiceWorkerMessageEventInit {
    val o = js("{}")
    o["data"] = data
    o["origin"] = origin
    o["lastEventId"] = lastEventId
    o["source"] = source
    o["ports"] = ports
    o["bubbles"] = bubbles
    o["cancelable"] = cancelable
    o["composed"] = composed
    return o
}

```

* Exposes the JavaScript

[ServiceWorkerGlobalScope](https://developer.mozilla.org/en/docs/Web/API/ServiceWorkerGlobalScope) to Kotlin

```

public external abstract class ServiceWorkerGlobalScope : WorkerGlobalScope {
    open val clients: Clients
    open val registration: ServiceWorkerRegistration
    open var oninstall: ((Event) -> dynamic)?
    open var onactivate: ((Event) -> dynamic)?
    open var onfetch: ((FetchEvent) -> dynamic)?
    open var onforeignfetch: ((Event) -> dynamic)?
    open var onmessage: ((MessageEvent) -> dynamic)?
    open var onnotificationclick: ((NotificationEvent) -> dynamic)?
    open var onnotificationclose: ((NotificationEvent) -> dynamic)?
    open var onfunctionalevent: ((Event) -> dynamic)?
    fun skipWaiting(): Promise<Unit>
}

```

* Exposes the JavaScript

[Client](https://developer.mozilla.org/en/docs/Web/API/Client) to Kotlin

```

public external abstract class Client : UnionClientOrMessagePortOrServiceWorker {
    open val url: String
    open val frameType: FrameType
    open val id: String
    fun postMessage(message: Any?, transfer: Array<dynamic> = definedExternally)
}

```

* Exposes the JavaScript

[WindowClient](https://developer.mozilla.org/en/docs/Web/API/WindowClient) to Kotlin

```

public external abstract class WindowClient : Client {
    open val visibilityState: dynamic
    open val focused: Boolean
    fun focus(): Promise<WindowClient>
    fun navigate(url: String): Promise<WindowClient>
}

```

* Exposes the JavaScript

[Clients](https://developer.mozilla.org/en/docs/Web/API/Clients) to Kotlin

```

public external abstract class Clients {
    fun get(id: String): Promise<Any?>
    fun matchAll(options: ClientQueryOptions = definedExternally): Promise<Array<Client>>
    fun openWindow(url: String): Promise<WindowClient?>
    fun claim(): Promise<Unit>
}
public external interface ClientQueryOptions {
    var includeUncontrolled: Boolean?
    /* = false */
    get() = definedExternally
    set(value) = definedExternally
    var type: ClientType?
    /* = ClientType.WINDOW */
    get() = definedExternally
    set(value) = definedExternally
}
@Suppress("INVISIBLE_REFERENCE", "INVISIBLE_MEMBER")
@kotlin.internal.InlineOnly
public inline fun ClientQueryOptions(includeUncontrolled: Boolean? = false, type: ClientType? = ClientType.WINDOW): ClientQueryOptions {
    val o = js("{}")
    o["includeUncontrolled"] = includeUncontrolled
    o["type"] = type
    return o
}

```

* Exposes the JavaScript

[ExtendableEvent](https://developer.mozilla.org/en/docs/Web/API/ExtendableEvent) to Kotlin

```

public external open class ExtendableEvent(type: String, eventInitDict: ExtendableEventInit = definedExternally) : Event {
    fun waitUntil(f: Promise<Any?>)
}
companion object {
    val NONE: Short
    val CAPTURING_PHASE:
}

```

```

Short\n    val AT_TARGET: Short\n    val BUBBLING_PHASE: Short\n    }\n}\n\npublic external interface
ExtendableEventInit : EventInit\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun ExtendableEventInit(bubbles:
Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false): ExtendableEventInit {\n    val o =
js(\"({})\")\n    o[\"bubbles\"] = bubbles\n    o[\"cancelable\"] = cancelable\n    o[\"composed\"] = composed\n    return o\n}\n\n/**\n * Exposes the JavaScript
[InstallEvent](https://developer.mozilla.org/en/docs/Web/API/InstallEvent) to Kotlin\n *\npublic external open
class InstallEvent(type: String, eventInitDict: ExtendableEventInit = definedExternally) : ExtendableEvent {\n    fun
registerForeignFetch(options: ForeignFetchOptions)\n\n    companion object {\n        val NONE: Short\n        val
CAPTURING_PHASE: Short\n        val AT_TARGET: Short\n        val BUBBLING_PHASE: Short\n    }\n}\n\npublic external interface ForeignFetchOptions {\n    var scopes: Array<String>?\n    var origins:
Array<String>?\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun ForeignFetchOptions(scopes:
Array<String>?, origins: Array<String>?): ForeignFetchOptions {\n    val o = js(\"({})\")\n    o[\"scopes\"] =
scopes\n    o[\"origins\"] = origins\n    return o\n}\n\n/**\n * Exposes the JavaScript
[FetchEvent](https://developer.mozilla.org/en/docs/Web/API/FetchEvent) to Kotlin\n *\npublic external open class
FetchEvent(type: String, eventInitDict: FetchEventInit) : ExtendableEvent {\n    open val request: Request\n    open
val clientId: String?\n    open val isReload: Boolean\n    fun respondWith(r: Promise<Response>)\n\n    companion
object {\n        val NONE: Short\n        val CAPTURING_PHASE: Short\n        val AT_TARGET: Short\n        val
BUBBLING_PHASE: Short\n    }\n}\n\npublic external interface FetchEventInit : ExtendableEventInit {\n    var
request: Request?\n    var clientId: String? /* = null */\n        get() = definedExternally\n        set(value) =
definedExternally\n    var isReload: Boolean? /* = false */\n        get() = definedExternally\n        set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun FetchEventInit(request: Request?,
clientId: String? = null, isReload: Boolean? = false, bubbles: Boolean? = false, cancelable: Boolean? = false,
composed: Boolean? = false): FetchEventInit {\n    val o = js(\"({})\")\n    o[\"request\"] = request\n    o[\"clientId\"]
= clientId\n    o[\"isReload\"] = isReload\n    o[\"bubbles\"] = bubbles\n    o[\"cancelable\"] = cancelable\n    o[\"composed\"] = composed\n    return o\n}\n\npublic external open class ForeignFetchEvent(type: String,
eventInitDict: ForeignFetchEventInit) : ExtendableEvent {\n    open val request: Request\n    open val origin:
String\n    fun respondWith(r: Promise<ForeignFetchResponse>)\n\n    companion object {\n        val NONE:
Short\n        val CAPTURING_PHASE: Short\n        val AT_TARGET: Short\n        val BUBBLING_PHASE:
Short\n    }\n}\n\npublic external interface ForeignFetchEventInit : ExtendableEventInit {\n    var request:
Request?\n    var origin: String? /* = \"null\" */\n        get() = definedExternally\n        set(value) =
definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun ForeignFetchEventInit(request:
Request?, origin: String? = \"null\", bubbles: Boolean? = false, cancelable: Boolean? = false, composed: Boolean? =
false): ForeignFetchEventInit {\n    val o = js(\"({})\")\n    o[\"request\"] = request\n    o[\"origin\"] = origin\n    o[\"bubbles\"] = bubbles\n    o[\"cancelable\"] = cancelable\n    o[\"composed\"] = composed\n    return
o\n}\n\npublic external interface ForeignFetchResponse {\n    var response: Response?\n    var origin: String?\n    get() = definedExternally\n    set(value) = definedExternally\n    var headers: Array<String>?\n    get() =
definedExternally\n    set(value) = definedExternally\n}\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\npublic inline fun ForeignFetchResponse(response:
Response?, origin: String? = undefined, headers: Array<String>? = undefined): ForeignFetchResponse {\n    val o =
js(\"({})\")\n    o[\"response\"] = response\n    o[\"origin\"] = origin\n    o[\"headers\"] = headers\n    return
o\n}\n\n/**\n * Exposes the JavaScript
[ExtendableMessageEvent](https://developer.mozilla.org/en/docs/Web/API/ExtendableMessageEvent) to Kotlin\n *\npublic external open class ExtendableMessageEvent(type: String, eventInitDict: ExtendableMessageEventInit =
definedExternally) : ExtendableEvent {\n    open val data: Any?\n    open val origin: String\n    open val lastEventId:

```



```

String\n  open val source: UnionClientOrMessagePortOrServiceWorker?\n  open val ports: Array<out
MessagePort>?\n\n  companion object {\n    val NONE: Short\n    val CAPTURING_PHASE: Short\n    val
AT_TARGET: Short\n    val BUBBLING_PHASE: Short\n  }\n\n\npublic external interface
ExtendableMessageEventInit : ExtendableEventInit {\n  var data: Any?\n    get() = definedExternally\n
set(value) = definedExternally\n  var origin: String?\n    get() = definedExternally\n    set(value) =
definedExternally\n  var lastEventId: String?\n    get() = definedExternally\n    set(value) =
definedExternally\n  var source: UnionClientOrMessagePortOrServiceWorker?\n    get() = definedExternally\n
    set(value) = definedExternally\n  var ports: Array<MessagePort>?\n    get() = definedExternally\n
    set(value) = definedExternally\n}\n\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\n\npublic inline fun ExtendableMessageEventInit(data:
Any? = undefined, origin: String? = undefined, lastEventId: String? = undefined, source:
UnionClientOrMessagePortOrServiceWorker? = undefined, ports: Array<MessagePort>? = undefined, bubbles:
Boolean? = false, cancelable: Boolean? = false, composed: Boolean? = false): ExtendableMessageEventInit {\n
val o = js(\"({})\")\n  o[\"data\"] = data\n  o[\"origin\"] = origin\n  o[\"lastEventId\"] = lastEventId\n
o[\"source\"] = source\n  o[\"ports\"] = ports\n  o[\"bubbles\"] = bubbles\n  o[\"cancelable\"] = cancelable\n
o[\"composed\"] = composed\n  return o\n}\n\n\n/**\n * Exposes the JavaScript
[Cache](https://developer.mozilla.org/en/docs/Web/API/Cache) to Kotlin\n */\n\npublic external abstract class Cache
{\n  fun match(request: dynamic, options: CacheQueryOptions = definedExternally): Promise<Any?>\n  fun
matchAll(request: dynamic = definedExternally, options: CacheQueryOptions = definedExternally):
Promise<Array<Response>>\n  fun add(request: dynamic): Promise<Unit>\n  fun addAll(requests:
Array<dynamic>): Promise<Unit>\n  fun put(request: dynamic, response: Response): Promise<Unit>\n  fun
delete(request: dynamic, options: CacheQueryOptions = definedExternally): Promise<Boolean>\n  fun
keys(request: dynamic = definedExternally, options: CacheQueryOptions = definedExternally):
Promise<Array<Request>>\n}\n\n\npublic external interface CacheQueryOptions {\n  var ignoreSearch: Boolean? /*
= false */\n    get() = definedExternally\n    set(value) = definedExternally\n  var ignoreMethod: Boolean? /*
= false */\n    get() = definedExternally\n    set(value) = definedExternally\n  var ignoreVary: Boolean? /*
= false */\n    get() = definedExternally\n    set(value) = definedExternally\n  var cacheName: String?\n
get() = definedExternally\n    set(value) = definedExternally\n}\n\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\n\npublic inline fun CacheQueryOptions(ignoreSearch:
Boolean? = false, ignoreMethod: Boolean? = false, ignoreVary: Boolean? = false, cacheName: String? = undefined):
CacheQueryOptions {\n  val o = js(\"({})\")\n  o[\"ignoreSearch\"] = ignoreSearch\n  o[\"ignoreMethod\"] =
ignoreMethod\n  o[\"ignoreVary\"] = ignoreVary\n  o[\"cacheName\"] = cacheName\n  return o\n}\n\n\npublic
external interface CacheBatchOperation {\n  var type: String?\n    get() = definedExternally\n    set(value) =
definedExternally\n  var request: Request?\n    get() = definedExternally\n    set(value) = definedExternally\n
var response: Response?\n    get() = definedExternally\n    set(value) = definedExternally\n  var options:
CacheQueryOptions?\n    get() = definedExternally\n    set(value) =
definedExternally\n}\n\n\n@Suppress(\"INVISIBLE_REFERENCE\",
\"INVISIBLE_MEMBER\")\n@kotlin.internal.InlineOnly\n\npublic inline fun CacheBatchOperation(type: String? =
undefined, request: Request? = undefined, response: Response? = undefined, options: CacheQueryOptions? =
undefined): CacheBatchOperation {\n  val o = js(\"({})\")\n  o[\"type\"] = type\n  o[\"request\"] = request\n
o[\"response\"] = response\n  o[\"options\"] = options\n  return o\n}\n\n\n\n/**\n * Exposes the JavaScript
[CacheStorage](https://developer.mozilla.org/en/docs/Web/API/CacheStorage) to Kotlin\n */\n\npublic external
abstract class CacheStorage {\n  fun match(request: dynamic, options: CacheQueryOptions = definedExternally):
Promise<Any?>\n  fun has(cacheName: String): Promise<Boolean>\n  fun open(cacheName: String):
Promise<Cache>\n  fun delete(cacheName: String): Promise<Boolean>\n  fun keys():
Promise<Array<String>>\n}\n\n\npublic external open class FunctionalEvent : ExtendableEvent {\n  companion
object {\n    val NONE: Short\n    val CAPTURING_PHASE: Short\n    val AT_TARGET: Short\n    val
BUBBLING_PHASE: Short\n  }\n\n\npublic external interface UnionMessagePortOrServiceWorker\n\npublic

```

```

external interface UnionClientOrMessagePortOrServiceWorker\n\n/* please, don't implement this interface!
*\n@JsName("\null")\n@Suppress("\NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface ServiceWorkerState {\n    companion object\n}\n\npublic inline val
ServiceWorkerState.Companion.INSTALLING: ServiceWorkerState get() =
"\installing".asDynamic().unsafeCast<ServiceWorkerState>()\n\npublic inline val
ServiceWorkerState.Companion.INSTALLED: ServiceWorkerState get() =
"\installed".asDynamic().unsafeCast<ServiceWorkerState>()\n\npublic inline val
ServiceWorkerState.Companion.ACTIVATING: ServiceWorkerState get() =
"\activating".asDynamic().unsafeCast<ServiceWorkerState>()\n\npublic inline val
ServiceWorkerState.Companion.ACTIVATED: ServiceWorkerState get() =
"\activated".asDynamic().unsafeCast<ServiceWorkerState>()\n\npublic inline val
ServiceWorkerState.Companion.REDUNDANT: ServiceWorkerState get() =
"\redundant".asDynamic().unsafeCast<ServiceWorkerState>()\n\n/* please, don't implement this interface!
*\n@JsName("\null")\n@Suppress("\NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface FrameType {\n    companion object\n}\n\npublic inline val FrameType.Companion.AUXILIARY:
FrameType get() = "\auxiliary".asDynamic().unsafeCast<FrameType>()\n\npublic inline val
FrameType.Companion.TOP_LEVEL: FrameType get() = "\top-
level".asDynamic().unsafeCast<FrameType>()\n\npublic inline val FrameType.Companion.NESTED: FrameType
get() = "\nested".asDynamic().unsafeCast<FrameType>()\n\npublic inline val FrameType.Companion.NONE:
FrameType get() = "\none".asDynamic().unsafeCast<FrameType>()\n\n/* please, don't implement this interface!
*\n@JsName("\null")\n@Suppress("\NESTED_CLASS_IN_EXTERNAL_INTERFACE")\n\npublic external
interface ClientType {\n    companion object\n}\n\npublic inline val ClientType.Companion.WINDOW: ClientType
get() = "\window".asDynamic().unsafeCast<ClientType>()\n\npublic inline val ClientType.Companion.WORKER:
ClientType get() = "\worker".asDynamic().unsafeCast<ClientType>()\n\npublic inline val
ClientType.Companion.SHAREDWORKER: ClientType get() =
"\sharedworker".asDynamic().unsafeCast<ClientType>()\n\npublic inline val ClientType.Companion.ALL:
ClientType get() = "\all".asDynamic().unsafeCast<ClientType>()"}\n\n/*\n * Copyright 2010-2021 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n *\n\n// NOTE: THIS FILE IS AUTO-GENERATED, DO NOT
EDIT!\n\n// See github.com/kotlin/dukat for details\n\npackage org.w3c.xhr\n\nimport kotlin.js.*\nimport
org.khronos.webgl.*\nimport org.w3c.dom.*\nimport org.w3c.dom.events.*\nimport org.w3c.files.*\n\n/**\n *
Exposes the JavaScript
[XMLHttpRequestEventTarget](https://developer.mozilla.org/en/docs/Web/API/XMLHttpRequestEventTarget) to
Kotlin\n *\n\npublic external abstract class XMLHttpRequestEventTarget : EventTarget {\n    open var onloadstart:
((ProgressEvent) -> dynamic)?\n    open var onprogress: ((ProgressEvent) -> dynamic)?\n    open var onabort:
((Event) -> dynamic)?\n    open var onerror: ((Event) -> dynamic)?\n    open var onload: ((Event) -> dynamic)?\n
open var ontimeout: ((Event) -> dynamic)?\n    open var onloadend: ((Event) -> dynamic)?\n}\n\n\npublic external
abstract class XMLHttpRequestUpload : XMLHttpRequestEventTarget\n\n/**\n * Exposes the JavaScript
[XMLHttpRequest](https://developer.mozilla.org/en/docs/Web/API/XMLHttpRequest) to Kotlin\n *\n\npublic
external open class XMLHttpRequest : XMLHttpRequestEventTarget {\n    var onreadystatechange: ((Event) ->
dynamic)?\n    open val readyState: Short\n    var timeout: Int\n    var withCredentials: Boolean\n    open val upload:
XMLHttpRequestUpload\n    open val responseURL: String\n    open val status: Short\n    open val statusText:
String\n    var responseType: XMLHttpRequestResponseType\n    open val response: Any?\n    open val
responseText: String\n    open val responseXML: Document?\n    fun open(method: String, url: String)\n    fun
open(method: String, url: String, async: Boolean, username: String? = definedExternally, password: String? =
definedExternally)\n    fun setRequestHeader(name: String, value: String)\n    fun send(body: dynamic =
definedExternally)\n    fun abort()\n    fun getResponseHeader(name: String): String?\n    fun
getAllResponseHeaders(): String\n    fun overrideMimeType(mime: String)\n}\n\n    companion object {\n        val

```



```

instead.)\npublic annotation class Experimental(val level: Level = Level.ERROR) {\n    /**\n     * Severity of the diagnostic that should be reported on usages of experimental API which did not explicitly accept the experimental aspect\n     * of that API either by using [UseExperimental] or by being annotated with the corresponding marker annotation.\n     */\n    public enum class Level {\n        /** Specifies that a warning should be reported on incorrect usages of this experimental API. */\n        WARNING,\n        /** Specifies that an error should be reported on incorrect usages of this experimental API. */\n        ERROR,\n    }\n}\n/**\n * Allows to use experimental API denoted by the given markers in the annotated file, declaration, or expression.\n * If a declaration is annotated with [UseExperimental], its usages are not required to opt-in to that experimental API.\n * This class is deprecated in favor of a more general approach provided by [RequiresOptIn]/[OptIn].\n */\n@Target(\n    CLASS,\n    PROPERTY,\n    LOCAL_VARIABLE,\n    VALUE_PARAMETER,\n    CONSTRUCTOR,\n    FUNCTION,\n    PROPERTY_GETTER,\n    PROPERTY_SETTER,\n    EXPRESSION,\n    FILE,\n    TYPEALIAS)\n@Retention(SOURCE)\n@SinceKotlin("1.2")\n@RequireKotlin("1.2.50", versionKind = RequireKotlinVersionKind.COMPILER_VERSION)\n@Deprecated("Please use OptIn instead.", ReplaceWith("OptIn(*markerClass)", "kotlin.OptIn"))\npublic annotation class UseExperimental(\n    vararg val markerClass: KClass<out Annotation>)\n\n@Target(CLASS, PROPERTY, CONSTRUCTOR, FUNCTION, TYPEALIAS)\n@Retention(BINARY)\ninternal annotation class WasExperimental(\n    vararg val markerClass: KClass<out Annotation>)\n\n", "package kotlin\n\nimport kotlin.annotation.AnnotationTarget.*\n\n/**\n * This annotation marks the standard library API that is considered experimental and is not subject to the\n * [general compatibility guarantees](https://kotlinlang.org/docs/reference/evolution/components-stability.html) given for the standard library:\n * the behavior of such API may be changed or the API may be removed completely in any further release.\n * > Beware using the annotated API especially if you're developing a library, since your library might become binary incompatible\n * with the future versions of the standard library.\n * Any usage of a declaration annotated with `@ExperimentalStdlibApi` must be accepted either by\n * annotating that usage with the [OptIn] annotation, e.g. `@OptIn(ExperimentalStdlibApi::class)`,\n * or by using the compiler argument `-Xopt-in=kotlin.ExperimentalStdlibApi`.\n */\n@Suppress("DEPRECATION")\n@Experimental(level = Experimental.Level.ERROR)\n@RequiresOptIn(level = RequiresOptIn.Level.ERROR)\n@Retention(AnnotationRetention.BINARY)\n@Target(\n    CLASS,\n    ANNOTATION_CLASS,\n    PROPERTY,\n    FIELD,\n    LOCAL_VARIABLE,\n    VALUE_PARAMETER,\n    CONSTRUCTOR,\n    FUNCTION,\n    PROPERTY_GETTER,\n    PROPERTY_SETTER,\n    TYPEALIAS)\n@MustBeDocumented\n@SinceKotlin("1.3")\npublic annotation class ExperimentalStdlibApi\n\n", "/*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\npackage kotlin\n\nimport kotlin.annotation.AnnotationTarget.*\nimport kotlin.experimental.ExperimentalTypeInference\n\n/**\n * Allows to infer generic type arguments of a function from the calls in the annotated function parameter of that function.\n * When this annotation is placed on a generic function parameter of a function,\n * it enables to infer the type arguments of that generic function from the lambda body passed to that parameter.\n * The calls that affect inference are either members of the receiver type of an annotated function parameter or\n * extensions for that type. The extensions must be themselves annotated with `@BuilderInference`.\n * Example: we declare\n * ```\n * fun <T> sequence(@BuilderInference block: suspend SequenceScope<T>().-> Unit): Sequence<T>\n * ```\n * and use it like\n * ```\n * val result = sequence { yield("result") }\n * ```\n * Here the type argument of the resulting sequence is inferred to `String` from\n * the argument of the [SequenceScope.yield] function, that is called inside the lambda passed to [sequence].\n * Note: this annotation is experimental, see [ExperimentalTypeInference] on how to opt-in for it.\n */\n@Target(VALUE_PARAMETER, FUNCTION, PROPERTY)\n@Retention(AnnotationRetention.BINARY)\n@SinceKotlin("1.3")\n@ExperimentalTypeInference\npublic annotation class BuilderInference\n\n/**\n * Enables overload selection based on the type of the value returned from lambda argument.\n * When two or more function overloads have otherwise the same parameter lists that differ only in the return type\n * of a functional parameter, this annotation enables overload selection by the

```

type of the value returned from the lambda function passed to this functional parameter. Example: `@OverloadResolutionByLambdaReturnType fun create(intProducer: () -> Int): Int { fun create(doubleProducer: () -> Double): Double { val newValue = create { 3.14 } } }` The annotation being applied to one of overloads allows to resolve this ambiguity by analyzing what value is returned from the lambda function. This annotation is also used to discriminate the annotated overloads in case if overload selection still cannot choose one of them even taking in account the result of lambda parameter analysis. In that case a warning is reported. Note: this annotation is experimental, see [ExperimentalTypeInference] on how to opt-in for it.

```
*/@Target(FUNCTION)@Retention(AnnotationRetention.BINARY)@SinceKotlin("1.4")@ExperimentalTypeInference\npublic annotation class OverloadResolutionByLambdaReturnType", "/*\n * Copyright 2010-2018\nJetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the\nApache 2.0 license that can be found in the license/LICENSE.txt file.\n */\npackage kotlin\n\nimport\nkotlin.annotation.AnnotationTarget.\nimport kotlin.internal.RequireKotlin\nimport\nkotlin.internal.RequireKotlinVersionKind\n\n/*\n * The experimental multiplatform support API marker.\n * Any usage of a declaration annotated with `@ExperimentalMultiplatform` must be accepted either by\n * annotating that usage with the [OptIn] annotation, e.g. `@OptIn(ExperimentalMultiplatform::class)`,\n * or by using the compiler argument `-Xopt-in=kotlin.ExperimentalMultiplatform`.\n */
```

```
*/@Suppress("DEPRECATION")@Experimental@RequiresOptIn@MustBeDocumented@Target(\nCLASS,\n ANNOTATION_CLASS,\n PROPERTY,\n FIELD,\n LOCAL_VARIABLE,\n VALUE_PARAMETER,\n CONSTRUCTOR,\n FUNCTION,\n PROPERTY_GETTER,\n PROPERTY_SETTER,\n TYPEALIAS)\n@Retention(AnnotationRetention.BINARY)@RequireKotlin("1.2.50", versionKind =\nRequireKotlinVersionKind.COMPILER_VERSION)\npublic annotation class ExperimentalMultiplatform\n\n/*\n * Marks an expected annotation class that it isn't required to have actual counterparts in all platforms.\n * This annotation is only applicable to `expect` annotation classes in multi-platform projects and marks that class as\n * `optional`. Optional expected class is allowed to have no corresponding actual class on the platform. Optional\n * annotations can only be used to annotate something, not as types in signatures. If an optional annotation has no\n * corresponding actual class on a platform, the annotation entries where it's used are simply erased when\n * compiling code on that platform. Note: this annotation is experimental, see [ExperimentalMultiplatform] on\n * how to opt-in for it.
```

```
*/@Target(ANNOTATION_CLASS)@Retention(AnnotationRetention.BINARY)@ExperimentalMultiplatform\n@RequireKotlin("1.2.50", versionKind = RequireKotlinVersionKind.COMPILER_VERSION)\npublic\nannotation class OptionalExpectation\n", "/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming\nLanguage contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the\nlicense/LICENSE.txt file.\n */\npackage kotlin\n\nimport\nkotlin.annotation.AnnotationRetention.BINARY\nimport kotlin.annotation.AnnotationRetention.SOURCE\nimport\nkotlin.annotation.AnnotationTarget.\nimport kotlin.internal.RequireKotlin\nimport\nkotlin.internal.RequireKotlinVersionKind\nimport kotlin.reflect.KClass\n\n/*\n * Signals that the annotated\nannotation class is a marker of an API that requires an explicit opt-in.\n * Call sites of any declaration annotated\nwith that marker should opt in to the API either by using [OptIn],\n * or by being annotated with that marker\nthemselves, effectively causing further propagation of the opt-in requirement.\n * This class requires opt-in itself\nand can only be used with the compiler argument `-Xopt-in=kotlin.RequiresOptIn`.\n * @property message\nmessage to be reported on usages of API without an explicit opt-in, or empty string for the default message.\n * The default message is: `\"This declaration is experimental and its usage should be marked with 'Marker'\n * or '@OptIn(Marker::class)'`, where `Marker` is the opt-in requirement marker.\n * @property level specifies\nhow usages of API without an explicit opt-in are reported in code.
```

```
*/@Target(ANNOTATION_CLASS)@Retention(BINARY)@SinceKotlin("1.3")@RequireKotlin("1.3.70\n", versionKind = RequireKotlinVersionKind.COMPILER_VERSION)\npublic annotation class RequiresOptIn(\n
```

```

val message: String = "\",\n    val level: Level = Level.ERROR\n) {\n    /**\n     * Severity of the diagnostic that
should be reported on usages which did not explicitly opted into\n     * the API either by using [OptIn] or by being
annotated with the corresponding marker annotation.\n     */\n    public enum class Level {\n        /** Specifies that a
warning should be reported on incorrect usages of this API. */\n        WARNING,\n        /** Specifies that an error
should be reported on incorrect usages of this API. */\n        ERROR,\n    }\n}\n\n/**\n * Allows to use the API
denoted by the given markers in the annotated file, declaration, or expression.\n * If a declaration is annotated with
[OptIn], its usages are **not** required to opt in to that API.\n * This class requires opt-in itself and can only be
used with the compiler argument `Xopt-in=kotlin.RequiresOptIn`. */\n@Target(CLASS, PROPERTY,
LOCAL_VARIABLE, VALUE_PARAMETER, CONSTRUCTOR, FUNCTION, PROPERTY_GETTER,
PROPERTY_SETTER, EXPRESSION, FILE,
TYPEALIAS)\n@Retention(SOURCE)\n@SinceKotlin("1.3")\n@RequireKotlin("1.3.70", versionKind =
RequireKotlinVersionKind.COMPILER_VERSION)\npublic annotation class OptIn(\n    vararg val markerClass:
KClass<out Annotation>\n)\n"/**\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\npackage kotlin.collections\nimport kotlin.js.JsName\n\n/**\n * Provides a skeletal
implementation of the read-only [Collection] interface.\n * @param E the type of elements contained in the
collection. The collection is covariant in its element type.\n */\n@SinceKotlin("1.1")\npublic abstract class
AbstractCollection<out E> protected constructor() : Collection<E> {\n    abstract override val size: Int\n    abstract
override fun iterator(): Iterator<E>\n\n    override fun contains(element: @UnsafeVariance E): Boolean = any { it
== element }\n\n    override fun containsAll(elements: Collection<@UnsafeVariance E>): Boolean =\n        elements.all { contains(it) } // use when js will support bound refs: elements.all(this::contains)\n\n    override fun
isEmpty(): Boolean = size == 0\n\n    override fun toString(): String = joinToString(", ", "[", "]") {\n        if (it
=== this) "(this Collection)" else it.toString()\n    }\n\n    /**\n     * Returns new array of type `Array<Any?>` with
the elements of this collection.\n     */\n    @JsName("toArray")\n    protected open fun toArray(): Array<Any?> =
copyToArrayImpl(this)\n\n    /**\n     * Fills the provided [array] or creates new array of the same type\n     * and
fills it with the elements of this collection.\n     */\n    protected open fun <T> toArray(array: Array<T>): Array<T>
= copyToArrayImpl(this, array)\n}\n"/**\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\npackage kotlin.collections\n\nprivate enum class State {\n    Ready,\n    NotReady,\n    Done,\n    Failed\n}\n\n/**\n * A base class to simplify implementing iterators so that
implementations only have to implement [computeNext]\n * to implement the iterator, calling [done] when the
iteration is complete.\n */\npublic abstract class AbstractIterator<T> : Iterator<T> {\n    private var state =
State.NotReady\n    private var nextValue: T? = null\n\n    override fun hasNext(): Boolean {\n        require(state !=
State.Failed)\n        return when (state) {\n            State.Done -> false\n            State.Ready -> true\n            else ->
tryToComputeNext()\n        }\n    }\n\n    override fun next(): T {\n        if (!hasNext()) throw
NoSuchElementException()\n        state = State.NotReady\n        @Suppress("UNCHECKED_CAST")\n        return nextValue as T\n    }\n\n    private fun tryToComputeNext(): Boolean {\n        state = State.Failed\n        computeNext()\n        return state == State.Ready\n    }\n\n    /**\n     * Computes the next item in the iterator.\n     */\n    /**\n     * This callback method should call one of these two methods:\n     * * [setNext] with the next value of
the iteration\n     * * [done] to indicate there are no more elements\n     * * Failure to call either method will
result in the iteration terminating with a failed state\n     */\n    abstract protected fun computeNext(): Unit\n\n    /**\n     * Sets the next value in the iteration, called from the [computeNext] function\n     */\n    protected fun
setNext(value: T): Unit {\n        nextValue = value\n        state = State.Ready\n    }\n\n    /**\n     * Sets the state to
done so that the iteration terminates.\n     */\n    protected fun done() {\n        state = State.Done\n    }\n}\n\n"/**\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code
is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\npackage kotlin.collections\n\n/**\n * Based on
GWT AbstractList\n * Copyright 2007 Google Inc.\n */\npackage kotlin.collections\n\n/**\n * Provides a skeletal
implementation of the read-only [List] interface.\n * This class is intended to help implementing read-only lists

```

so it doesn't support concurrent modification tracking.

```

    @param E the type of elements contained in the list.
    The list is covariant in its element type.
    @SinceKotlin("1.1")
    public abstract class AbstractList<out E>
    protected constructor() : AbstractCollection<E>(), List<E> {
        abstract override val size: Int
        abstract override fun get(index: Int): E
        override fun iterator(): Iterator<E> = IteratorImpl()
        override fun indexOf(element: @UnsafeVariance E): Int = indexOfFirst { it == element }
        override fun lastIndexOf(element: @UnsafeVariance E): Int = indexOfLast { it == element }
        override fun listIterator(): ListIterator<E> = ListIteratorImpl()
        override fun listIterator(index: Int): ListIterator<E> = ListIteratorImpl(index)
        override fun subList(fromIndex: Int, toIndex: Int): List<E> = SubList(this, fromIndex, toIndex)
        private class SubList<out E>(private val list: AbstractList<E>, private val fromIndex: Int, toIndex: Int) : AbstractList<E>(),
        RandomAccess {
            private var _size: Int = 0
            init {
                checkRangeIndexes(fromIndex, toIndex, list.size)
                this._size = toIndex - fromIndex
            }
            override fun get(index: Int): E {
                checkElementIndex(index, _size)
                return list[fromIndex + index]
            }
            override val size: Int get() = _size
        }
        /**
         * Compares this list with other list instance with the ordered structural equality.
         * @return true, if [other] instance is a [List] of the same size, which contains the same elements in the same order.
         */
        override fun equals(other: Any?): Boolean {
            if (other === this) return true
            if (other !is List<*>) return false
            return orderedEquals(this, other)
        }
        /**
         * Returns the hash code value for this list.
         */
        override fun hashCode(): Int = orderedHashCode(this)
        private open inner class IteratorImpl : Iterator<E> {
            /** the index of the item that will be returned on the next call to [next]() */
            protected var index = 0
            override fun hasNext(): Boolean = index < size
            override fun next(): E {
                if (!hasNext()) throw NoSuchElementException()
                return get(index++)
            }
        }
        /**
         * Implementation of [ListIterator] for abstract lists.
         */
        private open inner class ListIteratorImpl(index: Int) : IteratorImpl(), ListIterator<E> {
            init {
                checkPositionIndex(index, this@AbstractList.size)
                this.index = index
            }
            override fun hasNext(): Boolean = index > 0
            override fun nextIndex(): Int = index
            override fun previous(): E {
                if (!hasPrevious()) throw NoSuchElementException()
                return get(--index)
            }
            override fun previousIndex(): Int = index - 1
        }
        internal companion object {
            internal fun checkElementIndex(index: Int, size: Int) {
                if (index < 0 || index >= size) {
                    throw IndexOutOfBoundsException("index: $index, size: $size")
                }
            }
            internal fun checkPositionIndex(index: Int, size: Int) {
                if (index < 0 || index > size) {
                    throw IndexOutOfBoundsException("index: $index, size: $size")
                }
            }
            internal fun checkRangeIndexes(fromIndex: Int, toIndex: Int, size: Int) {
                if (fromIndex < 0 || toIndex > size) {
                    throw IndexOutOfBoundsException("fromIndex: $fromIndex, toIndex: $toIndex, size: $size")
                }
                if (fromIndex > toIndex) {
                    throw IllegalArgumentException("fromIndex: $fromIndex > toIndex: $toIndex")
                }
            }
            internal fun checkBoundsIndexes(startIndex: Int, endIndex: Int, size: Int) {
                if (startIndex < 0 || endIndex > size) {
                    throw IndexOutOfBoundsException("startIndex: $startIndex, endIndex: $endIndex, size: $size")
                }
                if (startIndex > endIndex) {
                    throw IllegalArgumentException("startIndex: $startIndex > endIndex: $endIndex")
                }
            }
            internal fun orderedHashCode(c: Collection<*>): Int {
                var hashCode = 1
                for (e in c) {
                    hashCode = 31 * hashCode + (e?.hashCode() ?: 0)
                }
                return hashCode
            }
            internal fun orderedEquals(c: Collection<*>, other: Collection<*>): Boolean {
                if (c.size != other.size) return false
                val otherIterator = other.iterator()
                for (elem in c) {
                    val elemOther = otherIterator.next()
                    if (elem != elemOther) {
                        return false
                    }
                }
                return true
            }
        }
    }
}

```

/*
 * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.
 * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.
 */
 Based on GWT AbstractMap
 Copyright 2007 Google Inc.
 package kotlin.collections
 Provides a skeletal implementation of the read-only [Map] interface.
 The implementor is required to implement [entries] property, which should return read-only set of map entries.
 @param K the type of map keys. The map is invariant in its key type.
 @param V the type of map values. The map is covariant in its value type.
 @SinceKotlin("1.1")
 public abstract class AbstractMap<K, out V> protected constructor() : Map<K, V>

```

{\n\n  override fun containsKey(key: K): Boolean {\n      return implFindEntry(key) != null\n  }\n\n  override
fun containsValue(value: @UnsafeVariance V): Boolean = entries.any { it.value == value }\n\n  internal fun
containsEntry(entry: Map.Entry<*, *>?): Boolean {\n      // since entry comes from @UnsafeVariance parameters it
can be virtually anything\n      if (entry !is Map.Entry<*, *>) return false\n      val key = entry.key\n      val value
= entry.value\n      val ourValue = get(key)\n      if (value != ourValue) {\n          return false\n      }\n\n      //
Perhaps it was null and we don't contain the key?\n      if (ourValue == null && !containsKey(key)) {\n
return false\n      }\n\n      return true\n  }\n\n\n  /**\n   * Compares this map with other instance with the
ordered structural equality.\n   * @return true, if [other] instance is a [Map] of the same size, all entries of
which are contained in the [entries] set of this map.\n   */\n  override fun equals(other: Any?): Boolean {\n      if
(other === this) return true\n      if (other !is Map<*, *>) return false\n      if (size != other.size) return false\n\n
return other.entries.all { containsEntry(it) }\n  }\n\n  override operator fun get(key: K): V? =
implFindEntry(key)?.value\n\n\n  /**\n   * Returns the hash code value for this map.\n   * @return It is the same as
the hashCode of [entries] set.\n   */\n  override fun hashCode(): Int = entries.hashCode()\n\n  override fun
isEmpty(): Boolean = size == 0\n  override val size: Int get() = entries.size\n\n  /**\n   * Returns a read-only
[Set] of all keys in this map.\n   * @return Accessing this property first time creates a keys view from [entries].\n   *
All subsequent accesses just return the created instance.\n   */\n  override val keys: Set<K>\n      get() {\n
if (_keys == null) {\n          _keys = object : AbstractSet<K>() {\n              override operator fun
contains(element: K): Boolean = containsKey(element)\n              override operator fun iterator(): Iterator<K>
{\n                  val entryIterator = entries.iterator()\n                  return object : Iterator<K> {\n
override fun hasNext(): Boolean = entryIterator.hasNext()\n                  override fun next(): K =
entryIterator.next().key\n                  }\n              }\n              override val size: Int get() =
this@AbstractMap.size\n          }\n          return _keys!!\n      }\n      @kotlin.jvm.Volatile\n  private var _keys: Set<K>? = null\n\n  override fun toString(): String = entries.joinToString(", ", "\n", "\n") {
toString(it) }\n\n  private fun toString(entry: Map.Entry<K, V>): String = toString(entry.key) + "\n" +
toString(entry.value)\n\n  private fun toString(o: Any?): String = if (o === this) "(this Map)" else o.toString()\n\n
/**\n   * Returns a read-only [Collection] of all values in this map.\n   * @return Accessing this property first time
creates a values view from [entries].\n   * All subsequent accesses just return the created instance.\n   */\n
override val values: Collection<V>\n      get() {\n          if (_values == null) {\n              _values = object :
AbstractCollection<V>() {\n                  override operator fun contains(element: @UnsafeVariance V): Boolean =
containsValue(element)\n                  override operator fun iterator(): Iterator<V> {\n                      val
entryIterator = entries.iterator()\n                      return object : Iterator<V> {\n                          override fun
hasNext(): Boolean = entryIterator.hasNext()\n                          override fun next(): V = entryIterator.next().value\n
                      }\n                  }\n                  override val size: Int get() = this@AbstractMap.size\n              }\n
              return _values!!\n          }\n          @kotlin.jvm.Volatile\n  private var _values: Collection<V>? = null\n\n
private fun implFindEntry(key: K): Map.Entry<K, V>? = entries.firstOrNull { it.key == key }\n\n  internal
companion object {\n      internal fun entryHashCode(e: Map.Entry<*, *>): Int = with(e) { (key?.hashCode() ?:
0) xor (value?.hashCode() ?: 0) }\n      internal fun entryToString(e: Map.Entry<*, *>): String = with(e) {
"\nkey=$value\n" }\n      internal fun entryEquals(e: Map.Entry<*, *>, other: Any?): Boolean {\n          if (other !is
Map.Entry<*, *>) return false\n          return e.key == other.key && e.value == other.value\n      }\n  }\n\n\n
"/*\n   * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n   * Use of
this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n   */\n
*\npackage kotlin.collections\n\n/**\n   * Provides a skeletal implementation of the read-only [Set] interface.\n   * @return
This class is intended to help implementing read-only sets so it doesn't support concurrent modification tracking.\n   *
@param E the type of elements contained in the set. The set is covariant in its element type.\n   */\n\n
*\n@SinceKotlin("1.1")\npublic abstract class AbstractSet<out E> protected constructor() :
AbstractCollection<E>(), Set<E> {\n\n  /**\n   * Compares this set with other set instance with the unordered
structural equality.\n   * @return true, if [other] instance is a [Set] of the same size, all elements of which are
contained in this set.\n   */\n  override fun equals(other: Any?): Boolean {\n      if (other === this) return true\n

```



```

    if (other !is Set<*>) return false\n    return setEquals(this, other)\n    }\n\n    /**\n     * Returns the hash code
value for this set.\n     */\n    override fun hashCode(): Int = unorderedHashCode(this)\n\n    internal companion
object {\n        internal fun unorderedHashCode(c: Collection<*>): Int {\n            var hashCode = 0\n            for
(element in c) {\n                hashCode += (element?.hashCode() ?: 0)\n            }\n            return hashCode\n        }\n\n        internal fun setEquals(c: Set<*>, other: Set<*>): Boolean {\n            if (c.size != other.size) return false\n
            return c.containsAll(other)\n        }\n    }\n\n    \"\"*\n     * Copyright 2010-2019 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n     * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n     */\n\n    package kotlin.collections\n\n    /**\n     * Resizable-array implementation
of the deque data structure.\n     * The name deque is short for \"double ended queue\" and is usually pronounced
\"deck\".\n     * The collection provide methods for convenient access to the both ends.\n     * It also implements
[MutableList] interface and supports efficient get/set operations by index.\n     */\n\n    @SinceKotlin(\"1.4\")\n    @WasExperimental(ExperimentalStdlibApi::class)\n    public class ArrayDeque<E> :
AbstractMutableList<E> {\n        private var head: Int = 0\n        private var elementData: Array<Any?>\n\n        override
var size: Int = 0\n        private set\n\n        /**\n         * Constructs an empty deque with specified [initialCapacity], or
throws [IllegalArgumentException] if [initialCapacity] is negative.\n         */\n        public constructor(initialCapacity:
Int) {\n            elementData = when {\n                initialCapacity == 0 -> emptyElementData\n                initialCapacity > 0 -
> arrayOfNulls(initialCapacity)\n                else -> throw IllegalArgumentException(\"Illegal Capacity:
$initialCapacity\")\n            }\n        }\n\n        /**\n         * Constructs an empty deque.\n         */\n        public constructor() {\n
            elementData = emptyElementData\n        }\n\n        /**\n         * Constructs a deque that contains the same elements as the
specified [elements] collection in the same order.\n         */\n        public constructor(elements: Collection<E>) {\n
            elementData = elements.toArray()\n            size = elementData.size\n            if (elementData.isEmpty())
            elementData = emptyElementData\n        }\n\n        /**\n         * Ensures that the capacity of this deque is at least equal to
the specified [minCapacity].\n         * If the current capacity is less than the [minCapacity], a new backing
storage is allocated with greater capacity.\n         * Otherwise, this method takes no action and simply returns.\n         */\n        private fun ensureCapacity(minCapacity: Int) {\n            if (minCapacity < 0) throw IllegalStateException(\"Deque is
too big.\") // overflow\n            if (minCapacity <= elementData.size) return\n            if (elementData ===
emptyElementData) {\n                elementData = arrayOfNulls(minCapacity.coerceAtLeast(defaultMinCapacity))\n
            }\n            val newCapacity = newCapacity(elementData.size, minCapacity)\n            copyElements(newCapacity)\n        }\n\n        /**\n         * Creates a new array with the specified [newCapacity] size and
copies elements in the [elementData] array to it.\n         */\n        private fun copyElements(newCapacity: Int) {\n            val
newElements = arrayOfNulls<Any?>(newCapacity)\n            elementData.copyInto(newElements, 0, head,
elementData.size)\n            elementData.copyInto(newElements, elementData.size - head, 0, head)\n            head = 0\n
            elementData = newElements\n        }\n\n        @kotlin.internal.InlineOnly\n        private inline fun
internalGet(internalIndex: Int): E {\n            @Suppress(\"UNCHECKED_CAST\")\n            return
elementData[internalIndex] as E\n        }\n\n        private fun positiveMod(index: Int): Int = if (index >=
elementData.size) index - elementData.size else index\n\n        private fun negativeMod(index: Int): Int = if (index < 0)
index + elementData.size else index\n\n        @kotlin.internal.InlineOnly\n        private inline fun internalIndex(index:
Int): Int = positiveMod(head + index)\n\n        private fun incremented(index: Int): Int = if (index ==
elementData.lastIndex) 0 else index + 1\n\n        private fun decremented(index: Int): Int = if (index == 0)
elementData.lastIndex else index - 1\n\n        override fun isEmpty(): Boolean = size == 0\n\n        /**\n         * Returns the
first element, or throws [NoSuchElementException] if this deque is empty.\n         */\n        public fun first(): E = if
(isEmpty()) throw NoSuchElementException(\"ArrayDeque is empty.\") else internalGet(head)\n\n        /**\n         *
Returns the first element, or `null` if this deque is empty.\n         */\n        public fun firstOrNull(): E? = if (isEmpty()) null
else internalGet(head)\n\n        /**\n         * Returns the last element, or throws [NoSuchElementException] if this deque
is empty.\n         */\n        public fun last(): E = if (isEmpty()) throw NoSuchElementException(\"ArrayDeque is empty.\")
else internalGet(internalIndex(lastIndex))\n\n        /**\n         * Returns the last element, or `null` if this deque is empty.\n         */\n        public fun lastOrNull(): E? = if (isEmpty()) null else internalGet(internalIndex(lastIndex))\n\n        /**\n         *
Prepends the specified [element] to this deque.\n         */\n        public fun addFirst(element: E) {\n

```

```

ensureCapacity(size + 1)\n\n    head = decremented(head)\n    elementData[head] = element\n    size += 1\n}\n\n /**\n * Appends the specified [element] to this deque.\n */\n public fun addLast(element: E) {\n
ensureCapacity(size + 1)\n\n    elementData[internalIndex(size)] = element\n    size += 1\n }\n\n /**\n *
Removes the first element from this deque and returns that removed element, or throws [NoSuchElementException]
if this deque is empty.\n */\n public fun removeFirst(): E {\n    if (isEmpty()) throw
NoSuchElementException("ArrayDeque is empty.")\n\n    val element = internalGet(head)\n
elementData[head] = null\n    head = incremented(head)\n    size -= 1\n    return element\n }\n\n /**\n *
Removes the first element from this deque and returns that removed element, or returns `null` if this deque is
empty.\n */\n public fun removeFirstOrNull(): E? = if (isEmpty()) null else removeFirst()\n\n /**\n *
Removes the last element from this deque and returns that removed element, or throws [NoSuchElementException]
if this deque is empty.\n */\n public fun removeLast(): E {\n    if (isEmpty()) throw
NoSuchElementException("ArrayDeque is empty.")\n\n    val internalLastIndex = internalIndex(lastIndex)\n
val element = internalGet(internalLastIndex)\n    elementData[internalLastIndex] = null\n    size -= 1\n
return element\n }\n\n /**\n *
Removes the last element from this deque and returns that removed element, or
returns `null` if this deque is empty.\n */\n public fun removeLastOrNull(): E? = if (isEmpty()) null else
removeLast()\n\n // MutableList, MutableCollection\n public override fun add(element: E): Boolean {\n
addLast(element)\n    return true\n }\n\n public override fun add(index: Int, element: E) {\n
AbstractList.checkPositionIndex(index, size)\n\n    if (index == size) {\n        addLast(element)\n
return\n    } else if (index == 0) {\n        addFirst(element)\n        return\n    }\n\n    ensureCapacity(size
+ 1)\n\n    // Elements in circular array lay in 2 ways:\n    // 1. `head` is less than `tail`:  [#, #, e1, e2, e3,
#]\n    // 2. `head` is greater than `tail`:  [e3, #, #, #, e1, e2]\n    // where head is the index of the first element
in the circular array,\n    // and tail is the index following the last element.\n    // At this point the
insertion index is not equal to head or tail.\n    // Also the circular array can store at least one more element.\n
// Depending on where the given element must be inserted the preceding or the succeeding\n    // elements
will be shifted to make room for the element to be inserted.\n    // In case the preceding elements are
shifted:\n    // * if the insertion index is greater than the head (regardless of circular array form)\n    // ->
shift the preceding elements\n    // * otherwise, the circular array has (2) form and the insertion index is less than
tail\n    // -> shift all elements in the back of the array\n    // -> shift preceding elements in the front of the
array\n    // In case the succeeding elements are shifted:\n    // * if the insertion index is less than the tail
(regardless of circular array form)\n    // -> shift the succeeding elements\n    // * otherwise, the circular
array has (2) form and the insertion index is greater than head\n    // -> shift all elements in the front of the
array\n    // -> shift succeeding elements in the back of the array\n\n    val internalIndex =
internalIndex(index)\n\n    if (index < (size + 1) shr 1) {\n        // closer to the first element -> shift preceding
elements\n        val decrementedInternalIndex = decremented(internalIndex)\n        val decrementedHead =
decremented(head)\n\n        if (decrementedInternalIndex >= head) {\n            elementData[decrementedHead]
= elementData[head] // head can be zero\n            elementData.copyInto(elementData, head, head + 1,
decrementedInternalIndex + 1)\n        } else { // head > tail\n            elementData.copyInto(elementData, head -
1, head, elementData.size) // head can't be zero\n            elementData[elementData.size - 1] = elementData[0]\n
            elementData.copyInto(elementData, 0, 1, decrementedInternalIndex + 1)\n        }\n\n        elementData[decrementedInternalIndex] = element\n        head = decrementedHead\n    } else {\n        //
closer to the last element -> shift succeeding elements\n        val tail = internalIndex(size)\n\n        if
(internalIndex < tail) {\n            elementData.copyInto(elementData, internalIndex + 1, internalIndex, tail)\n
        } else { // head > tail\n            elementData.copyInto(elementData, 1, 0, tail)\n            elementData[0] =
elementData[elementData.size - 1]\n            elementData.copyInto(elementData, internalIndex + 1, internalIndex,
elementData.size - 1)\n        }\n\n        elementData[internalIndex] = element\n    }\n\n    size += 1\n }\n\n
private fun copyCollectionElements(internalIndex: Int, elements: Collection<E>) {\n    val iterator =
elements.iterator()\n\n    for (index in internalIndex until elementData.size) {\n        if (!iterator.hasNext())
break\n        elementData[index] = iterator.next()\n    }\n\n    for (index in 0 until head) {\n        if

```

```

(!iterator.hasNext()) break\n        elementData[index] = iterator.next()\n    }\n\n    size += elements.size\n}\n\n    public override fun addAll(elements: Collection<E>): Boolean {\n    if (elements.isEmpty()) return false\n        ensureCapacity(this.size + elements.size)\n        copyCollectionElements(internalIndex(size), elements)\n    return true\n    }\n\n    public override fun addAll(index: Int, elements: Collection<E>): Boolean {\n    AbstractList.checkPositionIndex(index, size)\n\n    if (elements.isEmpty()) {\n        return false\n    } else if (index == size) {\n        return addAll(elements)\n    }\n\n    ensureCapacity(this.size + elements.size)\n\n    val tail = internalIndex(size)\n    val internalIndex = internalIndex(index)\n    val elementsSize = elements.size\n\n    if (index < (size + 1) shr 1) {\n        // closer to the first element -> shift preceding elements\n\n        var shiftedHead = head - elementsSize\n\n        if (internalIndex >= head) {\n            if (shiftedHead >= 0) {\n                elementData.copyInto(elementData, shiftedHead, head, internalIndex)\n            } else { // head < tail, insertion leads to head >= tail\n                shiftedHead += elementData.size\n                val elementsToShift = internalIndex - head\n                val shiftToBack = elementData.size - shiftedHead\n                if (shiftToBack >= elementsToShift) {\n                    elementData.copyInto(elementData, shiftedHead, head, internalIndex)\n                } else {\n                    elementData.copyInto(elementData, shiftedHead, head, head + shiftToBack)\n                }\n            }\n        } else { // head > tail, internalIndex < tail\n            elementData.copyInto(elementData, shiftedHead, head, elementData.size)\n            if (elementsSize >= internalIndex) {\n                elementData.copyInto(elementData, elementData.size - elementsSize, 0, internalIndex)\n            } else {\n                elementData.copyInto(elementData, elementData.size - elementsSize, 0, elementsSize)\n                elementData.copyInto(elementData, 0, elementsSize, internalIndex)\n            }\n        }\n        head = shiftedHead\n        copyCollectionElements(negativeMod(internalIndex - elementsSize), elements)\n    } else {\n        // closer to the last element -> shift succeeding elements\n        val shiftedInternalIndex = internalIndex + elementsSize\n        if (internalIndex < tail) {\n            if (tail + elementsSize <= elementData.size) {\n                elementData.copyInto(elementData, shiftedInternalIndex, internalIndex, tail)\n            } else { // head < tail, insertion leads to head >= tail\n                if (shiftedInternalIndex >= elementData.size) {\n                    elementData.copyInto(elementData, shiftedInternalIndex - elementData.size, internalIndex, tail)\n                } else {\n                    val shiftToFront = tail + elementsSize - elementData.size\n                    elementData.copyInto(elementData, 0, tail - shiftToFront, tail)\n                    elementData.copyInto(elementData, shiftedInternalIndex, internalIndex, tail - shiftToFront)\n                }\n            }\n        } else { // head > tail, internalIndex > head\n            elementData.copyInto(elementData, elementsSize, 0, tail)\n            if (shiftedInternalIndex >= elementData.size) {\n                elementData.copyInto(elementData, shiftedInternalIndex - elementData.size, internalIndex, elementData.size)\n            } else {\n                elementData.copyInto(elementData, 0, elementData.size - elementsSize, elementData.size)\n                elementData.copyInto(elementData, shiftedInternalIndex, internalIndex, elementData.size - elementsSize)\n            }\n        }\n    }\n\n    copyCollectionElements(internalIndex, elements)\n}\n\n    return true\n}\n\n    public override fun get(index: Int): E {\n    AbstractList.checkElementIndex(index, size)\n    return internalGet(internalIndex(index))\n}\n\n    public override fun set(index: Int, element: E): E {\n    AbstractList.checkElementIndex(index, size)\n    val internalIndex = internalIndex(index)\n    val oldElement = internalGet(internalIndex)\n    elementData[internalIndex] = element\n    return oldElement\n}\n\n    public override fun contains(element: E): Boolean = indexOf(element) != -1\n\n    public override fun indexOf(element: E): Int {\n    val tail = internalIndex(size)\n    if (head < tail) {\n        for (index in head until tail) {\n            if (element == elementData[index]) return index - head\n        }\n    } else if (head >= tail) {\n        for (index in head until elementData.size) {\n            if (element == elementData[index]) return index - head\n        }\n    }\n    for (index in 0 until tail) {\n        if (element == elementData[index]) return index + elementData.size - head\n    }\n}\n\n    return -1\n}\n\n    public override fun lastIndexOf(element: E): Int {\n    val tail = internalIndex(size)\n    if (head < tail) {\n        for (index in tail - 1 downTo head) {\n            if (element == elementData[index]) return index - head\n        }\n    } else if (head > tail) {\n        for (index in tail - 1 downTo 0) {\n            if (element == elementData[index]) return

```

```

index + elementData.size - head\n        }\n        for (index in elementData.lastIndex downTo head) {\n
if (element == elementData[index]) return index - head\n        }\n        }\n\n        return -1\n    }\n\n    public
override fun remove(element: E): Boolean {\n        val index = indexOf(element)\n        if (index == -1) return
false\n        removeAt(index)\n        return true\n    }\n\n    public override fun removeAt(index: Int): E {\n
AbstractList.checkElementIndex(index, size)\n        if (index == lastIndex) {\n            return removeLast()\n        }
else if (index == 0) {\n            return removeFirst()\n        }\n        val internalIndex = internalIndex(index)\n
val element = internalGet(internalIndex)\n        if (index < size shr 1) {\n            // closer to the first element ->
shift preceding elements\n            if (internalIndex >= head) {\n                elementData.copyInto(elementData, head
+ 1, head, internalIndex)\n            } else { // head > tail, internalIndex < head\n
elementData.copyInto(elementData, 1, 0, internalIndex)\n                elementData[0] = elementData[elementData.size
- 1]\n                elementData.copyInto(elementData, head + 1, head, elementData.size - 1)\n            }\n        }\n
elementData[head] = null\n        head = incremented(head)\n    } else {\n        // closer to the last element ->
shift succeeding elements\n        val internalLastIndex = internalIndex(lastIndex)\n        if (internalIndex <=
internalLastIndex) {\n            elementData.copyInto(elementData, internalIndex, internalIndex + 1,
internalLastIndex + 1)\n        } else { // head > tail, internalIndex > head\n
elementData.copyInto(elementData, internalIndex, internalIndex + 1, elementData.size)\n
elementData[elementData.size - 1] = elementData[0]\n            elementData.copyInto(elementData, 0, 1,
internalLastIndex + 1)\n        }\n        elementData[internalLastIndex] = null\n    }\n    size -= 1\n\n    return element\n    }\n\n    public override fun removeAll(elements: Collection<E>): Boolean = filterInPlace {
!elements.contains(it) }\n\n    public override fun retainAll(elements: Collection<E>): Boolean = filterInPlace {
elements.contains(it) }\n\n    private inline fun filterInPlace(predicate: (E) -> Boolean): Boolean {\n        if
(this.isEmpty() || elementData.isEmpty())\n            return false\n\n        val tail = internalIndex(size)\n        var
newTail = head\n        var modified = false\n        if (head < tail) {\n            for (index in head until tail) {\n
val element = elementData[index]\n                @Suppress("UNCHECKED_CAST")\n                if
(predicate(element as E))\n                    elementData[newTail++] = element\n                    else\n                        modified =
true\n            }\n            elementData.fill(null, newTail, tail)\n        } else {\n            for (index in head until
elementData.size) {\n                val element = elementData[index]\n                elementData[index] = null\n            }\n
@Suppress("UNCHECKED_CAST")\n            if (predicate(element as E))\n                elementData[newTail++] = element\n            else\n                modified = true\n        }\n        newTail =
positiveMod(newTail)\n        for (index in 0 until tail) {\n            val element = elementData[index]\n
elementData[index] = null\n            @Suppress("UNCHECKED_CAST")\n            if (predicate(element as
E)) {\n                elementData[newTail] = element\n                newTail = incremented(newTail)\n            }
else {\n                modified = true\n            }\n        }\n        if (modified)\n            size =
negativeMod(newTail - head)\n        return modified\n    }\n\n    public override fun clear() {\n        val tail =
internalIndex(size)\n        if (head < tail) {\n            elementData.fill(null, head, tail)\n        } else if (isNotEmpty())
{\n            elementData.fill(null, head, elementData.size)\n            elementData.fill(null, 0, tail)\n        }\n        head =
0\n        size = 0\n    }\n\n    @Suppress("NOTHING_TO_OVERRIDE")\n    override fun <T> toArray(array:
Array<T>): Array<T> {\n        @Suppress("UNCHECKED_CAST")\n        val dest = (if (array.size >= size) array
else arrayOfNulls(array, size)) as Array<Any?>\n        val tail = internalIndex(size)\n        if (head < tail) {\n
elementData.copyInto(dest, startIndex = head, endIndex = tail)\n        } else if (isNotEmpty()) {\n
elementData.copyInto(dest, destinationOffset = 0, startIndex = head, endIndex = elementData.size)\n
elementData.copyInto(dest, destinationOffset = elementData.size - head, startIndex = 0, endIndex = tail)\n        }\n
        if (dest.size > size) {\n            dest[size] = null // null-terminate\n        }\n\n        @Suppress("UNCHECKED_CAST")\n        return dest as Array<T>\n    }\n\n    @Suppress("NOTHING_TO_OVERRIDE")\n    override fun toArray(): Array<Any?> {\n        return
toArray(arrayOfNulls<Any?>(size))\n    }\n\n    // for testing\n    internal fun <T> testToArray(array: Array<T>):
Array<T> = toArray(array)\n    internal fun testToArray(): Array<Any?> = toArray()\n\n    internal companion
object {\n        private val emptyElementData = emptyArray<Any?>()\n        private const val maxArraySize =

```

```

Int.MAX_VALUE - 8\n    private const val defaultMinCapacity = 10\n\n    internal fun
newCapacity(oldCapacity: Int, minCapacity: Int): Int {\n        // overflow-conscious\n        var newCapacity =
oldCapacity + (oldCapacity shr 1)\n        if (newCapacity - minCapacity < 0)\n            newCapacity =
minCapacity\n        if (newCapacity - maxArraySize > 0)\n            newCapacity = if (minCapacity >
maxArraySize) Int.MAX_VALUE else maxArraySize\n        return newCapacity\n    }\n }\n\n // For testing
only\n    internal fun internalStructure(structure: (head: Int, elements: Array<Any?>) -> Unit) {\n        val tail =
internalIndex(size)\n        val head = if (isEmpty() || head < tail) head else head - elementData.size\n
structure(head, toArray())\n    }\n }", /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n
*/\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("ArraysKt")\n\n\npackage
kotlin.collections\n\nimport kotlin.contracts.*\n\n\n/**\n * Returns a single list of all elements from all arrays in the
given array.\n * @sample samples.collections.Arrays.Transformations.flattenArray\n */\npublic fun <T> Array<out
Array<out T>>.flatten(): List<T> {\n    val result = ArrayList<T>(sumOf { it.size })\n    for (element in this) {\n
result.addAll(element)\n    }\n    return result\n}\n\n\n/**\n * Returns a pair of lists, where\n * *first* list is built from
the first values of each pair from this array,\n * *second* list is built from the second values of each pair from this
array.\n * @sample samples.collections.Arrays.Transformations.unzipArray\n */\npublic fun <T, R> Array<out
Pair<T, R>>.unzip(): Pair<List<T>, List<R>> {\n    val listT = ArrayList<T>(size)\n    val listR =
ArrayList<R>(size)\n    for (pair in this) {\n        listT.add(pair.first)\n        listR.add(pair.second)\n    }\n    return
listT to listR\n}\n\n\n/**\n * Returns `true` if this nullable array is either null or empty.\n * @sample
samples.collections.Arrays.Usage.arrayIsNullOrEmpty\n
*/\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline fun Array<*>?.isNullOrEmpty(): Boolean
{\n    contract {\n        returns(false) implies (this@isNullOrEmpty != null)\n    }\n    return this == null ||
this.isEmpty()\n}\n\n\n/**\n * Returns this array if it's not empty\n * or the result of calling [defaultValue] function if
the array is empty.\n * @sample samples.collections.Arrays.Usage.arrayIfEmpty\n
*/\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\n@Suppress("UPPER_BOUND_CANNOT_BE_ARRAY")\npublic inline fun <C, R> C.ifEmpty(defaultValue: () -> R): R where C : Array<*>, C : R =\n    if (isEmpty())
defaultValue() else
this\n\n\n@OptIn(ExperimentalUnsignedTypes::class)\n@SinceKotlin("1.3")\n@PublishedApi\n@kotlin.jvm.Jvm
Name("contentDeepEquals")\n@kotlin.js.JsName("contentDeepEqualsImpl")\ninternal fun <T> Array<out
T>?.contentDeepEqualsImpl(other: Array<out T>?): Boolean {\n    if (this === other) return true\n    if (this == null
|| other == null || this.size != other.size) return false\n\n    for (i in indices) {\n        val v1 = this[i]\n        val v2 =
other[i]\n\n        if (v1 === v2) {\n            continue\n        } else if (v1 == null || v2 == null) {\n            return false\n
        }\n        when {\n            v1 is Array<*> && v2 is Array<*> -> if (!v1.contentDeepEquals(v2)) return
false\n            v1 is ByteArray && v2 is ByteArray -> if (!v1.contentEquals(v2)) return false\n            v1 is
ShortArray && v2 is ShortArray -> if (!v1.contentEquals(v2)) return false\n            v1 is IntArray && v2 is
IntArray -> if (!v1.contentEquals(v2)) return false\n            v1 is LongArray && v2 is LongArray -> if
(!v1.contentEquals(v2)) return false\n            v1 is FloatArray && v2 is FloatArray -> if (!v1.contentEquals(v2))
return false\n            v1 is DoubleArray && v2 is DoubleArray -> if (!v1.contentEquals(v2)) return false\n
            v1 is CharArray && v2 is CharArray -> if (!v1.contentEquals(v2)) return false\n            v1 is BooleanArray &&
v2 is BooleanArray -> if (!v1.contentEquals(v2)) return false\n\n            v1 is UByteArray && v2 is UByteArray
-> if (!v1.contentEquals(v2)) return false\n            v1 is UShortArray && v2 is UShortArray -> if
(!v1.contentEquals(v2)) return false\n            v1 is UIntArray && v2 is UIntArray -> if (!v1.contentEquals(v2))
return false\n            v1 is ULongArray && v2 is ULongArray -> if (!v1.contentEquals(v2)) return false\n\n        }
else -> if (v1 != v2) return false\n    }\n\n    }\n    return
true\n}\n\n\n@SinceKotlin("1.3")\n@PublishedApi\n@kotlin.jvm.JvmName("contentDeepToString")\n@kotlin.js.
JsName("contentDeepToStringImpl")\ninternal fun <T> Array<out T>?.contentDeepToStringImpl(): String {\n    if (this == null) return "null"\n    val length = size.coerceAtMost((Int.MAX_VALUE - 2) / 5) * 5 + 2 // in order not

```

```

to overflow Int.MAX_VALUE\n    return buildString(length) {\n        contentDeepToStringInternal(this,
mutableListOf())\n    }\n}\n\n@OptIn(ExperimentalUnsignedTypes::class)\nprivate fun <T> Array<out
T>.contentDeepToStringInternal(result: StringBuilder, processed: MutableList<Array<*>>) {\n    if (this in
processed) {\n        result.append("[...]")\n        return\n    }\n    processed.add(this)\n    result.append('[')\n    for (i
in indices) {\n        if (i != 0) {\n            result.append(", ")\n        }\n        val element = this[i]\n        when
(element) {\n            null -> result.append("null")\n            is Array<*> ->
element.contentDeepToStringInternal(result, processed)\n            is ByteArray ->
result.append(element.contentToString())\n            is ShortArray -> result.append(element.contentToString())\n
            is IntArray -> result.append(element.contentToString())\n            is LongArray ->
result.append(element.contentToString())\n            is FloatArray -> result.append(element.contentToString())\n
            is DoubleArray -> result.append(element.contentToString())\n            is CharArray ->
result.append(element.contentToString())\n            is BooleanArray -> result.append(element.contentToString())\n
            is UByteArray -> result.append(element.contentToString())\n            is UShortArray ->
result.append(element.contentToString())\n            is UIntArray -> result.append(element.contentToString())\n
            is ULongArray -> result.append(element.contentToString())\n            else ->
result.append(element.toString())\n        }\n    }\n    result.append(''])\n
processed.removeAt(processed.lastIndex)\n}"/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlin.collections\n\n/** Returns true if the brittle contains optimization
is enabled. See KT-45438. */\n\ninternal expect fun brittleContainsOptimizationEnabled(): Boolean\n\n/**\n * Returns true if [brittleContainsOptimizationEnabled] is true\n * and it's safe to convert this collection to a set
without changing contains method behavior.\n */\n\nprivate fun <T> Collection<T>.safeToConvertToSet() =
brittleContainsOptimizationEnabled() && size > 2 && this is ArrayList\n\n/**\n * When [brittleContainsOptimizationEnabled] is true:\n * - Converts this [Iterable] to a set if it is not a [Collection].\n * -
Converts this [Collection] to a set, when it's worth so and it doesn't change contains method behavior.\n * -
Otherwise returns this.\n * When [brittleContainsOptimizationEnabled] is false:\n * - Converts this [Iterable] to a
list if it is not a [Collection].\n * - Otherwise returns this.\n */\n\ninternal fun <T>
Iterable<T>.convertToSetForSetOperationWith(source: Iterable<T>): Collection<T> =\n    when (this) {\n        is
Set -> this\n        is Collection -> when {\n            source is Collection && source.size < 2 -> this\n
            else -> if (this.safeToConvertToSet()) toHashSet() else this\n        }\n        else -> if
(brittleContainsOptimizationEnabled()) toHashSet() else toList()\n    }\n\n/**\n * When [brittleContainsOptimizationEnabled] is true:\n * - Converts this [Iterable] to a set if it is not a [Collection].\n * -
Converts this [Collection] to a set, when it's worth so and it doesn't change contains method behavior.\n * -
Otherwise returns this.\n * When [brittleContainsOptimizationEnabled] is false:\n * - Converts this [Iterable] to a
list if it is not a [Collection].\n * - Otherwise returns this.\n */\n\ninternal fun <T>
Iterable<T>.convertToSetForSetOperation(): Collection<T> =\n    when (this) {\n        is Set -> this\n        is
Collection -> if (this.safeToConvertToSet()) toHashSet() else this\n        else -> if
(brittleContainsOptimizationEnabled()) toHashSet() else toList()\n    }\n\n/**\n * Converts this sequence to a set if
[brittleContainsOptimizationEnabled] is true,\n * otherwise converts it to a list.\n */\n\ninternal fun <T>
Sequence<T>.convertToSetForSetOperation(): Collection<T> =\n    if (brittleContainsOptimizationEnabled())
toHashSet() else toList()\n\n/**\n * Converts this array to a set if [brittleContainsOptimizationEnabled] is true,\n *
otherwise converts it to a list.\n */\n\ninternal fun <T> Array<T>.convertToSetForSetOperation(): Collection<T> =\n
    if (brittleContainsOptimizationEnabled()) toHashSet() else asList()"/*\n * Copyright 2010-2018 JetBrains s.r.o.
and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license
that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.collections\n\n/**\n * Data class
representing a value from a collection or sequence, along with its index in that collection or sequence.\n */\n\n@property
value the underlying value.\n * @property index the index of the value in the collection or sequence.\n */\n\npublic
data class IndexedValue<out T>(public val index: Int, public val value: T)\n}"/*\n * Copyright 2010-

```

2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n

```
*\n\n@file:kotlin.jvm.JvmName("\nMapAccessorsKt")\n\npackage kotlin.collections\n\nimport\nkotlin.reflect.KProperty\nimport kotlin.internal.Exact\n\n/**\n * Returns the value of the property for the given\n * object from this read-only map.\n * @param thisRef the object for which the value is requested (not used).\n * @param property the metadata for the property, used to get the name of property and lookup the value\n * corresponding to this name in the map.\n * @return the property value.\n * @throws NoSuchElementException\n * when the map doesn't contain value for the property name and doesn't provide an implicit default (see\n * [withDefault]).\n */\n\n@kotlin.internal.InlineOnly\npublic inline operator fun <V, V1 : V> Map<in String, @Exact\n V>.getValue(thisRef: Any?, property: KProperty<*>): V1 =\n    @Suppress("\nUNCHECKED_CAST")\n    (getOrNull(thisRef, property.name) as V1)\n\n/**\n * Returns the value of the property for the given object from\n * this mutable map.\n * @param thisRef the object for which the value is requested (not used).\n * @param property the metadata for the property, used to get the name of property and lookup the value\n * corresponding to this name in\n * the map.\n * @return the property value.\n * @throws NoSuchElementException when the map doesn't contain\n * value for the property name and doesn't provide an implicit default (see [withDefault]).\n */\n\n@kotlin.jvm.JvmName("\ngetVar")\n\n@kotlin.internal.InlineOnly\npublic inline operator fun <V, V1 : V>\n MutableMap<in String, out @Exact V>.getValue(thisRef: Any?, property: KProperty<*>): V1 =\n    @Suppress("\nUNCHECKED_CAST")\n    (getOrNull(thisRef, property.name) as V1)\n\n/**\n * Stores the value of\n * the property for the given object in this mutable map.\n * @param thisRef the object for which the value is\n * requested (not used).\n * @param property the metadata for the property, used to get the name of property and store\n * the value associated with that name in the map.\n * @param value the value to set.\n */\n\n@kotlin.internal.InlineOnly\npublic inline operator fun <V> MutableMap<in String, in V>.setValue(thisRef:\n Any?, property: KProperty<*>, value: V) {\n    this.put(property.name, value)\n}\n\n/*\n * Copyright 2010-2018\n * JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the\n * Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
```

```
*\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("\nMapsKt")\n\npackage\nkotlin.collections\n\n/**\n * Returns the value for the given key, or the implicit default value for this map.\n * By\n * default no implicit value is provided for maps and a [NoSuchElementException] is thrown.\n * To create a map with\n * implicit default value use [withDefault] method.\n * @throws NoSuchElementException when the map doesn't\n * contain a value for the specified key and no implicit default was provided for that map.\n */\n\n@kotlin.jvm.JvmName("\ngetOrNull")\n\n@PublishedApi\ninternal fun <K, V> Map<K,\n V>.getOrNull(key: K): V {\n    if (this is MapWithDefault)\n        return\n        this.getOrNull(key)\n    return getOrNull(key, { throw NoSuchElementException("\nKey $key\n is missing in the map.") })\n}\n\n/**\n * Returns a wrapper of this read-only map, having the implicit default value\n * provided with the specified function [defaultValue].\n * This implicit default value is used when the original\n * map doesn't contain a value for the key specified\n * and a value is obtained with [Map.getValue] function, for\n * example when properties are delegated to the map.\n * When this map already has an implicit default value\n * provided with a former call to [withDefault], it is being replaced by this call.\n */\n\npublic fun <K, V> Map<K,\n V>.withDefault(defaultValue: (key: K) -> V): Map<K, V> =\n    when (this) {\n        is MapWithDefault ->\n        this.withDefault(defaultValue)\n        else -> MapWithDefaultImpl(this, defaultValue)\n    }\n\n/**\n * Returns\n * a wrapper of this mutable map, having the implicit default value provided with the specified function\n * [defaultValue].\n * This implicit default value is used when the original map doesn't contain a value for the key\n * specified\n * and a value is obtained with [Map.getValue] function, for example when properties are delegated to the\n * map.\n * When this map already has an implicit default value provided with a former call to [withDefault], it is\n * being replaced by this call.\n */\n\n@kotlin.jvm.JvmName("\nwithDefaultMutable")\n\npublic fun <K, V>\n MutableMap<K, V>.withDefault(defaultValue: (key: K) -> V): MutableMap<K, V> =\n    when (this) {\n        is\n        MutableMapWithDefault -> this.withDefault(defaultValue)\n        else -> MutableMapWithDefaultImpl(this,\n        defaultValue)\n    }\n\nprivate interface MapWithDefault<K, out V> : Map<K, V> {\n    public val map: Map<K,\n
```

```

V>\n public fun getOrImplicitDefault(key: K): V\n}\n\nprivate interface MutableMapWithDefault<K, V> :
MutableMap<K, V>, MapWithDefault<K, V> {\n public override val map: MutableMap<K, V>\n}\n\nprivate
class MapWithDefaultImpl<K, out V>(public override val map: Map<K, V>, private val default: (key: K) -> V) :
MapWithDefault<K, V> {\n override fun equals(other: Any?): Boolean = map.equals(other)\n override fun
hashCode(): Int = map.hashCode()\n override fun toString(): String = map.toString()\n override val size: Int get()
= map.size\n override fun isEmpty(): Boolean = map.isEmpty()\n override fun containsKey(key: K): Boolean =
map.containsKey(key)\n override fun containsValue(value: @UnsafeVariance V): Boolean =
map.containsValue(value)\n override fun get(key: K): V? = map.get(key)\n override val keys: Set<K> get() =
map.keys\n override val values: Collection<V> get() = map.values\n override val entries: Set<Map.Entry<K,
V>> get() = map.entries\n\n override fun getOrImplicitDefault(key: K): V = map.getOrNull(key, {
default(key) })\n}\n\nprivate class MutableMapWithDefaultImpl<K, V>(public override val map: MutableMap<K,
V>, private val default: (key: K) -> V) : MutableMapWithDefault<K, V> {\n override fun equals(other: Any?):
Boolean = map.equals(other)\n override fun hashCode(): Int = map.hashCode()\n override fun toString(): String
= map.toString()\n override val size: Int get() = map.size\n override fun isEmpty(): Boolean = map.isEmpty()\n
override fun containsKey(key: K): Boolean = map.containsKey(key)\n override fun containsValue(value:
@UnsafeVariance V): Boolean = map.containsValue(value)\n override fun get(key: K): V? = map.get(key)\n
override val keys: MutableSet<K> get() = map.keys\n override val values: MutableCollection<V> get() =
map.values\n override val entries: MutableSet<MutableMap.MutableEntry<K, V>> get() = map.entries\n\n
override fun put(key: K, value: V): V? = map.put(key, value)\n override fun remove(key: K): V? =
map.remove(key)\n override fun putAll(from: Map<out K, V>) = map.putAll(from)\n override fun clear() =
map.clear()\n\n override fun getOrImplicitDefault(key: K): V = map.getOrNull(key, { default(key)
})\n}\n}\n\n"/*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of
this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*/\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("CollectionsKt")\n\npackage
kotlin.collections\nimport kotlin.random.Random\n\n/**\n * Removes a single instance of the specified element
from this\n * collection, if it is present.\n * \n * Allows to overcome type-safety restriction of `remove` that requires
to pass an element of type `E`.\n * \n * @return `true` if the element has been successfully removed; `false` if it was
not present in the collection.\n */\n@kotlin.internal.InlineOnly\npublic inline fun <@kotlin.internal.OnlyInputTypes
T> MutableCollection<out T>.remove(element: T): Boolean =\n @Suppress("UNCHECKED_CAST") (this as
MutableCollection<T>).remove(element)\n\n/**\n * Removes all of this collection's elements that are also
contained in the specified collection.\n * \n * Allows to overcome type-safety restriction of `removeAll` that requires
to pass a collection of type `Collection<E>`.\n * \n * @return `true` if any of the specified elements was removed
from the collection, `false` if the collection was not modified.\n */\n@kotlin.internal.InlineOnly\npublic inline fun
<@kotlin.internal.OnlyInputTypes T> MutableCollection<out T>.removeAll(elements: Collection<T>): Boolean
=\n @Suppress("UNCHECKED_CAST") (this as MutableCollection<T>).removeAll(elements)\n\n/**\n * Retains only the
elements in this collection that are contained in the specified collection.\n * \n * Allows to
overcome type-safety restriction of `retainAll` that requires to pass a collection of type `Collection<E>`.\n * \n *
@return `true` if any element was removed from the collection, `false` if the collection was not modified.\n
*/\n@kotlin.internal.InlineOnly\npublic inline fun <@kotlin.internal.OnlyInputTypes T> MutableCollection<out
T>.retainAll(elements: Collection<T>): Boolean =\n @Suppress("UNCHECKED_CAST") (this as
MutableCollection<T>).retainAll(elements)\n\n/**\n * Adds the specified [element] to this mutable collection.\n
*/\n@kotlin.internal.InlineOnly\npublic inline operator fun <T> MutableCollection<in T>.plusAssign(element: T)
{\n this.add(element)\n}\n\n/**\n * Adds all elements of the given [elements] collection to this mutable
collection.\n */\n@kotlin.internal.InlineOnly\npublic inline operator fun <T> MutableCollection<in
T>.plusAssign(elements: Iterable<T>) {\n this.addAll(elements)\n}\n\n/**\n * Adds all elements of the given
[elements] array to this mutable collection.\n */\n@kotlin.internal.InlineOnly\npublic inline operator fun <T>
MutableCollection<in T>.plusAssign(elements: Array<T>) {\n this.addAll(elements)\n}\n\n/**\n * Adds all
elements of the given [elements] sequence to this mutable collection.\n */\n@kotlin.internal.InlineOnly\npublic

```



```

inline operator fun <T> MutableCollection<in T>.plusAssign(elements: Sequence<T>) {\n
this.addAll(elements)\n}\n\n/**\n * Removes a single instance of the specified [element] from this mutable
collection.\n */\n@kotlin.internal.InlineOnly\npublic inline operator fun <T> MutableCollection<in
T>.minusAssign(element: T) {\n  this.remove(element)\n}\n\n/**\n * Removes all elements contained in the given
[elements] collection from this mutable collection.\n */\n@kotlin.internal.InlineOnly\npublic inline operator fun
<T> MutableCollection<in T>.minusAssign(elements: Iterable<T>) {\n  this.removeAll(elements)\n}\n\n/**\n *
Removes all elements contained in the given [elements] array from this mutable collection.\n
*/\n@kotlin.internal.InlineOnly\npublic inline operator fun <T> MutableCollection<in T>.minusAssign(elements:
Array<T>) {\n  this.removeAll(elements)\n}\n\n/**\n * Removes all elements contained in the given [elements]
sequence from this mutable collection.\n */\n@kotlin.internal.InlineOnly\npublic inline operator fun <T>
MutableCollection<in T>.minusAssign(elements: Sequence<T>) {\n  this.removeAll(elements)\n}\n\n/**\n * Adds
all elements of the given [elements] collection to this [MutableCollection].\n */\npublic fun <T>
MutableCollection<in T>.addAll(elements: Iterable<T>): Boolean {\n  when (elements) {\n    is Collection ->
return addAll(elements)\n    else -> {\n      var result: Boolean = false\n      for (item in elements)\n
if (add(item)) result = true\n      return result\n    }\n  }\n}\n\n/**\n * Adds all elements of the given
[elements] sequence to this [MutableCollection].\n */\npublic fun <T> MutableCollection<in T>.addAll(elements:
Sequence<T>): Boolean {\n  var result: Boolean = false\n  for (item in elements) {\n    if (add(item)) result =
true\n  }\n  return result\n}\n\n/**\n * Adds all elements of the given [elements] array to this
[MutableCollection].\n */\npublic fun <T> MutableCollection<in T>.addAll(elements: Array<out T>): Boolean {\n
return addAll(elements.asList())\n}\n\n/**\n * Removes all elements from this [MutableCollection] that are also
contained in the given [elements] collection.\n */\npublic fun <T> MutableCollection<in T>.removeAll(elements:
Iterable<T>): Boolean {\n  return removeAll(elements.convertToSetForSetOperationWith(this))\n}\n\n/**\n *
Removes all elements from this [MutableCollection] that are also contained in the given [elements] sequence.\n
*/\npublic fun <T> MutableCollection<in T>.removeAll(elements: Sequence<T>): Boolean {\n  val set =
elements.convertToSetForSetOperation()\n  return set.isNotEmpty() && removeAll(set)\n}\n\n/**\n * Removes all
elements from this [MutableCollection] that are also contained in the given [elements] array.\n */\npublic fun <T>
MutableCollection<in T>.removeAll(elements: Array<out T>): Boolean {\n  return elements.isNotEmpty() &&
removeAll(elements.convertToSetForSetOperation())\n}\n\n/**\n * Retains only elements of this
[MutableCollection] that are contained in the given [elements] collection.\n */\npublic fun <T>
MutableCollection<in T>.retainAll(elements: Iterable<T>): Boolean {\n  return
retainAll(elements.convertToSetForSetOperationWith(this))\n}\n\n/**\n * Retains only elements of this
[MutableCollection] that are contained in the given [elements] array.\n */\npublic fun <T> MutableCollection<in
T>.retainAll(elements: Array<out T>): Boolean {\n  if (elements.isNotEmpty())\n    return
retainAll(elements.convertToSetForSetOperation())\n  else\n    return retainNothing()\n}\n\n/**\n * Retains only
elements of this [MutableCollection] that are contained in the given [elements] sequence.\n */\npublic fun <T>
MutableCollection<in T>.retainAll(elements: Sequence<T>): Boolean {\n  val set =
elements.convertToSetForSetOperation()\n  if (set.isNotEmpty())\n    return retainAll(set)\n  else\n    return
retainNothing()\n}\n\nprivate fun MutableCollection<*>.retainNothing(): Boolean {\n  val result = isEmpty()\n
clear()\n  return result\n}\n\n/**\n * Removes all elements from this [MutableIterable] that match the given
[predicate].\n */\n * @return `true` if any element was removed from this collection, or `false` when no elements
were removed and collection was not modified.\n */\npublic fun <T> MutableIterable<T>.removeAll(predicate: (T)
-> Boolean): Boolean = filterInPlace(predicate, true)\n\n/**\n * Retains only elements of this [MutableIterable] that
match the given [predicate].\n */\n * @return `true` if any element was removed from this collection, or `false` when
all elements were retained and collection was not modified.\n */\npublic fun <T>
MutableIterable<T>.retainAll(predicate: (T) -> Boolean): Boolean = filterInPlace(predicate, false)\n\nprivate fun
<T> MutableIterable<T>.filterInPlace(predicate: (T) -> Boolean, predicateResultToRemove: Boolean): Boolean {\n
var result = false\n  with(iterator()) {\n    while (hasNext())\n      if (predicate(next()) ==
predicateResultToRemove) {\n        remove()\n        result = true\n      }\n  }\n  return

```

```

result\n}\n\n/**\n * Removes the element at the specified [index] from this list.\n * In Kotlin one should use the
[MutableList.removeAt] function instead.\n *\n@Deprecated("Use removeAt(index) instead.",
ReplaceWith("removeAt(index)"), level = DeprecationLevel.ERROR)\n@kotlin.internal.InlineOnly\npublic inline
fun <T> MutableList<T>.remove(index: Int): T = removeAt(index)\n\n/**\n * Removes the first element from this
mutable list and returns that removed element, or throws [NoSuchElementException] if this list is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun <T>
MutableList<T>.removeFirst(): T = if (isEmpty()) throw NoSuchElementException("List is empty.") else
removeAt(0)\n\n/**\n * Removes the first element from this mutable list and returns that removed element, or
returns `null` if this list is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun <T>
MutableList<T>.removeFirstOrNull(): T? = if (isEmpty()) null else removeAt(0)\n\n/**\n * Removes the last
element from this mutable list and returns that removed element, or throws [NoSuchElementException] if this list is
empty.\n *\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun <T>
MutableList<T>.removeLast(): T = if (isEmpty()) throw NoSuchElementException("List is empty.") else
removeAt(lastIndex)\n\n/**\n * Removes the last element from this mutable list and returns that removed element,
or returns `null` if this list is empty.\n
*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun <T>
MutableList<T>.removeLastOrNull(): T? = if (isEmpty()) null else removeAt(lastIndex)\n\n/**\n * Removes all
elements from this [MutableList] that match the given [predicate].\n *\n * @return `true` if any element was
removed from this collection, or `false` when no elements were removed and collection was not modified.\n
*\npublic fun <T> MutableList<T>.removeAll(predicate: (T) -> Boolean): Boolean = filterInPlace(predicate,
true)\n\n/**\n * Retains only elements of this [MutableList] that match the given [predicate].\n *\n * @return `true`
if any element was removed from this collection, or `false` when all elements were retained and collection was not
modified.\n *\npublic fun <T> MutableList<T>.retainAll(predicate: (T) -> Boolean): Boolean =
filterInPlace(predicate, false)\n\nprivate fun <T> MutableList<T>.filterInPlace(predicate: (T) -> Boolean,
predicateResultToRemove: Boolean): Boolean {\n    if (this is RandomAccess)\n        return (this as
MutableIterable<T>).filterInPlace(predicate, predicateResultToRemove)\n\n    var writeIndex: Int = 0\n    for
(readIndex in 0..lastIndex) {\n        val element = this[readIndex]\n        if (predicate(element) ==
predicateResultToRemove)\n            continue\n\n        if (writeIndex != readIndex)\n            this[writeIndex] =
element\n        writeIndex++\n    }\n    if (writeIndex < size) {\n        for (removeIndex in lastIndex downTo
writeIndex)\n            removeAt(removeIndex)\n        return true\n    } else {\n        return false\n    }\n}\n", /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is
governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("CollectionsKt")\n\npackage
kotlin.collections\n\nprivate open class ReversedListReadOnly<out T>(private val delegate: List<T>) :
AbstractList<T>() {\n    override val size: Int get() = delegate.size\n    override fun get(index: Int): T =
delegate[reverseElementIndex(index)]\n}\n\nprivate class ReversedList<T>(private val delegate: MutableList<T>) :
AbstractMutableList<T>() {\n    override val size: Int get() = delegate.size\n    override fun get(index: Int): T =
delegate[reverseElementIndex(index)]\n    override fun clear() = delegate.clear()\n    override fun removeAt(index:
Int): T = delegate.removeAt(reverseElementIndex(index))\n    override fun set(index: Int, element: T): T =
delegate.set(reverseElementIndex(index), element)\n    override fun add(index: Int, element: T) {\n        delegate.add(reversePositionIndex(index), element)\n    }\n}\n\nprivate fun List<*>.reverseElementIndex(index:
Int) =\n    if (index in 0..lastIndex) lastIndex - index else throw IndexOutOfBoundsException("Element index
$index must be in range [0..lastIndex].")\n\nprivate fun List<*>.reversePositionIndex(index: Int) =\n    if (index
in 0..size) size - index else throw IndexOutOfBoundsException("Position index $index must be in range
[0..size].")\n\n/**\n * Returns a reversed read-only view of the original List.\n * All changes made in the
original list will be reflected in the reversed one.\n * @sample samples.collections.ReversedViews.asReversedList\n
*\npublic fun <T> List<T>.asReversed(): List<T> = ReversedListReadOnly(this)\n\n/**\n * Returns a reversed

```

```

mutable view of the original mutable List.\n * All changes made in the original list will be reflected in the reversed
one and vice versa.\n * @sample samples.collections.ReversedViews.asReversedMutableList\n
*/\n@kotlin.jvm.JvmName("asReversedMutable")\npublic fun <T> MutableList<T>.asReversed():
MutableList<T> = ReversedList(this)\n\n", "/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n
*/\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("SequencesKt")\n@file:OptIn(Experimenta
lTypeInference::class)\n\npackage kotlin.sequences\n\nimport kotlin.coroutines.*\nimport
kotlin.coroutines.intrinsics.*\nimport kotlin.experimental.ExperimentalTypeInference\n\n/**\n * Builds a
[Sequence] lazily yielding values one by one.\n *\n * @see kotlin.sequences.generateSequence\n *\n * @sample
samples.collections.Sequences.Building.buildSequenceYieldAll\n * @sample
samples.collections.Sequences.Building.buildFibonacciSequence\n */\n@SinceKotlin("1.3")\npublic fun <T>
sequence(@BuilderInference block: suspend SequenceScope<T>().() -> Unit): Sequence<T> = Sequence {
iterator(block) }\n\n@SinceKotlin("1.3")\n@Deprecated("Use 'sequence { }' function instead.",
ReplaceWith("sequence(builderAction)"), level =
DeprecationLevel.ERROR)\n@kotlin.internal.InlineOnly\npublic inline fun <T> buildSequence(@BuilderInference
noinline builderAction: suspend SequenceScope<T>().() -> Unit): Sequence<T> = Sequence { iterator(builderAction)
}\n\n/**\n * Builds an [Iterator] lazily yielding values one by one.\n *\n * @sample
samples.collections.Sequences.Building.buildIterator\n * @sample samples.collections.Iterables.Building.iterable\n
*/\n@SinceKotlin("1.3")\npublic fun <T> iterator(@BuilderInference block: suspend SequenceScope<T>().() ->
Unit): Iterator<T> {\n    val iterator = SequenceBuilderIterator<T>()\n    iterator.nextStep =
block.createCoroutineUnintercepted(receiver = iterator, completion = iterator)\n    return
iterator}\n\n@SinceKotlin("1.3")\n@Deprecated("Use 'iterator { }' function instead.",
ReplaceWith("iterator(builderAction)"), level = DeprecationLevel.ERROR)\n@kotlin.internal.InlineOnly\npublic
inline fun <T> buildIterator(@BuilderInference noinline builderAction: suspend SequenceScope<T>().() -> Unit):
Iterator<T> = iterator(builderAction)\n\n/**\n * The scope for yielding values of a [Sequence] or an [Iterator],
provides [yield] and [yieldAll] suspension functions.\n *\n * @see sequence\n * @see iterator\n *\n * @sample
samples.collections.Sequences.Building.buildSequenceYieldAll\n * @sample
samples.collections.Sequences.Building.buildFibonacciSequence\n
*/\n@RestrictsSuspension\n@SinceKotlin("1.3")\npublic abstract class SequenceScope<in T> internal
constructor() {\n    /**\n     * Yields a value to the [Iterator] being built and suspends\n     * until the next value is
requested.\n     *\n     * @sample samples.collections.Sequences.Building.buildSequenceYieldAll\n     * @sample
samples.collections.Sequences.Building.buildFibonacciSequence\n     */\n    public abstract suspend fun yield(value:
T)\n\n    /**\n     * Yields all values from the `iterator` to the [Iterator] being built\n     * and suspends until all these
values are iterated and the next one is requested.\n     *\n     * The sequence of values returned by the given iterator
can be potentially infinite.\n     *\n     * @sample samples.collections.Sequences.Building.buildSequenceYieldAll\n
*/\n    public abstract suspend fun yieldAll(iterator: Iterator<T>)\n\n    /**\n     * Yields a collections of values to
the [Iterator] being built\n     * and suspends until all these values are iterated and the next one is requested.\n
*/\n    * @sample samples.collections.Sequences.Building.buildSequenceYieldAll\n     */\n    public suspend fun
yieldAll(elements: Iterable<T>) {\n        if (elements is Collection && elements.isEmpty()) return\n        return
yieldAll(elements.iterator())\n    }\n\n    /**\n     * Yields potentially infinite sequence of values to the [Iterator]
being built\n     * and suspends until all these values are iterated and the next one is requested.\n     *\n     * The
sequence can be potentially infinite.\n     *\n     * @sample
samples.collections.Sequences.Building.buildSequenceYieldAll\n     */\n    public suspend fun yieldAll(sequence:
Sequence<T>) = yieldAll(sequence.iterator())\n\n\n@Deprecated("Use SequenceScope class instead.",
ReplaceWith("SequenceScope<T>"), level = DeprecationLevel.ERROR)\npublic typealias SequenceBuilder<T> =
SequenceScope<T>\n\nprivate typealias State = Int\n\nprivate const val State_NotReady: State = 0\nprivate const
val State_ManyNotReady: State = 1\nprivate const val State_ManyReady: State = 2\nprivate const val State_Ready:

```

```

State = 3\nprivate const val State_Done: State = 4\nprivate const val State_Failed: State = 5\n\nprivate class
SequenceBuilderIterator<T> : SequenceScope<T>(), Iterator<T>, Continuation<Unit> {\n  private var state =
State_NotReady\n  private var nextValue: T? = null\n  private var nextIterator: Iterator<T>? = null\n  var
nextStep: Continuation<Unit>? = null\n\n  override fun hasNext(): Boolean {\n    while (true) {\n      when
(state) {\n        State_NotReady -> {}\n        State_ManyNotReady ->\n          if
(nextIterator!!.hasNext()) {\n            state = State_ManyReady\n            return true\n          }
else {\n            nextIterator = null\n          }\n        State_Done -> return false\n        State_Ready, State_ManyReady -> return true\n        else -> throw exceptionalState()\n      }\n\n      state
= State_Failed\n      val step = nextStep!!\n      nextStep = null\n      step.resume(Unit)\n    }\n  }\n\n  override fun next(): T {\n    when (state) {\n      State_NotReady, State_ManyNotReady -> return
nextNotReady()\n      State_ManyReady -> {\n        state = State_ManyNotReady\n        return
nextIterator!!.next()\n      }\n      State_Ready -> {\n        state = State_NotReady\n        @Suppress("UNCHECKED_CAST")\n        val result = nextValue as T\n        nextValue = null\n        return result\n      }\n      else -> throw exceptionalState()\n    }\n  }\n\n  private fun nextNotReady(): T
{\n    if (!hasNext()) throw NoSuchElementException() else return next()\n  }\n\n  private fun
exceptionalState(): Throwable = when (state) {\n    State_Done -> NoSuchElementException()\n    State_Failed
-> IllegalStateException("Iterator has failed.")\n    else -> IllegalStateException("Unexpected state of the
iterator: $state")\n  }\n\n  override suspend fun yield(value: T) {\n    nextValue = value\n    state =
State_Ready\n    return suspendCoroutineUninterceptedOrReturn { c ->\n      nextStep = c\n      COROUTINE_SUSPENDED\n    }\n  }\n\n  override suspend fun yieldAll(iterator: Iterator<T>) {\n    if
(!iterator.hasNext()) return\n    nextIterator = iterator\n    state = State_ManyReady\n    return
suspendCoroutineUninterceptedOrReturn { c ->\n      nextStep = c\n      COROUTINE_SUSPENDED\n    }\n  }\n\n  // Completion continuation implementation\n  override fun resumeWith(result: Result<Unit>) {\n    result.getOrThrow() // just rethrow exception if it is there\n    state = State_Done\n  }\n\n  override val context:
CoroutineContext\n    get() = EmptyCoroutineContext\n}\n\n/*\n * Copyright 2010-2018 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.collections\n\ninternal fun
checkWindowSizeStep(size: Int, step: Int) {\n  require(size > 0 && step > 0) {\n    if (size != step)\n      "Both size $size and step $step must be greater than zero.\n    else\n      "size $size must be greater than
zero.\n  }\n}\n\ninternal fun <T> Sequence<T>.windowedSequence(size: Int, step: Int, partialWindows: Boolean,
reuseBuffer: Boolean): Sequence<List<T>> {\n  checkWindowSizeStep(size, step)\n  return Sequence {\n    windowedIterator(iterator(), size, step, partialWindows, reuseBuffer) }\n}\n\ninternal fun <T>
windowedIterator(iterator: Iterator<T>, size: Int, step: Int, partialWindows: Boolean, reuseBuffer: Boolean):
Iterator<List<T>> {\n  if (!iterator.hasNext()) return EmptyIterator\n  return iterator<List<T>> {\n    val
bufferInitialCapacity = size.coerceAtMost(1024)\n    val gap = step - size\n    if (gap >= 0) {\n      var buffer
= ArrayList<T>(bufferInitialCapacity)\n      var skip = 0\n      for (e in iterator) {\n        if (skip > 0) {\n          skip -= 1; continue\n        }\n        buffer.add(e)\n        if (buffer.size == size) {\n          yield(buffer)\n          if (reuseBuffer) buffer.clear() else buffer = ArrayList(size)\n          skip = gap\n        }\n        }\n      }\n      if (buffer.isNotEmpty()) {\n        if (partialWindows || buffer.size == size) yield(buffer)\n      }\n    }\n  } else {\n    var buffer = RingBuffer<T>(bufferInitialCapacity)\n    for (e in iterator) {\n      buffer.add(e)\n      if (buffer.isFull()) {\n        if (buffer.size < size) {\n          buffer = buffer.expanded(maxCapacity = size); continue\n        }\n        yield(if (reuseBuffer) buffer else ArrayList(buffer))\n        buffer.removeFirst(step)\n      }\n    }\n    if (partialWindows) {\n      while (buffer.size > step) {\n        yield(if (reuseBuffer) buffer else ArrayList(buffer))\n        buffer.removeFirst(step)\n      }\n      if (buffer.isNotEmpty()) yield(buffer)\n    }\n  }\n}\n\ninternal class MovingSubList<out E>(private val list: List<E>) : AbstractList<E>(), RandomAccess {\n  private var fromIndex: Int = 0\n  private var _size: Int = 0\n  fun move(fromIndex: Int, toIndex: Int) {\n    checkRangeIndexes(fromIndex, toIndex, list.size)\n    this.fromIndex = fromIndex\n    this._size = toIndex -

```

```

fromIndex\n } \n\n override fun get(index: Int): E {\n    checkElementIndex(index, _size)\n\n    return
list[fromIndex + index]\n } \n\n override val size: Int get() = _size\n}\n\n/**\n * Provides ring buffer
implementation.\n *\n * Buffer overflow is not allowed so [add] doesn't overwrite tail but raises an exception.\n
*\nprivate class RingBuffer<T>(private val buffer: Array<Any?>, filledSize: Int) : AbstractList<T>(),
RandomAccess {\n    init {\n        require(filledSize >= 0) { \"ring buffer filled size should not be negative but it is
$filledSize\" }\n        require(filledSize <= buffer.size) { \"ring buffer filled size: $filledSize cannot be larger than
the buffer size: ${buffer.size}\" }\n    }\n\n    constructor(capacity: Int) : this(arrayOfNulls<Any?>(capacity), 0)\n\n    private val capacity = buffer.size\n    private var startIndex: Int = 0\n\n    override var size: Int = filledSize\n\n    private set\n\n    override fun get(index: Int): T {\n        checkElementIndex(index, size)\n\n        @Suppress(\"UNCHECKED_CAST\")\n        return buffer[startIndex.forward(index)] as T\n    }\n\n    fun isFull() =
size == capacity\n\n    override fun iterator(): Iterator<T> = object : AbstractIterator<T>() {\n        private var count
= size\n        private var index = startIndex\n\n        override fun computeNext() {\n            if (count == 0) {\n
                done()\n            } else {\n                @Suppress(\"UNCHECKED_CAST\")\n                setNext(buffer[index] as
T)\n                index = index.forward(1)\n                count--\n            }\n        }\n    }\n\n    @Suppress(\"UNCHECKED_CAST\")\n    override fun <T> toArray(array: Array<T>): Array<T> {\n        val
result: Array<T?> =\n        if (array.size < this.size) array.copyOf(this.size) else array as Array<T?>\n\n        val
size = this.size\n\n        var widx = 0\n        var idx = startIndex\n\n        while (widx < size && idx < capacity) {\n
            result[widx] = buffer[idx] as T\n            widx++\n            idx++\n        }\n\n        idx = 0\n        while (widx <
size) {\n            result[widx] = buffer[idx] as T\n            widx++\n            idx++\n        }\n\n        if (result.size >
this.size) result[this.size] = null\n\n        return result as Array<T>\n    }\n\n    override fun toArray(): Array<Any?>
{\n        return toArray(arrayOfNulls(size))\n    }\n\n    /**\n     * Creates a new ring buffer with the capacity equal to
the minimum of [maxCapacity] and 1.5 * [capacity].\n     * The returned ring buffer contains the same elements as
this ring buffer.\n     *\n     fun expanded(maxCapacity: Int): RingBuffer<T> {\n        val newCapacity = (capacity +
(capacity shr 1) + 1).coerceAtMost(maxCapacity)\n        val newBuffer = if (startIndex == 0)
buffer.copyOf(newCapacity) else toArray(arrayOfNulls(newCapacity))\n        return RingBuffer(newBuffer, size)\n    }\n\n    /**\n     * Add [element] to the buffer or fail with [IllegalStateException] if no free space available in the
buffer.\n     *\n     fun add(element: T) {\n        if (isFull()) {\n            throw IllegalStateException(\"ring buffer is
full\")\n        }\n\n        buffer[startIndex.forward(size)] = element\n        size++\n    }\n\n    /**\n     * Removes [n]
first elements from the buffer or fails with [IllegalArgumentException] if not enough elements in the buffer to
remove.\n     *\n     fun removeFirst(n: Int) {\n        require(n >= 0) { \"n shouldn't be negative but it is $n\" }\n\n        require(n <= size) { \"n shouldn't be greater than the buffer size: n = $n, size = $size\" }\n\n        if (n > 0) {\n            val start = startIndex\n            val end = start.forward(n)\n\n            if (start > end) {\n                buffer.fill(null, start,
capacity)\n                buffer.fill(null, 0, end)\n            } else {\n                buffer.fill(null, start, end)\n            }\n\n            startIndex = end\n            size -= n\n        }\n    }\n\n    @Suppress(\"NOTHING_TO_INLINE\")\n    private
inline fun Int.forward(n: Int): Int = (this + n) % capacity\n}\n\n\"/*\n * Copyright 2010-2019 JetBrains s.r.o. and
Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that
can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.collections\n\n// UByteArray

```

```

=====\n@Exp
erimentalUnsignedTypes\nprivate fun partition(\n    array: UByteArray, left: Int, right: Int): Int {\n    var i = left\n    var j = right\n    val pivot = array[(left + right) / 2]\n    while (i <= j) {\n        while (array[i] < pivot)\n            i++\n        while (array[j] > pivot)\n            j--\n        if (i <= j) {\n            val tmp = array[i]\n            array[i] = array[j]\n            array[j] = tmp\n            i++\n            j--\n        }\n    }\n    return i\n}\n\n@ExperimentalUnsignedTypes\nprivate fun
quickSort(\n    array: UByteArray, left: Int, right: Int) {\n    val index = partition(array, left, right)\n    if (left < index
- 1)\n        quickSort(array, left, index - 1)\n    if (index < right)\n        quickSort(array, index, right)\n}\n\n//
UShortArray

```

```

=====\n@Exp
erimentalUnsignedTypes\nprivate fun partition(\n    array: UShortArray, left: Int, right: Int): Int {\n    var i = left\n    var j = right\n    val pivot = array[(left + right) / 2]\n    while (i <= j) {\n        while (array[i] < pivot)\n            i++\n

```

```

    while (array[j] > pivot)\n        j--\n        if (i <= j) {\n            val tmp = array[i]\n            array[i] = array[j]\n            array[j] = tmp\n            i++\n            j--\n        }\n    }\n    return i\n}\n\n@ExperimentalUnsignedTypes\nprivate fun quickSort(\n    array: UShortArray, left: Int, right: Int) {\n    val index = partition(array, left, right)\n    if (left < index - 1)\n        quickSort(array, left, index - 1)\n    if (index < right)\n        quickSort(array, index, right)\n}\n\n// UIntArray

```

```

=====
@ExperimentalUnsignedTypes\nprivate fun partition(\n    array: UIntArray, left: Int, right: Int): Int {\n    var i = left\n    var j = right\n    val pivot = array[(left + right) / 2]\n    while (i <= j) {\n        while (array[i] < pivot)\n            i++\n        while (array[j] > pivot)\n            j--\n        if (i <= j) {\n            val tmp = array[i]\n            array[i] = array[j]\n            array[j] = tmp\n            i++\n            j--\n        }\n    }\n    return i\n}\n\n@ExperimentalUnsignedTypes\nprivate fun quickSort(\n    array: UIntArray, left: Int, right: Int) {\n    val index = partition(array, left, right)\n    if (left < index - 1)\n        quickSort(array, left, index - 1)\n    if (index < right)\n        quickSort(array, index, right)\n}\n\n// ULongArray

```

```

=====
@ExperimentalUnsignedTypes\nprivate fun partition(\n    array: ULongArray, left: Int, right: Int): Int {\n    var i = left\n    var j = right\n    val pivot = array[(left + right) / 2]\n    while (i <= j) {\n        while (array[i] < pivot)\n            i++\n        while (array[j] > pivot)\n            j--\n        if (i <= j) {\n            val tmp = array[i]\n            array[i] = array[j]\n            array[j] = tmp\n            i++\n            j--\n        }\n    }\n    return i\n}\n\n@ExperimentalUnsignedTypes\nprivate fun quickSort(\n    array: ULongArray, left: Int, right: Int) {\n    val index = partition(array, left, right)\n    if (left < index - 1)\n        quickSort(array, left, index - 1)\n    if (index < right)\n        quickSort(array, index, right)\n}\n\n// Interfaces

```

```

=====
\n/**\n * Sorts the given array using qsort algorithm.\n */\n@ExperimentalUnsignedTypes\ninternal fun sortArray(array: UByteArray, fromIndex: Int, toIndex: Int) = quickSort(array, fromIndex, toIndex - 1)\n@ExperimentalUnsignedTypes\ninternal fun sortArray(array: UShortArray, fromIndex: Int, toIndex: Int) = quickSort(array, fromIndex, toIndex - 1)\n@ExperimentalUnsignedTypes\ninternal fun sortArray(array: UIntArray, fromIndex: Int, toIndex: Int) = quickSort(array, fromIndex, toIndex - 1)\n@ExperimentalUnsignedTypes\ninternal fun sortArray(array: ULongArray, fromIndex: Int, toIndex: Int) = quickSort(array, fromIndex, toIndex - 1),"/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin\n\nimport kotlin.internal.InlineOnly\n\n/**\n * Compares this object with the specified object for order. Returns zero if this object is equal\n * to the specified [other] object, a negative number if it's less than [other], or a positive number\n * if it's greater than [other].\n */\n * This function delegates to [Comparable.compareTo] and allows to call it in infix form.\n\n */\n@InlineOnly\n@SinceKotlin("1.6")\npublic inline infix fun <T> Comparable<T>.compareTo(other: T): Int =\n    this.compareTo(other)\n","/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.contracts\n\nimport kotlin.internal.ContractsDsl\nimport kotlin.internal.InlineOnly\n\n/**\n * This marker distinguishes the experimental contract declaration API and is used to opt-in for that feature\n * when declaring contracts of user functions.\n */\n * Any usage of a declaration annotated with `@ExperimentalContracts` must be accepted either by\n * annotating that usage with the [OptIn] annotation, e.g. `@OptIn(ExperimentalContracts::class)`,\n * or by using the compiler argument `-Xopt-in=kotlin.contracts.ExperimentalContracts`.\n\n */\n@Suppress("DEPRECATION")\n@Retention(AnnotationRetention.BINARY)\n@SinceKotlin("1.3")\n@Experimental\n@RequiresOptIn\n@MustBeDocumented\npublic annotation class ExperimentalContracts\n\n/**\n * Provides a scope, where the functions of the contract DSL, such as [returns], [callsInPlace], etc.,\n * can be used to describe the contract of a function.\n */\n * This type is used as a receiver type of the lambda function passed to the [contract] function.\n */\n * @see contract\n
```

```

*\n@ContractsDsl\n@ExperimentalContracts\n@SinceKotlin("1.3")\npublic interface ContractBuilder {\n
/**\n
 * Describes a situation when a function returns normally, without any exceptions thrown.\n
 * Use
 [SimpleEffect.implies] function to describe a conditional effect that happens in such case.\n
 * \n
 * \n //
 @sample samples.contracts.returnsContract\n
 @ContractsDsl public fun returns(): Returns\n\n /**\n
 *
 Describes a situation when a function returns normally with the specified return [value].\n
 * The possible
 values of [value] are limited to `true`, `false` or `null`.\n
 * Use [SimpleEffect.implies] function to describe a
 conditional effect that happens in such case.\n
 * \n
 * \n // @sample samples.contracts.returnsTrueContract\n
 // @sample samples.contracts.returnsFalseContract\n
 // @sample samples.contracts.returnsNullContract\n
 @ContractsDsl public fun returns(value: Any?): Returns\n\n /**\n
 * Describes a situation when a function
 returns normally with any value that is not `null`.\n
 * Use [SimpleEffect.implies] function to describe a
 conditional effect that happens in such case.\n
 * \n
 * \n // @sample
 samples.contracts.returnsNotNullContract\n
 @ContractsDsl public fun returnsNotNull(): ReturnsNotNull\n\n
 /**\n
 * Specifies that the function parameter [lambda] is invoked in place.\n
 * This contract specifies
 that:\n
 * 1. the function [lambda] can only be invoked during the call of the owner function,\n
 * and it won't be
 invoked after that owner function call is completed;\n
 * 2. _(optionally)_ the function [lambda] is invoked the
 amount of times specified by the [kind] parameter.\n
 * see the [InvocationKind] enum for possible values.\n
 * \n
 * A function declaring the `callsInPlace` effect must be _inline_.\n
 * \n
 * \n // @sample
 samples.contracts.callsInPlaceAtMostOnceContract\n
 * @sample
 samples.contracts.callsInPlaceAtLeastOnceContract\n
 * @sample
 samples.contracts.callsInPlaceExactlyOnceContract\n
 * @sample
 samples.contracts.callsInPlaceUnknownContract\n
 * \n
 @ContractsDsl public fun <R> callsInPlace(lambda:
 Function<R>, kind: InvocationKind = InvocationKind.UNKNOWN): CallsInPlace\n}\n\n/**\n
 * Specifies how
 many times a function invokes its function parameter in place.\n
 * See [ContractBuilder.callsInPlace] for the
 details of the call-in-place function contract.\n
\n
*\n@ContractsDsl\n@ExperimentalContracts\n@SinceKotlin("1.3")\npublic enum class InvocationKind {\n
/**\n
 * A function parameter will be invoked one time or not invoked at all.\n
 * \n
 * \n // @sample
 samples.contracts.callsInPlaceAtMostOnceContract\n
 @ContractsDsl AT_MOST_ONCE,\n\n /**\n
 * A
 function parameter will be invoked one or more times.\n
 * \n
 * \n // @sample
 samples.contracts.callsInPlaceAtLeastOnceContract\n
 @ContractsDsl AT_LEAST_ONCE,\n\n /**\n
 * A
 function parameter will be invoked exactly one time.\n
 * \n
 * \n // @sample
 samples.contracts.callsInPlaceExactlyOnceContract\n
 @ContractsDsl EXACTLY_ONCE,\n\n /**\n
 * A
 function parameter is called in place, but it's unknown how many times it can be called.\n
 * \n
 * \n // @sample
 samples.contracts.callsInPlaceUnknownContract\n
 @ContractsDsl UNKNOWN\n}\n\n/**\n
 * Specifies the
 contract of a function.\n
 * The contract description must be at the beginning of a function and have at least one
 effect.\n
 * Only the top-level functions can have a contract for now.\n
 * @param builder the lambda where
 the contract of a function is described with the help of the [ContractBuilder] members.\n
 * \n
 * \n // @sample
 samples.contracts.returnsContract\n* @sample samples.contracts.returnsTrueContract\n* @sample
 samples.contracts.returnsFalseContract\n* @sample samples.contracts.returnsNullContract\n* @sample
 samples.contracts.returnsNotNullContract\n* @sample samples.contracts.callsInPlaceAtMostOnceContract\n*
 @sample samples.contracts.callsInPlaceAtLeastOnceContract\n* @sample
 samples.contracts.callsInPlaceExactlyOnceContract\n* @sample
 samples.contracts.callsInPlaceUnknownContract\n*\n@ContractsDsl\n@ExperimentalContracts\n@InlineOnly\n@
SinceKotlin("1.3")\n@Suppress("UNUSED_PARAMETER")\npublic inline fun contract(builder:
 ContractBuilder.() -> Unit) { }\n\n,**\n
 * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
 contributors.\n
 * Use of this source code is governed by the Apache 2.0 license that can be found in the
 license/LICENSE.txt file.\n
 * \n
 * \n\npackage kotlin.coroutines\n\n/**\n
 * Marks coroutine context element that
 intercepts coroutine continuations.\n
 * The coroutines framework uses [ContinuationInterceptor.Key] to retrieve the
 interceptor and\n
 * intercepts all coroutine continuations with [interceptContinuation] invocations.\n
 * \n
 * \n

```

[ContinuationInterceptor] behaves like a [polymorphic element][AbstractCoroutineContextKey], meaning that its implementation delegates [get][CoroutineContext.Element.get] and [minusKey][CoroutineContext.Element.minusKey] to [getPolymorphicElement] and [minusPolymorphicKey] respectively.

[ContinuationInterceptor] subtypes can be extracted from the coroutine context using either [ContinuationInterceptor.Key] or subtype key if it extends [AbstractCoroutineContextKey].

```

@SinceKotlin("1.3")
public interface ContinuationInterceptor : CoroutineContext.Element {
    // The key that defines the context interceptor.
    companion object Key :
        CoroutineContext.Key<ContinuationInterceptor> {
        // Returns continuation that wraps the original
        // [continuation], thus intercepting all resumptions.
        // This function is invoked by coroutines framework when
        // needed and the resulting continuations are
        // cached internally per each instance of the original [continuation].
        // This function may simply return original [continuation] if it does not want to intercept this particular
        // continuation.
        // When the original [continuation] completes, coroutine framework invokes
        // [releaseInterceptedContinuation] with the resulting continuation if it was intercepted, that is if
        // `interceptContinuation` had previously returned a different continuation instance.
        public fun <T>
            interceptContinuation(continuation: Continuation<T>): Continuation<T> {
            // Invoked for the
            // continuation instance returned by [interceptContinuation] when the original
            // continuation completes and will
            // not be used anymore. This function is invoked only if [interceptContinuation]
            // had returned a different
            // continuation instance from the one it was invoked with.
            // Default implementation does nothing.
            // @param continuation Continuation instance returned by this interceptor's [interceptContinuation] invocation.
            public fun releaseInterceptedContinuation(continuation: Continuation<*>) {
            // do nothing by default
            }
            public override operator fun <E : CoroutineContext.Element> get(key: CoroutineContext.Key<E>):
                E? {
            // getPolymorphicKey specialized for ContinuationInterceptor key
            @OptIn(ExperimentalStdlibApi::class)
            if (key is AbstractCoroutineContextKey<*, *>) {
            @Suppress("UNCHECKED_CAST")
            return if (key.isSubKey(this.key)) key.tryCast(this) as? E else
                null
            }
            @Suppress("UNCHECKED_CAST")
            return if (ContinuationInterceptor === key) this as
                E else null
            }
            public override fun minusKey(key: CoroutineContext.Key<*>): CoroutineContext {
            // minusPolymorphicKey specialized for ContinuationInterceptor key
            @OptIn(ExperimentalStdlibApi::class)
            if (key is AbstractCoroutineContextKey<*, *>) {
            return if
                (key.isSubKey(this.key) && key.tryCast(this) != null) EmptyCoroutineContext else this
            }
            return if
                (ContinuationInterceptor === key) EmptyCoroutineContext else this
            }
        }
    }
}

```

* Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors. Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.

```

package kotlin.coroutines
/**
 * Persistent context for the coroutine. It is an indexed set of [Element] instances.
 * An indexed set is a mix between a set and a map.
 * Every element in this set has a unique [Key].
 */
@SinceKotlin("1.3")
public interface CoroutineContext {
    // Returns the element with the given [key] from this context or `null`.
    // public operator fun <E : Element> get(key: Key<E>): E?
    // Accumulates entries of this context starting with [initial] value and applying [operation] from left to right to current accumulator value and each element of this context.
    // public fun <R> fold(initial: R, operation: (R, Element) -> R): R
    // Returns a context containing elements from this context and elements from other [context].
    // The elements from this context with the same key as in the other one are dropped.
    // public operator fun plus(context: CoroutineContext): CoroutineContext =
    //     if (context === EmptyCoroutineContext) this else // fast path -- avoid lambda creation
    //     context.fold(this) { acc, element ->
    //         val removed =
    //         acc.minusKey(element.key)
    //         if (removed === EmptyCoroutineContext) element else {
    //             // make sure interceptor is always last in the context (and thus is fast to get when present)
    //             val interceptor = removed[ContinuationInterceptor]
    //             if (interceptor == null) CombinedContext(removed, element) else {
    //                 val left = removed.minusKey(ContinuationInterceptor)
    //                 if (left === EmptyCoroutineContext) CombinedContext(element, interceptor) else
    //                 CombinedContext(CombinedContext(left, element), interceptor)
    //             }
    //         }
    //     }
}

```



```

* Returns a context containing elements from this context, but without an element with
 * the specified [key].
 *
 * public fun minusKey(key: Key<*>): CoroutineContext {
 *     if (this.key == key) EmptyCoroutineContext else this
 * }
 *
 * An element of the [CoroutineContext]. An element of the coroutine context is a singleton context by itself.
 *
 * public interface Element : CoroutineContext {
 *     val key: Key<*>
 *     public override operator fun <E : Element> get(key: Key<E>): E? =
 *         if (this.key == key) this as E else null
 *     public override
 * fun <R> fold(initial: R, operation: (R, Element) -> R): R =
 *         operation(initial, this)
 *     public override
 * fun minusKey(key: Key<*>): CoroutineContext =
 *         if (this.key == key) EmptyCoroutineContext else this
 * }
 *
 * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.
 * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.
 *
 * package kotlin.coroutines
 * import kotlin.coroutines.CoroutineContext.Element
 * import
 * kotlin.coroutines.CoroutineContext.Key
 *
 * Base class for [CoroutineContext.Element] implementations.
 *
 * @SinceKotlin("1.3")
 * public abstract class AbstractCoroutineContextElement(public override val key:
 * Key<*>) : Element
 *
 * Base class for [CoroutineContext.Key] associated with polymorphic
 * [CoroutineContext.Element] implementation.
 * Polymorphic element implementation implies delegating its
 * [get][Element.get] and [minusKey][Element.minusKey] to [getPolymorphicElement] and
 * [minusPolymorphicKey] respectively.
 * Polymorphic elements can be extracted from the coroutine context
 * using both element key and its supertype key.
 * Example of polymorphic elements:
 *
 * open class
 * BaseElement : CoroutineContext.Element {
 *     companion object Key : CoroutineContext.Key<BaseElement>
 *     override val key: CoroutineContext.Key<*> get() = Key
 *     // It is important to use getPolymorphicKey and
 *     minusPolymorphicKey
 *     override fun <E : CoroutineContext.Element> get(key: CoroutineContext.Key<E>):
 * E? = getPolymorphicElement(key)
 *     override fun minusKey(key: CoroutineContext.Key<*>):
 * CoroutineContext = minusPolymorphicKey(key)
 * }
 *
 * class DerivedElement : BaseElement() {
 *     companion object Key : AbstractCoroutineContextKey<BaseElement, DerivedElement>(BaseElement, { it as?
 * DerivedElement })
 *     // Now it is possible to query both `BaseElement` and `DerivedElement`
 *     someContext[BaseElement] // Returns BaseElement?, non-null both for BaseElement and DerivedElement
 *     instances
 *     someContext[DerivedElement] // Returns DerivedElement?, non-null only for DerivedElement
 *     instance
 *
 * @param B base class of a polymorphic element
 * @param baseKey an instance of base key
 * @param E element type associated with the current key
 * @param safeCast a function that can safely cast
 * abstract [CoroutineContext.Element] to the concrete [E] type
 * and return the element if it is a subtype
 * of [E] or `null` otherwise.
 *
 * @ExperimentalStdlibApi
 * public abstract class
 * AbstractCoroutineContextKey<B : Element, E : B>(
 *     baseKey: Key<B>,
 *     private val safeCast: (element:
 * Element) -> E?) : Key<E> {
 *     private val topmostKey: Key<*> = if (baseKey is
 * AbstractCoroutineContextKey<*, *>) baseKey.topmostKey else baseKey
 *     internal fun tryCast(element:
 * Element): E? = safeCast(element)
 *     internal fun isSubKey(key: Key<*>): Boolean = key === this || topmostKey
 * === key
 * }
 *
 * Returns the current element if it is associated with the given [key] in a polymorphic manner
 * or `null` otherwise.
 * This method returns non-null value if either [Element.key] is equal to the given [key] or if
 * the [key] is associated
 * with [Element.key] via [AbstractCoroutineContextKey].
 * See
 * [AbstractCoroutineContextKey] for the example of usage.
 *
 * @ExperimentalStdlibApi
 * public fun <E : Element>
 * Element.getPolymorphicElement(key: Key<E>): E? {
 *     if (key is AbstractCoroutineContextKey<*, *>) {
 *         @Suppress("UNCHECKED_CAST")
 *         return if (key.isSubKey(this.key)) key.tryCast(this) as? E else null
 *     }
 *     @Suppress("UNCHECKED_CAST")
 *     return if (this.key === key) this as E else null
 * }
 *
 * Returns empty coroutine context if the element is associated with the given [key] in a polymorphic manner
 * or
 * `null` otherwise.
 * This method returns empty context if either [Element.key] is equal to the given [key] or if the
 * [key] is associated
 * with [Element.key] via [AbstractCoroutineContextKey].
 * See
 * [AbstractCoroutineContextKey] for the example of usage.

```

```

*\/n@SinceKotlin("1.3")n@ExperimentalStdlibApi\npublic fun Element.minusPolymorphicKey(key: Key<*>):
CoroutineContext {\n  if (key is AbstractCoroutineContextKey<*, *>) {\n    return if (key.isSubKey(this.key)
&& key.tryCast(this) != null) EmptyCoroutineContext else this\n  }\n  return if (this.key === key)
EmptyCoroutineContext else this\n}\n\n/*n * An empty coroutine context.n */n@SinceKotlin("1.3")\npublic
object EmptyCoroutineContext : CoroutineContext, Serializable {\n  private const val serialVersionUID: Long =
0\n  private fun readResolve(): Any = EmptyCoroutineContext\n\n  public override fun <E : Element> get(key:
Key<E>): E? = null\n  public override fun <R> fold(initial: R, operation: (R, Element) -> R): R = initial\n  public
override fun plus(context: CoroutineContext): CoroutineContext = context\n  public override fun minusKey(key:
Key<*>): CoroutineContext = this\n  public override fun hashCode(): Int = 0\n  public override fun toString():
String = "EmptyCoroutineContext"\n}\n\n//----- internal impl -----\n\n// this class is not
exposed, but is hidden inside implementations\n// this is a left-biased list, so that `plus` works
naturally\n@SinceKotlin("1.3")\ninternal class CombinedContext(\n  private val left: CoroutineContext,\n  private val element: Element\n) : CoroutineContext, Serializable {\n\n  override fun <E : Element> get(key:
Key<E>): E? {\n    var cur = this\n    while (true) {\n      cur.element[key]?.let { return it }\n      val next
= cur.left\n      if (next is CombinedContext) {\n        cur = next\n      } else {\n        return
next[key]\n      }\n    }\n\n  public override fun <R> fold(initial: R, operation: (R, Element) -> R): R =\n    operation(left.fold(initial, operation), element)\n\n  public override fun minusKey(key: Key<*>):
CoroutineContext {\n    element[key]?.let { return left }\n    val newLeft = left.minusKey(key)\n    return
when {\n      newLeft === left -> this\n      newLeft === EmptyCoroutineContext -> element\n    } else ->
CombinedContext(newLeft, element)\n  }\n\n  private fun size(): Int {\n    var cur = this\n    var size
= 2\n    while (true) {\n      cur = cur.left as? CombinedContext ?: return size\n      size++\n    }\n  }\n\n  private fun contains(element: Element): Boolean =\n    get(element.key) == element\n\n  private fun
containsAll(context: CombinedContext): Boolean {\n    var cur = context\n    while (true) {\n      if
(!contains(cur.element)) return false\n      val next = cur.left\n      if (next is CombinedContext) {\n
cur = next\n      } else {\n        return contains(next as Element)\n      }\n    }\n  }\n\n  override fun
equals(other: Any?): Boolean =\n    this === other || other is CombinedContext && other.size() == size() &&
other.containsAll(this)\n\n  override fun hashCode(): Int = left.hashCode() + element.hashCode()\n\n  override
fun toString(): String = "\n  "[" + fold("\n  ") { acc, element ->\n    if (acc.isEmpty()) element.toString() else
"\n  $acc, $element\n  } + "]" + "\n\n  private fun writeReplace(): Any {\n    val n = size()\n    val elements =
arrayOfNulls<CoroutineContext>(n)\n    var index = 0\n    fold(Unit) { _, element -> elements[index++] =
element }\n    check(index == n)\n    @Suppress("UNCHECKED_CAST")\n    return Serialized(elements
as Array<CoroutineContext>)\n  }\n\n  private class Serialized(val elements: Array<CoroutineContext>) :
Serializable {\n    companion object {\n      private const val serialVersionUID: Long = 0L\n    }\n\n    private fun readResolve(): Any = elements.fold(EmptyCoroutineContext, CoroutineContext::plus)\n  }\n}\n\n", /*n
* Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.n * Use of this source code
is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.n
*/n\n@file:kotlin.jvm.JvmName("IntrinsicsKt")n@file:kotlin.jvm.JvmMultifileClass\n\npackage
kotlin.coroutines.intrinsics\n\nimport kotlin.contracts.*\nimport kotlin.coroutines.*\nimport
kotlin.internal.InlineOnly\n\n/*n * Obtains the current continuation instance inside suspend functions and either
suspends\n * currently running coroutine or returns result immediately without suspension.n *n * If the [block]
returns the special [COROUTINE_SUSPENDED] value, it means that suspend function did suspend the execution
and will\n * not return any result immediately. In this case, the [Continuation] provided to the [block] shall be\n *
resumed by invoking [Continuation.resumeWith] at some moment in the\n * future when the result becomes
available to resume the computation.n *n * Otherwise, the return value of the [block] must have a type assignable
to [T] and represents the result of this suspend function.n * It means that the execution was not suspended and the
[Continuation] provided to the [block] shall not be invoked.n * As the result type of the [block] is declared as
`Any?` and cannot be correctly type-checked,\n * its proper return type remains on the conscience of the suspend
function's author.n *n * Invocation of [Continuation.resumeWith] resumes coroutine directly in the invoker's

```

thread without going through the `[ContinuationInterceptor]` that might be present in the coroutine's `[CoroutineContext]`. It is the invoker's responsibility to ensure that a proper invocation context is established. `[Continuation.intercepted]` can be used to acquire the intercepted continuation. Note that it is not recommended to call either `[Continuation.resume]` nor `[Continuation.resumeWithException]` functions synchronously in the same stackframe where suspension function is run. Use `[suspendCoroutine]` as a safer way to obtain current continuation instance.

```
*\n@SinceKotlin("1.3")\n@InlineOnly\n@Suppress("UNUSED_PARAMETER",  
"RedundantSuspendModifier")\npublic suspend inline fun <T>  
suspendCoroutineUninterceptedOrReturn(crossinline block: (Continuation<T>) -> Any?): T {\n    contract {\n        callsInPlace(block, InvocationKind.EXACTLY_ONCE) \n    } \n    throw NotImplementedError("Implementation of  
suspendCoroutineUninterceptedOrReturn is intrinsic") \n} \n\n/* This value is used as a return value of  
[suspendCoroutineUninterceptedOrReturn] `block` argument to state that  
the execution was suspended and will  
not return any result immediately. \n\n**Note: this value should not be used in general code.** Using it outside  
of the context of `suspendCoroutineUninterceptedOrReturn` function return value (including, but not limited  
to, storing this value in other properties, returning it from other functions, etc) can lead to unspecified  
behavior of the code. \n\n// It is implemented as property with getter to avoid ProGuard <clinit> problem with  
multifile IntrinsicKt class\n@SinceKotlin("1.3")\npublic val COROUTINE_SUSPENDED: Any get() =  
CoroutineSingletons.COROUTINE_SUSPENDED \n\n// Using enum here ensures two important properties: \n\n1.  
It makes SafeContinuation serializable with all kinds of serialization frameworks (since all of them natively support  
enums) \n\n2. It improves debugging experience, since you clearly see toString() value of those objects and what  
package they come from\n@SinceKotlin("1.3")\n@PublishedApi // This class is Published API via serialized  
representation of SafeContinuation, don't rename/move\ninternal enum class CoroutineSingletons {\n    COROUTINE_SUSPENDED, UNDECIDED, RESUMED } \n\n", /* Copyright 2010-2018 JetBrains s.r.o. and  
Kotlin Programming Language contributors. \n\nUse of this source code is governed by the Apache 2.0 license that  
can be found in the license/LICENSE.txt file. \n\npackage kotlin.experimental \n\n** Performs a bitwise AND  
operation between the two values. *\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic inline infix fun  
Byte.and(other: Byte): Byte = (this.toInt() and other.toInt()).toByte() \n\n** Performs a bitwise OR operation  
between the two values. *\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic inline infix fun  
Byte.or(other: Byte): Byte = (this.toInt() or other.toInt()).toByte() \n\n** Performs a bitwise XOR operation  
between the two values. *\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic inline infix fun  
Byte.xor(other: Byte): Byte = (this.toInt() xor other.toInt()).toByte() \n\n** Inverts the bits in this value.  
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic inline fun Byte.inv(): Byte =  
(this.toInt().inv()).toByte() \n\n** Performs a bitwise AND operation between the two values.  
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic inline infix fun Short.and(other: Short): Short =  
(this.toInt() and other.toInt()).toShort() \n\n** Performs a bitwise OR operation between the two values.  
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic inline infix fun Short.or(other: Short): Short =  
(this.toInt() or other.toInt()).toShort() \n\n** Performs a bitwise XOR operation between the two values.  
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic inline infix fun Short.xor(other: Short): Short =  
(this.toInt() xor other.toInt()).toShort() \n\n** Inverts the bits in this value.  
*\n@SinceKotlin("1.1")\n@kotlin.internal.InlineOnly\npublic inline fun Short.inv(): Short =  
(this.toInt().inv()).toShort() \n\n", /* Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language  
contributors. \n\nUse of this source code is governed by the Apache 2.0 license that can be found in the  
license/LICENSE.txt file. \n\npackage kotlin.experimental \n\n** \n\n* The experimental marker for type  
inference augmenting annotations. \n\n* Any usage of a declaration annotated with  
`@ExperimentalTypeInference` must be accepted either by \n\n* annotating that usage with the [OptIn] annotation,  
e.g. `@OptIn(ExperimentalTypeInference::class)` \n\n* or by using the compiler argument `-Xopt-  
in=kotlin.experimental.ExperimentalTypeInference` \n\n*\n@Suppress("DEPRECATION")\n@Experimental(level  
= Experimental.Level.ERROR)\n@RequiresOptIn(level =
```

RequiresOptIn.Level.ERROR)\n@MustBeDocumented\n@Retention(AnnotationRetention.BINARY)\n@Target(AnnotationTarget.ANNOTATION_CLASS)\n@SinceKotlin("1.3")\npublic annotation class ExperimentalTypeInference\n"/\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\npackage kotlin.internal\n/**\n * Specifies that the corresponding type should be ignored during type inference.\n *\n */\n@Target(AnnotationTarget.TYPE)\n@Retention(AnnotationRetention.BINARY)\ninternal annotation class NoInfer\n/**\n * Specifies that the constraint built for the type during type inference should be an equality one.\n *\n */\n@Target(AnnotationTarget.TYPE)\n@Retention(AnnotationRetention.BINARY)\ninternal annotation class Exact\n/**\n * Specifies that a corresponding member has the lowest priority in overload resolution.\n *\n */\n@Target(AnnotationTarget.FUNCTION, AnnotationTarget.PROPERTY)\n@Retention(AnnotationRetention.BINARY)\ninternal annotation class LowPriorityInOverloadResolution\n/**\n * Specifies that the corresponding member has the highest priority in overload resolution. Effectively this means that\n * an extension annotated with this annotation will win in overload resolution over a member with the same signature.\n */\n@Target(AnnotationTarget.FUNCTION, AnnotationTarget.PROPERTY)\n@Retention(AnnotationRetention.BINARY)\ninternal annotation class HidesMembers\n/**\n * The value of this type parameter should be mentioned in input types (argument types, receiver type or expected type).\n *\n */\n@Target(AnnotationTarget.TYPE_PARAMETER)\n@Retention(AnnotationRetention.BINARY)\ninternal annotation class OnlyInputTypes\n/**\n * Specifies that this function should not be called directly without inlining\n */\n@Target(AnnotationTarget.FUNCTION, AnnotationTarget.PROPERTY, AnnotationTarget.PROPERTY_GETTER, AnnotationTarget.PROPERTY_SETTER)\n@Retention(AnnotationRetention.BINARY)\ninternal annotation class InlineOnly\n/**\n * Specifies that this declaration can have dynamic receiver type.\n *\n */\n@Target(AnnotationTarget.FUNCTION, AnnotationTarget.PROPERTY)\n@Retention(AnnotationRetention.BINARY)\ninternal annotation class DynamicExtension\n/**\n * The value of this parameter should be a property reference expression (`this::foo`), referencing a `lateinit` property,\n * the backing field of which is accessible at the point where the corresponding argument is passed.\n *\n */\n@Target(AnnotationTarget.VALUE_PARAMETER)\n@Retention(AnnotationRetention.BINARY)\n@SinceKotlin("1.2")\ninternal annotation class AccessibleLateinitPropertyLiteral\n/**\n * Specifies that this declaration is only completely supported since the specified version.\n */\n * The Kotlin compiler of an earlier version is going to report a diagnostic on usages of this declaration.\n * The diagnostic message can be specified with [message], or via [errorCode] (takes less space, but might not be immediately clear\n * to the user). The diagnostic severity can be specified with [level]: WARNING/ERROR mean that either a warning or an error\n * is going to be reported, HIDDEN means that the declaration is going to be removed from resolution completely.\n */\n * [versionKind] specifies which version should be compared with the [version] value, when compiling the usage of the annotated declaration.\n * Note that prior to 1.2, only [RequireKotlinVersionKind.LANGUAGE_VERSION] was supported, so the Kotlin compiler before 1.2 is going to\n * treat any [RequireKotlin] as if it requires the language version. Since 1.2, the Kotlin compiler supports\n * [RequireKotlinVersionKind.LANGUAGE_VERSION], [RequireKotlinVersionKind.COMPILER_VERSION] and [RequireKotlinVersionKind.API_VERSION].\n * If the actual value of [versionKind] is something different (e.g. a new version kind, added in future versions of Kotlin),\n * Kotlin 1.2 is going to ignore this [RequireKotlin] altogether, where as Kotlin before 1.2 is going to treat this as a requirement\n * on the language version.\n */\n * This annotation is erased at compile time; its arguments are stored in a more compact form in the Kotlin metadata.\n */\n@Target(AnnotationTarget.CLASS, AnnotationTarget.FUNCTION, AnnotationTarget.PROPERTY, AnnotationTarget.CONSTRUCTOR, AnnotationTarget.TYPE_ALIAS)\n@Retention(AnnotationRetention.SOURCE)\n@Repeatable\n@SinceKotlin("1.2")\ninternal annotation class RequireKotlin(\n val version: String,\n val message: String = "",\n val level:

```

DeprecationLevel = DeprecationLevel.ERROR,\n  val versionKind: RequireKotlinVersionKind =
RequireKotlinVersionKind.LANGUAGE_VERSION,\n  val errorCode: Int = -1)\n\n/**\n * The kind of the
version that is required by [RequireKotlin].\n */\n@SinceKotlin("1.2")\ninternal enum class
RequireKotlinVersionKind {\n  LANGUAGE_VERSION,\n  COMPILER_VERSION,\n  API_VERSION,\n}\n\n/**\n * Specifies that this declaration is a part of special DSL, used for constructing
function's contract.\n */\n@Retention(AnnotationRetention.BINARY)\n@SinceKotlin("1.2")\ninternal annotation
class ContractsDsl\n\n/**\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlin.properties\n\nimport kotlin.reflect.KProperty\n\n/**\n * Standard
property delegates.\n */\npublic object Delegates {\n  /**\n   * Returns a property delegate for a read/write
property with a non-`null` value that is initialized not during\n   * object construction time but at a later time.
Trying to read the property before the initial value has been\n   * assigned results in an exception.\n   */\n   *
@sample samples.properties.Delegates.notNullDelegate\n   */\n   public fun <T : Any> notNull():
ReadWriteProperty<Any?, T> = NotNullVar()\n\n   /**\n   * Returns a property delegate for a read/write property
that calls a specified callback function when changed.\n   * @param initialValue the initial value of the property.\n
   * @param onChange the callback which is called after the change of the property is made. The value of the
property\n   * has already been changed when this callback is invoked.\n   */\n   * @sample
samples.properties.Delegates.observableDelegate\n   */\n   public inline fun <T> observable(initialValue: T,
crossinline onChange: (property: KProperty<*>, oldValue: T, newValue: T) -> Unit):\n
ReadWriteProperty<Any?, T> =\n   object : ObservableProperty<T>(initialValue) {\n   override fun
afterChange(property: KProperty<*>, oldValue: T, newValue: T) = onChange(property, oldValue, newValue)\n
   }\n\n   /**\n   * Returns a property delegate for a read/write property that calls a specified callback function when
changed,\n   * allowing the callback to veto the modification.\n   * @param initialValue the initial value of the
property.\n   * @param onChange the callback which is called before a change to the property value is attempted.\n
   * The value of the property hasn't been changed yet, when this callback is invoked.\n   * If the callback returns
`true` the value of the property is being set to the new value,\n   * and if the callback returns `false` the new value
is discarded and the property remains its old value.\n   */\n   * @sample
samples.properties.Delegates.vetoableDelegate\n   * @sample
samples.properties.Delegates.throwVetoableDelegate\n   */\n   public inline fun <T> vetoable(initialValue: T,
crossinline onChange: (property: KProperty<*>, oldValue: T, newValue: T) -> Boolean):\n
ReadWriteProperty<Any?, T> =\n   object : ObservableProperty<T>(initialValue) {\n   override fun
beforeChange(property: KProperty<*>, oldValue: T, newValue: T): Boolean = onChange(property, oldValue,
newValue)\n   }\n\n}\n\nprivate class NotNullVar<T : Any>() : ReadWriteProperty<Any?, T> {\n  private var
value: T? = null\n  public override fun getValue(thisRef: Any?, property: KProperty<*>): T {\n    return value
?: throw IllegalStateException("Property ${property.name} should be initialized before get.")\n  }\n  public
override fun setValue(thisRef: Any?, property: KProperty<*>, value: T) {\n    this.value = value\n  }\n}\n\n"/**\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of
this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage kotlin.properties\n\nimport kotlin.reflect.KProperty\n\n/**\n * Base interface that can be used for
implementing property delegates of read-only properties.\n */\n * This is provided only for convenience; you don't
have to extend this interface\n * as long as your property delegate has methods with the same signatures.\n */\n *
@param T the type of object which owns the delegated property.\n * @param V the type of the property value.\n
*/\npublic fun interface ReadOnlyProperty<in T, out V> {\n  /**\n   * Returns the value of the property for the
given object.\n   * @param thisRef the object for which the value is requested.\n   * @param property the
metadata for the property.\n   * @return the property value.\n   */\n   public operator fun getValue(thisRef: T,
property: KProperty<*>): V\n}\n\n/**\n * Base interface that can be used for implementing property delegates of
read-write properties.\n */\n * This is provided only for convenience; you don't have to extend this interface\n * as
long as your property delegate has methods with the same signatures.\n */\n * @param T the type of object which

```

```

owns the delegated property.\n * @param V the type of the property value.\n */\npublic interface
ReadWriteProperty<in T, V> : ReadOnlyProperty<T, V> {\n    /**\n     * Returns the value of the property for the
given object.\n     * @param thisRef the object for which the value is requested.\n     * @param property the
metadata for the property.\n     * @return the property value.\n     */\n    public override operator fun
getValue(thisRef: T, property: KProperty<*>): V\n\n    /**\n     * Sets the value of the property for the given
object.\n     * @param thisRef the object for which the value is requested.\n     * @param property the metadata for
the property.\n     * @param value the value to set.\n     */\n    public operator fun setValue(thisRef: T, property:
KProperty<*>, value: V)\n}\n\n/**\n * Base interface that can be used for implementing property delegate
providers.\n * This is provided only for convenience; you don't have to extend this interface\n * as long as your
delegate provider has a method with the same signature.\n * @param T the type of object which owns the
delegated property.\n * @param D the type of property delegates this provider provides.\n
*/\n\n@SinceKotlin("1.4")\npublic fun interface PropertyDelegateProvider<in T, out D> {\n    /**\n     * Returns the
delegate of the property for the given object.\n     * This function can be used to extend the logic of creating
the object (e.g. perform validation checks)\n     * to which the property implementation is delegated.\n     *
@param thisRef the object for which property delegate is requested.\n     * @param property the metadata for the
property.\n     * @return the property delegate.\n     */\n    public operator fun provideDelegate(thisRef: T, property:
KProperty<*>): D\n}\n\n"/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\npackage kotlin.properties\n\nimport kotlin.reflect.KProperty\n\n/**\n *
Implements the core logic of a property delegate for a read/write property that calls callback functions when
changed.\n * @param initialValue the initial value of the property.\n */\n\npublic abstract class
ObservableProperty<V>(initialValue: V) : ReadWriteProperty<Any?, V> {\n    private var value = initialValue\n\n
/**\n     * The callback which is called before a change to the property value is attempted.\n     * The value of the
property hasn't been changed yet, when this callback is invoked.\n     * If the callback returns `true` the value of the
property is being set to the new value,\n     * and if the callback returns `false` the new value is discarded and the
property remains its old value.\n     */\n    protected open fun beforeChange(property: KProperty<*>, oldValue: V,
newValue: V): Boolean = true\n\n    /**\n     * The callback which is called after the change of the property is made.
The value of the property\n     * has already been changed when this callback is invoked.\n     */\n    protected open
fun afterChange(property: KProperty<*>, oldValue: V, newValue: V): Unit {}\n\n    public override fun
getValue(thisRef: Any?, property: KProperty<*>): V {\n        return value\n    }\n\n    public override fun
setValue(thisRef: Any?, property: KProperty<*>, value: V) {\n        val oldValue = this.value\n        if
(!beforeChange(property, oldValue, value)) {\n            return\n        }\n        this.value = value\n        afterChange(property, oldValue, value)\n    }\n}\n\n"/*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n */\n\n@file:Suppress("PackageDirectoryMismatch")\npackage
kotlin\n\nimport kotlin.reflect.*\n\n/**\n * An extension operator that allows delegating a read-only property of type
[V]\n * to a property reference to a property of type [V] or its subtype.\n * @receiver A property reference to a
read-only or mutable property of type [V] or its subtype.\n * The reference is without a receiver, i.e. it either
references a top-level property or\n * has the receiver bound to it.\n * Example:\n * ```\n * class Login(val
username: String)\n * val defaultLogin = Login("Admin")\n * val defaultUsername by defaultLogin::username\n *
// equivalent to\n * val defaultUserName get() = defaultLogin.username\n * ```\n
*/\n\n@SinceKotlin("1.4")\n@kotlin.internal.InlineOnly\npublic inline operator fun <V>
KProperty0<V>.getValue(thisRef: Any?, property: KProperty<*>): V {\n    return get()\n}\n\n/**\n * An extension
operator that allows delegating a mutable property of type [V]\n * to a property reference to a mutable property of
the same type [V].\n * @receiver A property reference to a mutable property of type [V].\n * The reference is
without a receiver, i.e. it either references a top-level property or\n * has the receiver bound to it.\n * Example:\n *
```\n * class Login(val username: String, var incorrectAttemptCounter: Int = 0)\n * val defaultLogin =
Login("Admin")\n * var defaultLoginAttempts by defaultLogin::incorrectAttemptCounter\n * // equivalent to\n *

```

```

var defaultLoginAttempts: Int {
 get() = defaultLogin.incorrectAttemptCounter
 set(value) {
 defaultLogin.incorrectAttemptCounter = value
 }
}

@SinceKotlin("1.4")@kotlin.internal.InlineOnly
public inline operator fun <V>
KMutableProperty0<V>.setValue(thisRef: Any?, property: KProperty<*>, value: V) {
 set(value)
}

* An extension operator that allows delegating a read-only member or extension property of type [V]
* to a property reference to a member or extension property of type [V] or its subtype.
* @receiver A property reference to a read-only or mutable property of type [V] or its subtype.
* The reference has an unbound receiver of type [T].
* Example:
* class Login(val username: String)
* val Login.user by
Login::username
* // equivalent to
* val Login.user get() = this.username

@SinceKotlin("1.4")@kotlin.internal.InlineOnly
public inline operator fun <T, V> KProperty1<T,
V>.getValue(thisRef: T, property: KProperty<*>): V {
 return get(thisRef)
}

* An extension operator
that allows delegating a mutable member or extension property of type [V]
* to a property reference to a member
or extension mutable property of the same type [V].
* @receiver A property reference to a read-only or
mutable property of type [V] or its subtype.
* The reference has an unbound receiver of type [T].
* Example:
* class Login(val username: String, var incorrectAttemptCounter: Int)
* var Login.attempts
by Login::incorrectAttemptCounter
* // equivalent to
* var Login.attempts: Int
* get() =
this.incorrectAttemptCounter
* set(value) { this.incorrectAttemptCounter = value }

@SinceKotlin("1.4")@kotlin.internal.InlineOnly
public inline operator fun <T, V> KMutableProperty1<T,
V>.setValue(thisRef: T, property: KProperty<*>, value: V) {
 set(thisRef, value)
}

* Copyright 2010-
2021 JetBrains s.r.o. and Kotlin Programming Language contributors.
* Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.
package kotlin.random
import
kotlin.math.nextDown

* An abstract class that is implemented by random number generator algorithms.
* The companion object [Random.Default] is the default instance of [Random].
* To get a seeded instance
of random generator use [Random] function.
* @sample samples.random.Randoms.defaultRandom

@SinceKotlin("1.3")
public abstract class Random {
 /**
 * Gets the next random [bitCount] number
of bits.
 * Generates an `Int` whose lower [bitCount] bits are filled with random values and the remaining
upper bits are zero.
 * @param bitCount number of bits to generate, must be in range 0..32, otherwise the
behavior is unspecified.
 * @sample samples.random.Randoms.nextBits

 public abstract fun
nextBits(bitCount: Int): Int

 /**
 * Gets the next random `Int` from the random number generator.
 * Generates an `Int` random value uniformly distributed between `Int.MIN_VALUE` and `Int.MAX_VALUE`
(inclusive).
 * @sample samples.random.Randoms.nextInt

 public open fun nextInt(): Int =
nextBits(32)

 /**
 * Gets the next random non-negative `Int` from the random number generator less than
the specified [until] bound.
 * Generates an `Int` random value uniformly distributed between `0`
(inclusive) and the specified [until] bound (exclusive).
 * @param until must be positive.
 * @throws IllegalArgumentException if [until] is negative or zero.
 * @sample
samples.random.Randoms.nextIntFromUntil

 public open fun nextInt(until: Int): Int = nextInt(0, until)

 /**
 * Gets the next random `Int` from the random number generator in the specified range.
 * Generates an `Int` random value uniformly distributed between the specified [from] (inclusive) and [until]
(exclusive) bounds.
 * @throws IllegalArgumentException if [from] is greater than or equal to [until].
 * @sample samples.random.Randoms.nextIntFromUntil

 public open fun nextInt(from: Int, until:
Int): Int {
 checkRangeBounds(from, until)
 val n = until - from
 if (n > 0 || n == Int.MIN_VALUE)
 {
 val rnd = if (n and -n == n) {
 val bitCount = fastLog2(n)
 nextBits(bitCount)
 } else {
 var v: Int
 do {
 val bits = nextInt().ushr(1)
 v = bits % n
 } while (bits - v + (n - 1) < 0)
 v
 }
 return from + rnd
 } else {
 while
(true) {
 val rnd = nextInt()
 if (rnd in from until until) return rnd
 }
 }
 }

 /**
 * Gets the next random `Long` from the random number generator.
 * Generates a `Long` random
value uniformly distributed between `Long.MIN_VALUE` and `Long.MAX_VALUE` (inclusive).
 * @sample samples.random.Randoms.nextLong

 public open fun nextLong(): Long =

```

```

nextInt().toLong().shl(32) + nextInt()\n\n /**\n * Gets the next random non-negative `Long` from the random
number generator less than the specified [until] bound.\n *\n * Generates a `Long` random value uniformly
distributed between `0` (inclusive) and the specified [until] bound (exclusive).\n *\n * @param until must be
positive.\n *\n * @throws IllegalArgumentException if [until] is negative or zero.\n *\n * @sample
samples.random.Randoms.nextLongFromUntil\n *\n public open fun nextLong(until: Long): Long =
nextLong(0, until)\n\n /**\n * Gets the next random `Long` from the random number generator in the specified
range.\n *\n * Generates a `Long` random value uniformly distributed between the specified [from] (inclusive)
and [until] (exclusive) bounds.\n *\n * @throws IllegalArgumentException if [from] is greater than or equal to
[until].\n *\n * @sample samples.random.Randoms.nextLongFromUntil\n *\n public open fun
nextLong(from: Long, until: Long): Long {\n checkRangeBounds(from, until)\n val n = until - from\n
if (n > 0) {\n val rnd: Long\n if (n and -n == n) {\n val nLow = n.toInt()\n val nHigh
= (n ushr 32).toInt()\n rnd = when {\n nLow != 0 -> {\n val bitCount =
fastLog2(nLow)\n // toUInt().toLong()\n nextBits(bitCount).toLong() and
0xFFFF_FFFF\n }\n nHigh == 1 ->{\n // toUInt().toLong()\n
nextInt().toLong() and 0xFFFF_FFFF\n } else -> {\n val bitCount = fastLog2(nHigh)\n
 nextBits(bitCount).toLong().shl(32) + (nextInt().toLong() and 0xFFFF_FFFF)\n }\n
}\n } else {\n var v: Long\n do {\n val bits = nextLong().ushr(1)\n
v = bits % n\n } while (bits - v + (n - 1) < 0)\n rnd = v\n }\n return from + rnd\n
}\n\n } else {\n while (true) {\n val rnd = nextLong()\n if (rnd in from until until) return rnd\n
}\n }\n}\n\n /**\n * Gets the next random [Boolean] value.\n *\n * @sample
samples.random.Randoms.nextBoolean\n *\n public open fun nextBoolean(): Boolean = nextBits(1) != 0\n\n
/**\n * Gets the next random [Double] value uniformly distributed between 0 (inclusive) and 1 (exclusive).\n
*\n * @sample samples.random.Randoms.nextDouble\n *\n public open fun nextDouble(): Double =
doubleFromParts(nextBits(26), nextBits(27))\n\n /**\n * Gets the next random non-negative `Double` from the
random number generator less than the specified [until] bound.\n *\n * Generates a `Double` random value
uniformly distributed between 0 (inclusive) and [until] (exclusive).\n *\n * @throws IllegalArgumentException
if [until] is negative or zero.\n *\n * @sample samples.random.Randoms.nextDoubleFromUntil\n *\n
public open fun nextDouble(until: Double): Double = nextDouble(0.0, until)\n\n /**\n * Gets the next random
`Double` from the random number generator in the specified range.\n *\n * Generates a `Double` random value
uniformly distributed between the specified [from] (inclusive) and [until] (exclusive) bounds.\n *\n * [from]
and [until] must be finite otherwise the behavior is unspecified.\n *\n * @throws IllegalArgumentException if
[from] is greater than or equal to [until].\n *\n * @sample samples.random.Randoms.nextDoubleFromUntil\n
*\n public open fun nextDouble(from: Double, until: Double): Double {\n checkRangeBounds(from, until)\n
val size = until - from\n val r = if (size.isInfinite() && from.isFinite() && until.isFinite()) {\n val r1 =
nextDouble() * (until / 2 - from / 2)\n from + r1 + r1\n } else {\n from + nextDouble() * size\n
}\n return if (r >= until) until.nextDown() else r\n}\n\n /**\n * Gets the next random [Float] value
uniformly distributed between 0 (inclusive) and 1 (exclusive).\n *\n * @sample
samples.random.Randoms.nextFloat\n *\n public open fun nextFloat(): Float = nextBits(24) / (1 shl
24).toFloat()\n\n /**\n * Fills a subrange of the specified byte [array] starting from [fromIndex] inclusive and
ending [toIndex] exclusive\n * with random bytes.\n *\n * @return [array] with the subrange filled with
random bytes.\n *\n * @sample samples.random.Randoms.nextBytes\n *\n public open fun
nextBytes(array: ByteArray, fromIndex: Int = 0, toIndex: Int = array.size): ByteArray {\n require(fromIndex in
0..array.size && toIndex in 0..array.size) { \"fromIndex ($fromIndex) or toIndex ($toIndex) are out of range:
0..${array.size}.\" }\n require(fromIndex <= toIndex) { \"fromIndex ($fromIndex) must be not greater than
toIndex ($toIndex).\" }\n val steps = (toIndex - fromIndex) / 4\n var position = fromIndex\n
repeat(steps) {\n val v = nextInt()\n array[position] = v.toByte()\n array[position + 1] =
v.ushr(8).toByte()\n array[position + 2] = v.ushr(16).toByte()\n array[position + 3] =
v.ushr(24).toByte()\n position += 4\n }\n val remainder = toIndex - position\n val vr =

```



```

nextBits(remainder * 8)\n for (i in 0 until remainder) {\n array[position + i] = vr.ushr(i * 8).toByte()\n }\n return array\n }\n\n /**\n * Fills the specified byte [array] with random bytes and returns it.\n *\n * @return [array] filled with random bytes.\n *\n * @sample samples.random.Randoms.nextBytes\n */\n\n public open fun nextBytes(array: ByteArray): ByteArray = nextBytes(array, 0, array.size)\n\n /**\n * Creates a byte array of the specified [size], filled with random bytes.\n *\n * @sample samples.random.Randoms.nextBytes\n */\n\n public open fun nextBytes(size: Int): ByteArray = nextBytes(ByteArray(size))\n\n /**\n * The default random number generator.\n *\n * On JVM this generator is thread-safe, its methods can be invoked from multiple threads.\n *\n * @sample samples.random.Randoms.defaultRandom\n */\n\n companion object Default : Random(), Serializable {\n private val defaultRandom: Random = defaultPlatformRandom()\n private object Serialized : Serializable {\n private const val serialVersionUID = 0L\n private fun readResolve(): Any = Random()\n }\n\n private fun writeReplace(): Any = Serialized\n\n override fun nextBits(bitCount: Int): Int = defaultRandom.nextBits(bitCount)\n\n override fun nextInt(): Int = defaultRandom.nextInt()\n\n override fun nextInt(until: Int): Int = defaultRandom.nextInt(until)\n\n override fun nextInt(from: Int, until: Int): Int = defaultRandom.nextInt(from, until)\n\n override fun nextLong(): Long = defaultRandom.nextLong()\n\n override fun nextLong(until: Long): Long = defaultRandom.nextLong(until)\n\n override fun nextLong(from: Long, until: Long): Long = defaultRandom.nextLong(from, until)\n\n override fun nextBoolean(): Boolean = defaultRandom.nextBoolean()\n\n override fun nextDouble(): Double = defaultRandom.nextDouble()\n\n override fun nextDouble(until: Double): Double = defaultRandom.nextDouble(until)\n\n override fun nextDouble(from: Double, until: Double): Double = defaultRandom.nextDouble(from, until)\n\n override fun nextFloat(): Float = defaultRandom.nextFloat()\n\n override fun nextBytes(array: ByteArray): ByteArray = defaultRandom.nextBytes(array)\n\n override fun nextBytes(size: Int): ByteArray = defaultRandom.nextBytes(size)\n\n override fun nextBytes(array: ByteArray, fromIndex: Int, toIndex: Int): ByteArray =\n defaultRandom.nextBytes(array, fromIndex, toIndex)\n }\n}\n\n /**\n * Returns a repeatable random number generator seeded with the given [seed] `Int` value.\n *\n * Two generators with the same seed produce the same sequence of values within the same version of Kotlin runtime.\n *\n * *Note:* Future versions of Kotlin may change the algorithm of this seeded number generator so that it will return\n * a sequence of values different from the current one for a given seed.\n *\n * On JVM the returned generator is NOT thread-safe. Do not invoke it from multiple threads without proper synchronization.\n *\n * @sample samples.random.Randoms.seededRandom\n */\n\n @SinceKotlin("1.3")\n\n public fun Random(seed: Int): Random = XorWowRandom(seed, seed.shr(31))\n\n /**\n * Returns a repeatable random number generator seeded with the given [seed] `Long` value.\n *\n * Two generators with the same seed produce the same sequence of values within the same version of Kotlin runtime.\n *\n * *Note:* Future versions of Kotlin may change the algorithm of this seeded number generator so that it will return\n * a sequence of values different from the current one for a given seed.\n *\n * On JVM the returned generator is NOT thread-safe. Do not invoke it from multiple threads without proper synchronization.\n *\n * @sample samples.random.Randoms.seededRandom\n */\n\n @SinceKotlin("1.3")\n\n public fun Random(seed: Long): Random = XorWowRandom(seed.toInt(), seed.shr(32).toInt())\n\n /**\n * Gets the next random `Int` from the random number generator in the specified [range].\n *\n * Generates an `Int` random value uniformly distributed in the specified [range]:\n * from `range.start` inclusive to `range.endInclusive` inclusive.\n *\n * @throws IllegalArgumentException if [range] is empty.\n */\n\n @SinceKotlin("1.3")\n\n public fun Random.nextInt(range: IntRange): Int = when {\n range.isEmpty() -> throw IllegalArgumentException("Cannot get random in empty range: $range")\n range.last < Int.MAX_VALUE -> nextInt(range.first, range.last + 1)\n range.first > Int.MIN_VALUE -> nextInt(range.first - 1, range.last) + 1\n else -> nextInt()\n }\n\n /**\n * Gets the next random `Long` from the random number generator in the specified [range].\n *\n * Generates a `Long` random value uniformly distributed in the specified [range]:\n * from `range.start` inclusive to `range.endInclusive` inclusive.\n *\n * @throws IllegalArgumentException if [range] is empty.\n */\n\n @SinceKotlin("1.3")\n\n public fun Random.nextLong(range: LongRange): Long = when {\n range.isEmpty() -> throw IllegalArgumentException("Cannot get random in empty range: $range")\n range.last <

```

```

Long.MAX_VALUE -> nextLong(range.first, range.last + 1)\n range.first > Long.MIN_VALUE ->
nextLong(range.first - 1, range.last) + 1\n else -> nextLong()\n}\n\n\ninternal expect fun
defaultPlatformRandom(): Random\n\ninternal expect fun doubleFromParts(hi26: Int, low27: Int): Double\n\n\ninternal
fun fastLog2(value: Int): Int = 31 - value.countLeadingZeroBits()\n\n\n/** Takes upper [bitCount] bits (0..32) from
this number. *\n\ninternal fun Int.takeUpperBits(bitCount: Int): Int =\n this.ushr(32 - bitCount) and (-
bitCount).shr(31)\n\n\ninternal fun checkRangeBounds(from: Int, until: Int) = require(until > from) {
boundsErrorMessage(from, until) }\n\ninternal fun checkRangeBounds(from: Long, until: Long) = require(until >
from) { boundsErrorMessage(from, until) }\n\ninternal fun checkRangeBounds(from: Double, until: Double) =
require(until > from) { boundsErrorMessage(from, until) }\n\n\ninternal fun boundsErrorMessage(from: Any, until:
Any) = "\nRandom range is empty: [$from, $until].\n","/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n *\n *\npackage kotlin.random\n\n\n\n/**\n * Gets the next random [UInt]
from the random number generator.\n *\n *\n * Generates a [UInt] random value uniformly distributed between
[UInt.MIN_VALUE] and [UInt.MAX_VALUE] (inclusive).\n\n
*\n *\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n\npublic fun
Random.nextUInt(): UInt = nextInt().toUInt()\n\n\n\n/**\n * Gets the next random [UInt] from the random number
generator less than the specified [until] bound.\n *\n *\n * Generates a [UInt] random value uniformly distributed
between `0` (inclusive) and the specified [until] bound (exclusive).\n *\n *\n * @throws IllegalArgumentException if
[until] is zero.\n *\n *\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n\npublic fun
Random.nextUInt(until: UInt): UInt = nextUInt(0u, until)\n\n\n\n/**\n * Gets the next random [UInt] from the random
number generator in the specified range.\n *\n *\n * Generates a [UInt] random value uniformly distributed between the
specified [from] (inclusive) and [until] (exclusive) bounds.\n *\n *\n * @throws IllegalArgumentException if [from] is
greater than or equal to [until].\n\n
*\n *\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n\npublic fun
Random.nextUInt(from: UInt, until: UInt): UInt {\n checkUIntRangeBounds(from, until)\n\n val signedFrom =
from.toInt() xor Int.MIN_VALUE\n val signedUntil = until.toInt() xor Int.MIN_VALUE\n\n val signedResult =
nextInt(signedFrom, signedUntil) xor Int.MIN_VALUE\n return signedResult.toUInt()\n}\n\n\n\n/**\n * Gets the next
random [UInt] from the random number generator in the specified [range].\n *\n *\n * Generates a [UInt] random value
uniformly distributed in the specified [range]:\n *\n * from `range.start` inclusive to `range.endInclusive` inclusive.\n
*\n *\n * @throws IllegalArgumentException if [range] is empty.\n\n
*\n *\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n\npublic fun
Random.nextUInt(range: UIntRange): UInt = when {\n range.isEmpty() -> throw
IllegalArgumentException("Cannot get random in empty range: $range")\n range.last < UInt.MAX_VALUE ->
nextUInt(range.first, range.last + 1u)\n range.first > UInt.MIN_VALUE -> nextUInt(range.first - 1u, range.last) +
1u\n else -> nextUInt()\n}\n\n\n\n/**\n * Gets the next random [ULong] from the random number generator.\n *\n *\n
* Generates a [ULong] random value uniformly distributed between [ULong.MIN_VALUE] and
[ULong.MAX_VALUE] (inclusive).\n\n
*\n *\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n\npublic fun
Random.nextULong(): ULong = nextLong().toULong()\n\n\n\n/**\n * Gets the next random [ULong] from the random
number generator less than the specified [until] bound.\n *\n *\n * Generates a [ULong] random value uniformly
distributed between `0` (inclusive) and the specified [until] bound (exclusive).\n *\n *\n * @throws
IllegalArgumentException if [until] is zero.\n\n
*\n *\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n\npublic fun
Random.nextULong(until: ULong): ULong = nextULong(0uL, until)\n\n\n\n/**\n * Gets the next random [ULong] from
the random number generator in the specified range.\n *\n *\n * Generates a [ULong] random value uniformly
distributed between the specified [from] (inclusive) and [until] (exclusive) bounds.\n *\n *\n * @throws
IllegalArgumentException if [from] is greater than or equal to [until].\n\n
*\n *\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\n\npublic fun

```

```

Random.nextULong(from: ULong, until: ULong): ULong {
 checkULongRangeBounds(from, until)
 val signedFrom = from.toLong() xor Long.MIN_VALUE
 val signedUntil = until.toLong() xor Long.MIN_VALUE
 val signedResult = nextLong(signedFrom, signedUntil) xor Long.MIN_VALUE
 return signedResult.toULong()
}

/**
 * Gets the next random [ULong] from the random number generator in the specified [range].
 * Generates a [ULong] random value uniformly distributed in the specified [range]:
 * from `range.start` inclusive to `range.endInclusive` inclusive.
 * @throws IllegalArgumentException if [range] is empty.
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
public fun Random.nextULong(range: ULongRange): ULong = when {
 range.isEmpty() -> throw IllegalArgumentException("Cannot get random in empty range: $range")
 range.last < ULong.MAX_VALUE -> nextULong(range.first, range.last + 1u)
 range.first > ULong.MIN_VALUE -> nextULong(range.first - 1u, range.last) + 1u
 else -> nextULong()
}

/**
 * Fills the specified unsigned byte [array] with random bytes and returns it.
 * @return [array] filled with random bytes.
 */
@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public fun Random.nextUBytes(array: UByteArray): UByteArray {
 nextBytes(array.asByteArray())
 return array
}

/**
 * Creates an unsigned byte array of the specified [size], filled with random bytes.
 */
@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public fun Random.nextUBytes(size: Int): UByteArray = nextBytes(size).asUByteArray()

/**
 * Fills a subrange of the specified `UByte` [array] starting from [fromIndex] inclusive and ending [toIndex] exclusive with random UBytes.
 * @return [array] with the subrange filled with random bytes.
 */
@SinceKotlin("1.3")
@ExperimentalUnsignedTypes
public fun Random.nextUBytes(array: UByteArray, fromIndex: Int = 0, toIndex: Int = array.size): UByteArray {
 nextBytes(array.asByteArray(), fromIndex, toIndex)
 return array
}

internal fun checkUIntRangeBounds(from: UInt, until: UInt) = require(until > from) {
 boundsErrorMessage(from, until)
}

internal fun checkULongRangeBounds(from: ULong, until: ULong) = require(until > from) {
 boundsErrorMessage(from, until)
}

/**
 * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.
 * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.
 */
package kotlin.random

/**
 * Random number generator, using Marsaglia's "xorwow" algorithm
 * Cycles after 2192 - 232 repetitions.
 * For more details, see Marsaglia, George (July 2003). "Xorshift RNGs". Journal of Statistical Software. 8 (14). doi:10.18637/jss.v008.i14
 * Available at https://www.jstatsoft.org/v08/i14/paper
 */
internal class XorWowRandom(
 private var x: Int,
 private var y: Int,
 private var z: Int,
 private var w: Int,
 private var v: Int,
 private var addend: Int
) : Random(), Serializable {
 internal constructor(seed1: Int, seed2: Int) : this(
 seed1, seed2, 0, 0, seed1.inv(), (seed1 shl 10) xor (seed2 ushr 4)
)

 init {
 require((x or y or z or w or v) != 0) { "Initial state must have at least one non-zero element." }
 // some trivial seeds can produce several values with zeroes in upper bits, so we discard first 64
 repeat(64) { nextInt() }
 }

 override fun nextInt(): Int {
 // Equivalent to the xorwow algorithm
 // From Marsaglia, G. 2003. Xorshift RNGs. J. Statis. Soft. 8, 14, p. 5
 var t = x
 t = t xor (t ushr 2)
 x = y
 y = z
 z = w
 val v0 = v
 w = v0
 t = (t xor (t shl 1)) xor v0 xor (v0 shl 4)
 v = t
 addend += 362437
 return t + addend
 }

 override fun nextBits(bitCount: Int): Int =
 nextInt().takeUpperBits(bitCount)

 private companion object {
 private const val serialVersionUID: Long = 0L
 }

 /**
 * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.
 * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.
 */
}

@file:kotlin.jvm.JvmMultifileClass
@file:kotlin.jvm.JvmName("RangesKt")
package kotlin.ranges

/**
 * Represents a range of [Comparable] values.
 */
private open class ComparableRange<T> : Comparable<T>, ClosedRange<T> {
 override fun equals(other: Any?): Boolean {
 return other is ComparableRange<*> && (isEmpty() && other.isEmpty() || start == other.start && endInclusive == other.endInclusive)
 }

 override fun hashCode(): Int {
 return if (isEmpty()) -1 else 31 * start.hashCode() + endInclusive.hashCode()
 }

 override fun toString(): String = "$start..$endInclusive"

 /**
 * Creates a range from this [Comparable] value to the specified [that] value.
 * This value needs to be smaller than or equal to [that] value, otherwise the returned
 */
}

```

```

range will be empty.\n * @sample samples.ranges.Ranges.rangeFromComparable\n *\npublic operator fun <T :
Comparable<T>> T.rangeTo(that: T): ClosedRange<T> = ComparableRange(this, that)\n\n/**\n * Represents a
range of floating point numbers.\n * Extends [ClosedRange] interface providing custom operation
[lessThanOrEquals] for comparing values of range domain type.\n *\n * This interface is implemented by floating
point ranges returned by [Float.rangeTo] and [Double.rangeTo] operators to\n * achieve IEEE-754 comparison order
instead of total order of floating point numbers.\n *\n@SinceKotlin("1.1")\npublic interface
ClosedFloatingPointRange<T : Comparable<T>> : ClosedRange<T> {\n override fun contains(value: T): Boolean
= lessThanOrEquals(start, value) && lessThanOrEquals(value, endInclusive)\n override fun isEmpty(): Boolean =
!lessThanOrEquals(start, endInclusive)\n\n /**\n * Compares two values of range domain type and returns true
if first is less than or equal to second.\n *\n * fun lessThanOrEquals(a: T, b: T): Boolean\n *}\n\n/**\n * A
closed range of values of type `Double`.\n *\n * Numbers are compared with the ends of this range according to
IEEE-754.\n *\nprivate class ClosedDoubleRange(\n start: Double,\n endInclusive: Double\n) :
ClosedFloatingPointRange<Double> {\n private val _start = start\n private val _endInclusive = endInclusive\n
override val start: Double get() = _start\n override val endInclusive: Double get() = _endInclusive\n\n override
fun lessThanOrEquals(a: Double, b: Double): Boolean = a <= b\n override fun contains(value: Double): Boolean
= value >= _start && value <= _endInclusive\n override fun isEmpty(): Boolean = !(_start <= _endInclusive)\n\n
override fun equals(other: Any?): Boolean {\n return other is ClosedDoubleRange && (isEmpty() &&
other.isEmpty() ||\n _start == other._start && _endInclusive == other._endInclusive)\n }\n\n override
fun hashCode(): Int {\n return if (isEmpty()) -1 else 31 * _start.hashCode() + _endInclusive.hashCode()\n }\n\n
override fun toString(): String = "$_start..$_endInclusive"\n}\n\n/**\n * Creates a range from this [Double]
value to the specified [that] value.\n *\n * Numbers are compared with the ends of this range according to IEEE-
754.\n *\n * @sample samples.ranges.Ranges.rangeFromDouble\n *\n@SinceKotlin("1.1")\npublic operator fun
Double.rangeTo(that: Double): ClosedFloatingPointRange<Double> = ClosedDoubleRange(this, that)\n\n\n/**\n * A
closed range of values of type `Float`.\n *\n * Numbers are compared with the ends of this range according to
IEEE-754.\n *\nprivate class ClosedFloatRange(\n start: Float,\n endInclusive: Float\n) :
ClosedFloatingPointRange<Float> {\n private val _start = start\n private val _endInclusive = endInclusive\n
override val start: Float get() = _start\n override val endInclusive: Float get() = _endInclusive\n\n override
fun lessThanOrEquals(a: Float, b: Float): Boolean = a <= b\n override fun contains(value: Float): Boolean = value
>= _start && value <= _endInclusive\n override fun isEmpty(): Boolean = !(_start <= _endInclusive)\n\n
override fun equals(other: Any?): Boolean {\n return other is ClosedFloatRange && (isEmpty() &&
other.isEmpty() ||\n _start == other._start && _endInclusive == other._endInclusive)\n }\n\n override
fun hashCode(): Int {\n return if (isEmpty()) -1 else 31 * _start.hashCode() + _endInclusive.hashCode()\n }\n\n
override fun toString(): String = "$_start..$_endInclusive"\n}\n\n/**\n * Creates a range from this [Float]
value to the specified [that] value.\n *\n * Numbers are compared with the ends of this range according to IEEE-
754.\n *\n * @sample samples.ranges.Ranges.rangeFromFloat\n *\n@SinceKotlin("1.1")\npublic operator fun
Float.rangeTo(that: Float): ClosedFloatingPointRange<Float> = ClosedFloatRange(this, that)\n\n\n/**\n * Returns
`true` if this iterable range contains the specified [element].\n *\n * Always returns `false` if the [element] is `null`.\n
*\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\npublic inline operator fun <T, R> R.contains(element: T?):
Boolean where T : Any, R : Iterable<T>, R : ClosedRange<T> =\n element != null &&
contains(element)\n\n\ninternal fun checkStepIsPositive(isPositive: Boolean, step: Number) {\n if (!isPositive)
throw IllegalArgumentException("Step must be positive, was: $step.")\n}\n\n/**\n * Copyright 2010-2019
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*\n@file:kotlin.jvm.JvmName("KClasses")\n@file:Suppress("UNCHECKED_CAST")\n\npackage
kotlin.reflect\nimport kotlin.internal.LowPriorityInOverloadResolution\n\n/**\n * Casts the given [value] to the
class represented by this [KClass] object.\n *\n * Throws an exception if the value is `null` or if it is not an instance of
this class.\n *\n * This is an experimental function that behaves as a similar function from kotlin.reflect.full on
JVM.\n *\n * @see [KClass.isInstance]\n * @see [KClass.safeCast]\n

```

```

*^@SinceKotlin("1.4")^@WasExperimental(ExperimentalStdlibApi::class)^@LowPriorityInOverloadResoluti
on\nfun <T : Any> KClass<T>.cast(value: Any?): T {\n if (!isInstance(value)) throw ClassCastException("\nValue
cannot be cast to $qualifiedOrSimpleName")\n return value as T\n}\n// TODO: replace with qualifiedName
when it is fully supported in K/JS\ninternal expect val KClass<*>.qualifiedOrSimpleName: String?\n/**\n * Casts
the given [value] to the class represented by this [KClass] object.\n * Returns `null` if the value is `null` or if it is not
an instance of this class.\n *\n * This is an experimental function that behaves as a similar function from
kotlin.reflect.full on JVM.\n *\n * @see [KClass.isInstance]\n * @see [KClass.cast]\n
*^@SinceKotlin("1.4")^@WasExperimental(ExperimentalStdlibApi::class)^@LowPriorityInOverloadResoluti
on\nfun <T : Any> KClass<T>.safeCast(value: Any?): T? {\n return if (isInstance(value)) value as T else
null\n}\n"/*\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of
this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*^@package kotlin.reflect\nimport kotlin.jvm.JvmField\nimport kotlin.jvm.JvmStatic\n\n/**\n * Represents
a type projection. Type projection is usually the argument to another type in a type usage.\n * For example, in the
type `Array<out Number>`, `out Number` is the covariant projection of the type represented by the class
`Number`.\n *\n * Type projection is either the star projection, or an entity consisting of a specific type plus optional
variance.\n *\n * See the [Kotlin language documentation](https://kotlinlang.org/docs/reference/generics.html#type-
projections)\n * for more information.\n *^@SinceKotlin("1.1")\npublic data class KTypeProjection
constructor(\n /**\n * The use-site variance specified in the projection, or `null` if this is a star projection.\n
*\n * The type specified in the projection, or `null` if this is a star
projection.\n *\n * public val variance: KVariance?,\n /**\n * The type specified in the projection, or `null` if this is a star
projection.\n *\n * public val type: KType?) {\n\n init {\n require((variance == null) == (type == null))\n
\n if (variance == null)\n "\nStar projection must have no type specified.\n" else\n
\n "\nThe projection variance $variance requires type to be specified.\n" }\n }\n\n override fun toString():
String = when (variance) {\n null -> "*" KVariance.INVARIANT -> type.toString()\n KVariance.IN -> "\n in $type"\n KVariance.OUT -> "\n out $type"\n }\n\n public companion object {\n //
provided for compiler access\n @JvmField\n @PublishedApi\n internal val star: KTypeProjection =
KTypeProjection(null, null)\n\n /**\n * Star projection, denoted by the `*` character.\n * For example,
in the type `KClass<*>`, `*` is the star projection.\n * See the [Kotlin language
documentation](https://kotlinlang.org/docs/reference/generics.html#star-projections)\n * for more
information.\n *\n * public val STAR: KTypeProjection get() = star\n /**\n * Creates an
invariant projection of a given type. Invariant projection is just the type itself,\n * without any use-site variance
modifiers applied to it.\n * For example, in the type `Set<String>`, `String` is an invariant projection of the type
represented by the class `String`.\n *\n * @JvmStatic\n public fun invariant(type: KType):
KTypeProjection =\n KTypeProjection(KVariance.INVARIANT, type)\n /**\n * Creates a
contravariant projection of a given type, denoted by the `in` modifier applied to a type.\n * For example, in the
type `MutableList<in Number>`, `in Number` is a contravariant projection of the type of class `Number`.\n *^@
\n @JvmStatic\n public fun contravariant(type: KType): KTypeProjection =\n KTypeProjection(KVariance.IN, type)\n /**\n * Creates a covariant projection of a given type, denoted
by the `out` modifier applied to a type.\n * For example, in the type `Array<out Number>`, `out Number` is a
covariant projection of the type of class `Number`.\n *\n * @JvmStatic\n public fun covariant(type:
KType): KTypeProjection =\n KTypeProjection(KVariance.OUT, type)\n }\n}"/*\n * Copyright 2010-
2019 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n *^@package kotlin.reflect\n/**\n *
Represents variance applied to a type parameter on the declaration site (*declaration-site variance*),\n * or to a type
in a projection (*use-site variance*).\n *\n * See the [Kotlin language
documentation](https://kotlinlang.org/docs/reference/generics.html#variance)\n * for more information.\n *\n *
@see [KTypeParameter.variance]\n * @see [KTypeProjection]\n *^@SinceKotlin("1.1")\nenum class KVariance
{\n /**\n * The affected type parameter or type is *invariant*, which means it has no variance applied to it.\n
*\n * INVARIANT,\n /**\n * The affected type parameter or type is *contravariant*. Denoted by the `in`

```

modifier in the source code. `IN` `/*` The affected type parameter or type is `covariant`.  
Denoted by the `out` modifier in the source code. `OUT` `/*` Copyright 2010-2019 JetBrains s.r.o. and Kotlin Programming Language contributors. `/*` Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file. `/*` Returns a runtime representation of the given reified type [T] as an instance of [KType].

```

* Since Kotlin("1.6")
* WasExperimental(ExperimentalStdlibApi::class)
public inline fun <reified T>
 typeOf(): KType =
 throw UnsupportedOperationException("This function is implemented as an intrinsic on all
 supported platforms.")
 /* Copyright 2010-2019 JetBrains s.r.o. and Kotlin Programming Language
 contributors.
 * Use of this source code is governed by the Apache 2.0 license that can be found in the
 license/LICENSE.txt file.
 */
 @file:kotlin.jvm.JvmMultifileClass
 @file:kotlin.jvm.JvmName("StringsKt")
 package
 kotlin.text
 /*
 * An object to which char sequences and values can be appended.
 * Next interface
 Appendable {
 /*
 * Appends the specified character [value] to this Appendable and returns this instance.
 *
 * @param value the character to append.
 */
 fun append(value: Char): Appendable
 /*
 * Appends the specified character sequence [value] to this Appendable and returns this instance.
 *
 * @param value the character sequence to append. If [value] is `null`, then the four characters `null` are appended to this
 Appendable.
 */
 fun append(value: CharSequence?): Appendable
 /*
 * Appends a subsequence of
 the specified character sequence [value] to this Appendable and returns this instance.
 *
 * @param value the
 character sequence from which a subsequence is appended. If [value] is `null`,
 * then characters are appended
 as if [value] contained the four characters `null`.
 * @param startIndex the beginning (inclusive) of the
 subsequence to append.
 * @param endIndex the end (exclusive) of the subsequence to append.
 *
 * @throws IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of
 range of the [value] character sequence indices or when `startIndex > endIndex`.
 */
 fun append(value:
 CharSequence?, startIndex: Int, endIndex: Int): Appendable
 }
 /*
 * Appends a subsequence of the specified
 character sequence [value] to this Appendable and returns this instance.
 *
 * @param value the character
 sequence from which a subsequence is appended.
 * @param startIndex the beginning (inclusive) of the
 subsequence to append.
 * @param endIndex the end (exclusive) of the subsequence to append.
 *
 * @throws
 IndexOutOfBoundsException or [IllegalArgumentException] when [startIndex] or [endIndex] is out of range of the
 [value] character sequence indices or when `startIndex > endIndex`.
 */
 @SinceKotlin("1.4")
 @WasExperimental(ExperimentalStdlibApi::class)
 public fun <T : Appendable>
 T.appendRange(value: CharSequence, startIndex: Int, endIndex: Int): T {
 @Suppress("UNCHECKED_CAST")
 return append(value, startIndex, endIndex) as T
 }
 /*
 * Appends
 all arguments to the given [Appendable].
 */
 public fun <T : Appendable> T.append(vararg value:
 CharSequence?): T {
 for (item in value)
 append(item)
 return this
 }
 /*
 * Appends a line feed
 character (`\n`) to this Appendable.
 */
 @SinceKotlin("1.4")
 @kotlin.internal.InlineOnly
 public inline fun
 Appendable.appendLine(): Appendable = append("\n")
 /*
 * Appends value to the given Appendable and a line
 feed character (`\n`) after it.
 */
 @SinceKotlin("1.4")
 @kotlin.internal.InlineOnly
 public inline fun
 Appendable.appendLine(value: CharSequence?): Appendable = append(value).appendLine()
 /*
 * Appends value
 to the given Appendable and a line feed character (`\n`) after it.
 */
 @SinceKotlin("1.4")
 @kotlin.internal.InlineOnly
 public inline fun Appendable.appendLine(value: Char):
 Appendable = append(value).appendLine()
 @kotlin.internal fun <T> Appendable.appendElement(element: T,
 transform: ((T) -> CharSequence?) {
 when {
 transform != null -> append(transform(element))
 element is CharSequence -> append(element)
 element is Char -> append(element)
 else ->
 append(element.toString())
 }
 })
 /*
 * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming
 Language contributors.
 * Use of this source code is governed by the Apache 2.0 license that can be found in the
 license/LICENSE.txt file.
 */
 @file:kotlin.jvm.JvmMultifileClass
 @file:kotlin.jvm.JvmName("StringsKt")
 package
 kotlin.text
 /*
 * Trims leading whitespace characters followed by [marginPrefix] from every line of a source

```

string and removes the first and the last lines if they are blank (notice difference blank vs empty). Doesn't affect a line if it doesn't contain [marginPrefix] except the first and the last blank lines. Doesn't preserve the original line endings. @param marginPrefix non-blank string, which is used as a margin delimiter. Default is `|` (pipe character). @sample samples.text.Strings.trimMargin @see trimIndent @see kotlin.text.isWhitespace

```

public fun String.trimMargin(marginPrefix: String = "|"): String =
 replaceIndentByMargin("|", marginPrefix)

```

Detects indent by [marginPrefix] as it does [trimMargin] and replace it with [newIndent]. @param marginPrefix non-blank string, which is used as a margin delimiter. Default is `|` (pipe character).

```

public fun String.replaceIndentByMargin(newIndent: String = "|",
 marginPrefix: String = "|"): String {
 require(marginPrefix.isNotBlank()) { "marginPrefix must be non-blank string." }
 val lines = lines()
 return lines.reindent(length + newIndent.length * lines.size,
 getIndentFunction(newIndent), { line ->
 val firstNonWhitespaceIndex = line.indexOfFirst { !it.isWhitespace() }
 when {
 firstNonWhitespaceIndex == -1 -> null
 line.startsWith(marginPrefix, firstNonWhitespaceIndex) -> line.substring(firstNonWhitespaceIndex + marginPrefix.length)
 else -> null
 }
 })
}

```

Detects a common minimal indent of all the input lines, removes it from every line and also removes the first and the last lines if they are blank (notice difference blank vs empty). Note that blank lines do not affect the detected indent level. In case if there are non-blank lines with no leading whitespace characters (no indent at all) then the common indent is 0, and therefore this function doesn't change the indentation. Doesn't preserve the original line endings. @sample samples.text.Strings.trimIndent @see trimMargin @see kotlin.text.isBlank

```

public fun String.trimIndent(): String = replaceIndent("\n\n", "\n")

```

Detects a common minimal indent like it does [trimIndent] and replaces it with the specified [newIndent].

```

public fun String.replaceIndent(newIndent: String = "\n\n"): String {
 val lines = lines()
 val minCommonIndent = lines
 .filter(String::isNotBlank)
 .map(String::indentWidth)
 .minOrNull() ?: 0
 return lines.reindent(length + newIndent.length * lines.size,
 getIndentFunction(newIndent), { line -> line.drop(minCommonIndent) })
}

```

Prepends [indent] to every line of the original string. Doesn't preserve the original line endings.

```

public fun String.prependIndent(indent: String = "\n\n"): String =
 lineSequence().map {
 when {
 it.isBlank() -> {
 when {
 it.length < indent.length -> indent
 else -> it
 }
 }
 else -> indent + it
 }
 }.joinToString("\n\n")

```

```

private fun String.indentWidth(): Int = indexOfFirst { !it.isWhitespace() }.let {
 if (it == -1) length else it
}
private fun getIndentFunction(indent: String) = when {
 indent.isEmpty() -> { line: String -> line }
 else -> { line: String -> indent + line }
}
private inline fun List<String>.reindent(
 resultSizeEstimate: Int,
 indentAddFunction: (String) -> String,
 indentCutFunction: (String) -> String?): String {
 val lastIndex = lastIndex
 return mapIndexedNotNull { index, value ->
 if ((index == 0 || index == lastIndex) && value.isBlank())
 null
 else
 indentCutFunction(value)?.let(indentAddFunction)?: value
 }.joinTo(StringBuilder(resultSizeEstimate), "\n\n").toString()
}

```

Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors. Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.

```

package kotlin.text

/** Defines names for Unicode symbols used in proper Typography.
 *
 * The character "
 * \u2013 quotation mark
 *
 * The character $
 * \u2013 dollar sign
 *
 * The character &
 * \u2013 ampersand
 *
 * The character <
 * \u2013 less-than sign
 *
 * The character >
 * \u2013 greater-than sign
 *
 * The non-breaking space character
 *
 * The character ×
 *
 * The character ¢
 *
 * The character £
 *
 * The character §
 *
 * The character ©
 *
 * The character «
 *
 * @SinceKotlin("1.6")
 *
 * The character »
 *
 * @SinceKotlin("1.6")
 */
public const val quote: Char = '\u0022'
/** The character $
 * \u2013 dollar sign
 */
public const val dollar: Char = '\u0024'
/** The character &
 * \u2013 ampersand
 */
public const val amp: Char = '\u0026'
/** The character <
 * \u2013 less-than sign
 */
public const val less: Char = '\u003C'
/** The character >
 * \u2013 greater-than sign
 */
public const val greater: Char = '\u003E'
/** The non-breaking space character
 */
public const val nbsp: Char = '\u00A0'
/** The character ×
 */
public const val times: Char = '\u00D7'
/** The character ¢
 */
public const val cent: Char = '\u00A2'
/** The character £
 */
public const val pound: Char = '\u00A3'
/** The character §
 */
public const val section: Char = '\u00A7'
/** The character ©
 */
public const val copyright: Char = '\u00A9'
/** The character «
 */
@SinceKotlin("1.6")
public const val leftGuillemet: Char = '\u00AB'
/** The character »
 */
@SinceKotlin("1.6")

```

```

rightGuillemet: Char = "\u00BB"n /** The character ® */n public const val registered: Char =
"\u00AE"n /** The character ° */n public const val degree: Char = "\u00B0"n /** The character
± */n public const val plusMinus: Char = "\u00B1"n /** The character ¶ */n public const val
paragraph: Char = "\u00B6"n /** The character · */n public const val middleDot: Char = "\u00B7"n
/** The character ½ */n public const val half: Char = "\u00BD"n /** The character – */n
public const val ndash: Char = "\u2013"n /** The character — */n public const val mdash: Char =
"\u2014"n /** The character ‘ */n public const val leftSingleQuote: Char = "\u2018"n /** The
character ’ */n public const val rightSingleQuote: Char = "\u2019"n /** The character ‚ */n
public const val lowSingleQuote: Char = "\u201A"n /** The character “ */n public const val
leftDoubleQuote: Char = "\u201C"n /** The character ” */n public const val rightDoubleQuote: Char
= "\u201D"n /** The character „ */n public const val lowDoubleQuote: Char = "\u201E"n /** The
character † */n public const val dagger: Char = "\u2020"n /** The character ‡ */n public
const val doubleDagger: Char = "\u2021"n /** The character • */n public const val bullet: Char =
"\u2022"n /** The character … */n public const val ellipsis: Char = "\u2026"n /** The character
′ */n public const val prime: Char = "\u2032"n /** The character ″ */n public const val
doublePrime: Char = "\u2033"n /** The character € */n public const val euro: Char = "\u20AC"n
/** The character ™ */n public const val tm: Char = "\u2122"n /** The character ≈ */n
public const val almostEqual: Char = "\u2248"n /** The character ≠ */n public const val notEqual:
Char = "\u2260"n /** The character ≤ */n public const val lessOrEqual: Char = "\u2264"n /** The
character ≥ */n public const val greaterOrEqual: Char = "\u2265"n /** The character « */n
@Deprecated("This constant has a typo in the name. Use leftGuillemet instead.")
ReplaceWith("Typography.leftGuillemet()")n @DeprecatedSinceKotlin("1.6")n public const val
leftGuillemete: Char = "\u00AB"n /** The character » */n @Deprecated("This constant has a typo in
the name. Use rightGuillemet instead.") ReplaceWith("Typography.rightGuillemet()")n
@DeprecatedSinceKotlin("1.6")n public const val rightGuillemete: Char = "\u00BB"n }n /*n * Copyright
2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.n * Use of this source code is governed
by the Apache 2.0 license that can be found in the license/LICENSE.txt file.n */npackage kotlin.textn/n/**n *
Represents a collection of captured groups in a single match of a regular expression.n */n * This collection has size
of `groupCount + 1` where `groupCount` is the count of groups in the regular expression.n * Groups are indexed
from 1 to `groupCount` and group with the index 0 corresponds to the entire match.n */n * An element of the
collection at the particular index can be `null`n * if the corresponding group in the regular expression is optional
andn * there was no match captured by that group.n */npublic interface MatchGroupCollection :
Collection<MatchGroup?> {n/n /** Returns a group with the specified [index].n */n * @return An instance
of [MatchGroup] if the group with the specified [index] was matched or `null` otherwise.n */n * Groups are
indexed from 1 to the count of groups in the regular expression. A group with the index 0n * corresponds to the
entire match.n */n public operator fun get(index: Int): MatchGroup?n }n/n/**n * Extends
[MatchGroupCollection] by introducing a way to get matched groups by name, when regex supports it.n
*/n@SinceKotlin("1.1")npublic interface MatchNamedGroupCollection : MatchGroupCollection {n /**n *
Returns a named group with the specified [name].n */n * @return An instance of [MatchGroup] if the group with the
specified [name] was matched or `null` otherwise.n */n * @throws IllegalArgumentException if there is no group
with the specified [name] defined in the regex pattern.n */n * @throws UnsupportedOperationException if getting
named groups isn't supported on the current platform.n */n public operator fun get(name: String):
MatchGroup?n }n/n/**n * Represents the results from a single regular expression match.n */npublic interface
MatchResult {n /** The range of indices in the original string where match was captured. */n public val range:
IntRangen /** The substring from the input string captured by this match. */n public val value: Stringn /**n
* A collection of groups matched by the regular expression.n */n * This collection has size of `groupCount +
1` where `groupCount` is the count of groups in the regular expression.n */n * Groups are indexed from 1 to
`groupCount` and group with the index 0 corresponds to the entire match.n */n public val groups:

```



```

MatchGroupCollection\n /**\n * A list of matched indexed group values.\n *\n * This list has size of
`groupCount + 1` where `groupCount` is the count of groups in the regular expression.\n * Groups are indexed
from 1 to `groupCount` and group with the index 0 corresponds to the entire match.\n *\n * If the group in the
regular expression is optional and there were no match captured by that group,\n * corresponding item in
[groupValues] is an empty string.\n *\n * @sample
samples.text.Regexps.matchDestructuringToGroupValues\n *\n public val groupValues: List<String>\n\n
/**\n * An instance of [MatchResult.Destructured] wrapper providing components for destructuring assignment
of group values.\n *\n * component1 corresponds to the value of the first group, component2 \u2014 of the
second, and so on.\n *\n * @sample samples.text.Regexps.matchDestructuringToGroupValues\n *\n
public val destructured: Destructured get() = Destructured(this)\n\n /** Returns a new [MatchResult] with the
results for the next match, starting at the position\n * at which the last match ended (at the character after the last
matched character).\n *\n public fun next(): MatchResult?\n\n /**\n * Provides components for
destructuring assignment of group values.\n *\n * [component1] corresponds to the value of the first group,
[component2] \u2014 of the second, and so on.\n *\n * If the group in the regular expression is optional and
there were no match captured by that group,\n * corresponding component value is an empty string.\n *\n *
@sample samples.text.Regexps.matchDestructuringToGroupValues\n *\n public class Destructured internal
constructor(public val match: MatchResult) {\n @kotlin.internal.InlineOnly\n public operator inline fun
component1(): String = match.groupValues[1]\n @kotlin.internal.InlineOnly\n public operator inline fun
component2(): String = match.groupValues[2]\n @kotlin.internal.InlineOnly\n public operator inline fun
component3(): String = match.groupValues[3]\n @kotlin.internal.InlineOnly\n public operator inline fun
component4(): String = match.groupValues[4]\n @kotlin.internal.InlineOnly\n public operator inline fun
component5(): String = match.groupValues[5]\n @kotlin.internal.InlineOnly\n public operator inline fun
component6(): String = match.groupValues[6]\n @kotlin.internal.InlineOnly\n public operator inline fun
component7(): String = match.groupValues[7]\n @kotlin.internal.InlineOnly\n public operator inline fun
component8(): String = match.groupValues[8]\n @kotlin.internal.InlineOnly\n public operator inline fun
component9(): String = match.groupValues[9]\n @kotlin.internal.InlineOnly\n public operator inline fun
component10(): String = match.groupValues[10]\n\n /**\n * Returns destructured group values as a list of
strings.\n * First value in the returned list corresponds to the value of the first group, and so on.\n *\n
* @sample samples.text.Regexps.matchDestructuringToGroupValues\n *\n public fun toList():
List<String> = match.groupValues.subList(1, match.groupValues.size)\n }\n}"/\n * Copyright 2010-2021
JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the
Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
*\n\n@file:kotlin.jvm.JvmMultifileClass()\n@file:kotlin.jvm.JvmName("DurationUnitKt")\n\npackage
kotlin.time\n\n/**\n * The list of possible time measurement units, in which a duration can be expressed.\n *\n *
The smallest time unit is [NANOSECONDS] and the largest is [DAYS], which corresponds to exactly 24
[HOURS].\n *\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalTime::class)\npublic expect enum class
DurationUnit {\n /**\n * Time unit representing one nanosecond, which is 1/1000 of a microsecond.\n *\n
NANOSECONDS,\n /**\n * Time unit representing one microsecond, which is 1/1000 of a millisecond.\n
*\n MICROSECONDS,\n /**\n * Time unit representing one millisecond, which is 1/1000 of a second.\n
*\n MILLISECONDS,\n /**\n * Time unit representing one second.\n *\n SECONDS,\n /**\n *
Time unit representing one minute.\n *\n MINUTES,\n /**\n * Time unit representing one hour.\n *\n
HOURS,\n /**\n * Time unit representing one day, which is always equal to 24 hours.\n *\n
DAYS;\n}\n\n/** Converts the given time duration [value] expressed in the specified [sourceUnit] into the specified
[targetUnit].\n *\n@SinceKotlin("1.3")\ninternal expect fun convertDurationUnit(value: Double, sourceUnit:
DurationUnit, targetUnit: DurationUnit): Double\n\n// overflown result is
unspecified\n@SinceKotlin("1.5")\ninternal expect fun convertDurationUnitOverflow(value: Long, sourceUnit:
DurationUnit, targetUnit: DurationUnit): Long\n\n// overflown result is coerced in the Long range
boundaries\n@SinceKotlin("1.5")\ninternal expect fun convertDurationUnit(value: Long, sourceUnit:

```

```

DurationUnit, targetUnit: DurationUnit):
Long\n\n\n@SinceKotlin("1.3")\n@Suppress("REDUNDANT_ELSE_IN_WHEN")\ninternal fun
DurationUnit.shortName(): String = when (this) {\n DurationUnit.NANOSECONDS -> "ns"\n
DurationUnit.MICROSECONDS -> "us"\n DurationUnit.MILLISECONDS -> "ms"\n
DurationUnit.SECONDS -> "s"\n DurationUnit.MINUTES -> "m"\n DurationUnit.HOURS -> "h"\n
DurationUnit.DAYS -> "d"\n else -> error("Unknown unit: $this")\n}\n\n@SinceKotlin("1.5")\ninternal fun
durationUnitByShortName(shortName: String): DurationUnit = when (shortName) {\n "ns" ->
DurationUnit.NANOSECONDS\n "us" -> DurationUnit.MICROSECONDS\n "ms" ->
DurationUnit.MILLISECONDS\n "s" -> DurationUnit.SECONDS\n "m" -> DurationUnit.MINUTES\n
"h" -> DurationUnit.HOURS\n "d" -> DurationUnit.DAYS\n else -> throw
IllegalArgumentException("Unknown duration unit short name:
$shortName")\n}\n\n@SinceKotlin("1.5")\ninternal fun durationUnitByIsoChar(isoChar: Char,
isTimeComponent: Boolean): DurationUnit =\n when {\n !isTimeComponent -> {\n when (isoChar)
{\n 'D' -> DurationUnit.DAYS\n else -> throw IllegalArgumentException("Invalid or
unsupported duration ISO non-time unit: $isoChar")\n }\n }\n else -> {\n when (isoChar) {\n
 'H' -> DurationUnit.HOURS\n 'M' -> DurationUnit.MINUTES\n 'S' ->
DurationUnit.SECONDS\n else -> throw IllegalArgumentException("Invalid duration ISO time unit:
$isoChar")\n }\n }\n },"/**\n * Copyright 2010-2019 JetBrains s.r.o. and Kotlin Programming
Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\npackage kotlin.time\n\nimport kotlin.annotation.AnnotationTarget.*\n\n/**\n * This annotation marks the experimental preview of the standard library API for measuring time and working with
durations.\n */\n * > Note that this API is in a preview state and has a very high chance of being changed in the
future.\n * Do not use it if you develop a library since your library will become binary incompatible\n * with the
future versions of the standard library.\n */\n * Any usage of a declaration annotated with `@ExperimentalTime`
must be accepted either by\n * annotating that usage with the [OptIn] annotation, e.g.
`@OptIn(ExperimentalTime::class)`,\n * or by using the compiler argument `-Xopt-
in=kotlin.time.ExperimentalTime`. \n */\n@Suppress("DEPRECATION")\n@Experimental(level =
Experimental.Level.ERROR)\n@RequiresOptIn(level =
RequiresOptIn.Level.ERROR)\n@MustBeDocumented\n@Retention(AnnotationRetention.BINARY)\n@Target(\n
CLASS,\n ANNOTATION_CLASS,\n PROPERTY,\n FIELD,\n LOCAL_VARIABLE,\n
VALUE_PARAMETER,\n CONSTRUCTOR,\n FUNCTION,\n PROPERTY_GETTER,\n
PROPERTY_SETTER,\n TYPEALIAS)\n@SinceKotlin("1.3")\npublic annotation class
ExperimentalTime\n","/**\n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\npackage kotlin.time\n\n/**\n * A source of time for measuring time intervals.\n
*/\n * The only operation provided by the time source is [markNow]. It returns a [TimeMark], which can be used to
query the elapsed time later.\n */\n * @see [measureTime]\n * @see [measureTimedValue]\n
*/\n@SinceKotlin("1.3")\n@ExperimentalTime\npublic interface TimeSource {\n /**\n * Marks a point in
time on this time source.\n */\n * The returned [TimeMark] instance encapsulates the captured time point and
allows querying\n * the duration of time interval [elapsed][TimeMark.elapsedNow] from that point.\n */\n
public fun markNow(): TimeMark\n\n /**\n * The most precise time source available in the platform.\n */\n
 * This time source returns its readings from a source of monotonic time when it is available in a target platform,\n
 * and resorts to a non-monotonic time source otherwise.\n */\n public object Monotonic : TimeSource by
MonotonicTimeSource {\n override fun toString(): String = MonotonicTimeSource.toString()\n }\n\n public companion object {\n /**\n * Represents a time point notched on a particular [TimeSource].
Remains bound to the time source it was taken from\n * and allows querying for the duration of time elapsed from
that point (see the function [elapsedNow]).\n */\n @SinceKotlin("1.3")\n @ExperimentalTime\n public abstract class
TimeMark {\n /**\n * Returns the amount of time passed from this mark measured with the time source from

```

```

which this mark was taken.\n *\n * Note that the value returned by this function can change on subsequent
invocations.\n */\n public abstract fun elapsedNow(): Duration\n\n /**\n * Returns a time mark on the same
time source that is ahead of this time mark by the specified [duration].\n *\n * The returned time mark is more
late when the [duration] is positive, and more _early_ when the [duration] is negative.\n */\n public open
operator fun plus(duration: Duration): TimeMark = AdjustedTimeMark(this, duration)\n\n /**\n * Returns a
time mark on the same time source that is behind this time mark by the specified [duration].\n *\n * The
returned time mark is more _early_ when the [duration] is positive, and more _late_ when the [duration] is
negative.\n */\n public open operator fun minus(duration: Duration): TimeMark = plus(-duration)\n\n /**\n * Returns true if this time mark has passed according to the time source from which this mark was taken.\n *\n * Note that the value returned by this function can change on subsequent invocations.\n * If the time source is
monotonic, it can change only from `false` to `true`, namely, when the time mark becomes behind the current point
of the time source.\n */\n public fun hasPassedNow(): Boolean = !elapsedNow().isNegative()\n\n /**\n *
Returns false if this time mark has not passed according to the time source from which this mark was taken.\n *\n * Note that the value returned by this function can change on subsequent invocations.\n * If the time source is
monotonic, it can change only from `true` to `false`, namely, when the time mark becomes behind the current point
of the time source.\n */\n public fun hasNotPassedNow(): Boolean =
elapsedNow().isNegative()\n\n\n@ExperimentalTime\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\n@
Deprecated(\n \ "Subtracting one TimeMark from another is not a well defined operation because these time marks
could have been obtained from the different time sources.\n",\n level =
DeprecationLevel.ERROR\n)\n@Suppress("UNUSED_PARAMETER")\npublic inline operator fun
TimeMark.minus(other: TimeMark): Duration = throw Error("Operation is
disallowed.")\n\n@ExperimentalTime\n@SinceKotlin("1.3")\n@kotlin.internal.InlineOnly\n@Deprecated(\n
\C"Comparing one TimeMark to another is not a well defined operation because these time marks could have been
obtained from the different time sources.\n",\n level =
DeprecationLevel.ERROR\n)\n@Suppress("UNUSED_PARAMETER")\npublic inline operator fun
TimeMark.compareTo(other: TimeMark): Int = throw Error("Operation is
disallowed.")\n\n\n@ExperimentalTime\nprivate class AdjustedTimeMark(val mark: TimeMark, val adjustment:
Duration) : TimeMark() {\n override fun elapsedNow(): Duration = mark.elapsedNow() - adjustment\n\n
override fun plus(duration: Duration): TimeMark = AdjustedTimeMark(mark, adjustment + duration)\n}\n"/\n *
Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is
governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\npackage
kotlin.time\n\n@SinceKotlin("1.3")\n@ExperimentalTime\ninternal expect object MonotonicTimeSource :
TimeSource\n\n/**\n * An abstract class used to implement time sources that return their readings as [Long] values
in the specified [unit].\n *\n * @property unit The unit in which this time source's readings are expressed.\n
*/\n\n@SinceKotlin("1.3")\n@ExperimentalTime\npublic abstract class AbstractLongTimeSource(protected val
unit: DurationUnit) : TimeSource {\n /**\n * This protected method should be overridden to return the current
reading of the time source expressed as a [Long] number\n * in the unit specified by the [unit] property.\n */\n\n protected abstract fun read(): Long\n\n private class LongTimeMark(private val startedAt: Long, private val
timeSource: AbstractLongTimeSource, private val offset: Duration) : TimeMark() {\n override fun
elapsedNow(): Duration = (timeSource.read() - startedAt).toDuration(timeSource.unit) - offset\n override fun
plus(duration: Duration): TimeMark = LongTimeMark(startedAt, timeSource, offset + duration)\n }\n\n override
fun markNow(): TimeMark = LongTimeMark(read(), this, Duration.ZERO)\n}\n\n/**\n * An abstract class used to
implement time sources that return their readings as [Double] values in the specified [unit].\n *\n * @property unit
The unit in which this time source's readings are expressed.\n
*/\n\n@SinceKotlin("1.3")\n@ExperimentalTime\npublic abstract class AbstractDoubleTimeSource(protected val
unit: DurationUnit) : TimeSource {\n /**\n * This protected method should be overridden to return the current
reading of the time source expressed as a [Double] number\n * in the unit specified by the [unit] property.\n
*/\n\n protected abstract fun read(): Double\n\n private class DoubleTimeMark(private val startedAt: Double,

```

```

private val timeSource: AbstractDoubleTimeSource, private val offset: Duration) : TimeMark() {
 override fun elapsedNow(): Duration = (timeSource.read() - startedAt).toDuration(timeSource.unit) - offset
 override fun plus(duration: Duration): TimeMark = DoubleTimeMark(startedAt, timeSource, offset + duration)
}

override fun markNow(): TimeMark = DoubleTimeMark(read(), this, Duration.ZERO)

/**
 * A time source that has programmatically updatable readings. It is useful as a predictable source of time in tests.
 * The current reading value can be advanced by the specified duration amount with the operator [plusAssign]:
 * val timeSource = TestTimeSource()
 * timeSource += 10.seconds
 * Implementation note: the current reading value is stored as a [Long] number of nanoseconds,
 * thus it's capable to represent a time range of approximately 1292 years.
 * Should the reading value overflow as the result of [plusAssign] operation, an [IllegalStateException] is thrown.
 */
@SinceKotlin("1.3")
@ExperimentalTime
public class TestTimeSource : AbstractLongTimeSource(unit = DurationUnit.NANOSECONDS) {
 private var reading: Long = 0L

 override fun read(): Long = reading

 /**
 * Advances the current reading value of this time source by the specified [duration].
 * [duration] value is rounded down towards zero when converting it to a [Long] number of nanoseconds.
 * For example, if the duration being added is `0.6.nanoseconds`, the reading doesn't advance because
 * the duration value is rounded to zero nanoseconds.
 * @throws IllegalStateException when the reading value overflows as the result of this operation.
 */
 public operator fun plusAssign(duration: Duration) {
 val longDelta = duration.toLong(unit)
 reading = if (longDelta != Long.MIN_VALUE && longDelta != Long.MAX_VALUE) {
 // when delta fits in long, add it as long
 val newReading = reading + longDelta
 if (reading xor longDelta >= 0 && reading xor newReading < 0)
 overflow(duration)
 newReading
 } else {
 val delta = duration.toDouble(unit)
 // when delta is greater than long, add it as double
 val newReading = reading + delta
 if (newReading > Long.MAX_VALUE || newReading < Long.MIN_VALUE)
 overflow(duration)
 newReading.toLong()
 }
 }

 private fun overflow(duration: Duration) {
 throw IllegalStateException("TestTimeSource will overflow if its reading ${reading}ns is advanced by $duration.")
 }
}

/**
 * Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors.
 * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.
 */
package kotlin.time

import kotlin.contracts.*

/**
 * Executes the given function [block] and returns the duration of elapsed time interval.
 * The elapsed time is measured with [TimeSource.Monotonic].
 */
@SinceKotlin("1.3")
@ExperimentalTime
public inline fun measureTime(block: () -> Unit): Duration {
 contract {
 callsInPlace(block, InvocationKind.EXACTLY_ONCE)
 }
 return TimeSource.Monotonic.measureTime(block)
}

/**
 * Executes the given function [block] and returns the duration of elapsed time interval.
 * The elapsed time is measured with the specified `this` [TimeSource] instance.
 */
@SinceKotlin("1.3")
@ExperimentalTime
public inline fun TimeSource.measureTime(block: () -> Unit): Duration {
 contract {
 callsInPlace(block, InvocationKind.EXACTLY_ONCE)
 }
 val mark = markNow()
 block()
 return mark.elapsedNow()
}

/**
 * Data class representing a result of executing an action, along with the duration of elapsed time interval.
 * @property value the result of the action.
 * @property duration the time elapsed to execute the action.
 */
@SinceKotlin("1.3")
@ExperimentalTime
public data class TimedValue<T>(val value: T, val duration: Duration)

/**
 * Executes the given function [block] and returns an instance of [TimedValue] class, containing both
 * the result of the function execution and the duration of elapsed time interval.
 * The elapsed time is measured with [TimeSource.Monotonic].
 */
@SinceKotlin("1.3")
@ExperimentalTime
public inline fun <T> measureTimedValue(block: () -> T): TimedValue<T> {
 contract {
 callsInPlace(block, InvocationKind.EXACTLY_ONCE)
 }
 return TimeSource.Monotonic.measureTimedValue(block)
}

/**
 * Executes the given [block] and returns an instance of [TimedValue] class, containing both
 * the result of function execution and the duration of elapsed time interval.
 * The elapsed time is measured with the specified `this` [TimeSource] instance.
 */
@SinceKotlin("1.3")
@ExperimentalTime
public inline fun <T> TimeSource.measureTimedValue(block: () -> T): TimedValue<T> {
 contract {
 callsInPlace(block, InvocationKind.EXACTLY_ONCE)
 }
}

```





`this.toInt().mod(other.toInt()).toByte()`  
 Divides this value by the other value, flooring the result to an integer that is closer to negative infinity.

`Byte.floorDiv(other: Short): Int =` `this.toInt().floorDiv(other.toInt())`  
 Calculates the remainder of flooring division of this value by the other value. The result is either zero or has the same sign as the `_divisor_` and has the absolute value less than the absolute value of the divisor.

`Byte.mod(other: Short): Short =` `this.toInt().mod(other.toInt()).toShort()`  
 Divides this value by the other value, flooring the result to an integer that is closer to negative infinity.

`Byte.floorDiv(other: Int): Int =` `this.toInt().floorDiv(other)`  
 Calculates the remainder of flooring division of this value by the other value. The result is either zero or has the same sign as the `_divisor_` and has the absolute value less than the absolute value of the divisor.

`Byte.mod(other: Int): Int =` `this.toInt().mod(other)`  
 Divides this value by the other value, flooring the result to an integer that is closer to negative infinity.

`Byte.floorDiv(other: Long): Long =` `this.toLong().floorDiv(other)`  
 Calculates the remainder of flooring division of this value by the other value. The result is either zero or has the same sign as the `_divisor_` and has the absolute value less than the absolute value of the divisor.

`Byte.mod(other: Long): Long =` `this.toLong().mod(other)`  
 Divides this value by the other value, flooring the result to an integer that is closer to negative infinity.

`Short.floorDiv(other: Byte): Int =` `this.toInt().floorDiv(other.toInt())`  
 Calculates the remainder of flooring division of this value by the other value. The result is either zero or has the same sign as the `_divisor_` and has the absolute value less than the absolute value of the divisor.

`Short.mod(other: Byte): Byte =` `this.toInt().mod(other.toInt()).toByte()`  
 Divides this value by the other value, flooring the result to an integer that is closer to negative infinity.

`Short.floorDiv(other: Short): Int =` `this.toInt().floorDiv(other.toInt())`  
 Calculates the remainder of flooring division of this value by the other value. The result is either zero or has the same sign as the `_divisor_` and has the absolute value less than the absolute value of the divisor.

`Short.mod(other: Short): Short =` `this.toInt().mod(other.toInt()).toShort()`  
 Divides this value by the other value, flooring the result to an integer that is closer to negative infinity.

`Short.floorDiv(other: Int): Int =` `this.toInt().floorDiv(other)`  
 Calculates the remainder of flooring division of this value by the other value. The result is either zero or has the same sign as the `_divisor_` and has the absolute value less than the absolute value of the divisor.

`Short.mod(other: Int): Int =` `this.toInt().mod(other)`  
 Divides this value by the other value, flooring the result to an integer that is closer to negative infinity.

`Short.floorDiv(other: Long): Long =` `this.toLong().floorDiv(other)`  
 Calculates the remainder of flooring division of this value by the other value. The result is either zero or has the same sign as the `_divisor_` and has the absolute value less than the absolute value of the divisor.

`Short.mod(other: Long): Long =` `this.toLong().mod(other)`  
 Divides this value by the other value, flooring the result to an integer that is closer to negative infinity.

`Int.floorDiv(other: Byte): Int =` `this.floorDiv(other.toInt())`  
 Calculates the remainder of flooring division of this value by the other value. The result is either zero or has the same sign as the `_divisor_` and has the absolute value less than the absolute value of the divisor.

`Int.mod(other: Byte): Byte =` `this.mod(other.toInt()).toByte()`  
 Divides this value by the other value,

flooring the result to an integer that is closer to negative infinity.

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Int.floorDiv(other: Short): Int = \n this.floorDiv(other.toInt())\n\n/**\n * Calculates the remainder of flooring division of this value by the other\n * value.\n * \n * The result is either zero or has the same sign as the _divisor_ and has the absolute value less than the\n * absolute value of the divisor.\n */\n\n*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun\nInt.mod(other: Short): Short = \n this.mod(other.toInt()).toShort()\n\n/** Divides this value by the other value,\n * flooring the result to an integer that is closer to negative infinity.
```

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Int.floorDiv(other: Int): Int {\n var q =\n this / other\n if (this xor other < 0 && q * other != this) q--\n return q\n}\n\n/**\n * Calculates the remainder of\n * flooring division of this value by the other value.\n * \n * The result is either zero or has the same sign as the\n * _divisor_ and has the absolute value less than the absolute value of the divisor.\n */
```

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Int.mod(other: Int): Int {\n val r = this\n % other\n return r + (other and (((r xor other) and (r or -r)) shr 31))\n}\n\n/** Divides this value by the other value,\n * flooring the result to an integer that is closer to negative infinity.
```

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Int.floorDiv(other: Long): Long = \n this.toLong().floorDiv(other)\n\n/**\n * Calculates the remainder of flooring division of this value by the other\n * value.\n * \n * The result is either zero or has the same sign as the _divisor_ and has the absolute value less than the\n * absolute value of the divisor.\n */\n\n*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun\nInt.mod(other: Long): Long = \n this.toLong().mod(other)\n\n/** Divides this value by the other value, flooring\n * the result to an integer that is closer to negative infinity.
```

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Long.floorDiv(other: Byte): Long = \n this.floorDiv(other.toLong())\n\n/**\n * Calculates the remainder of flooring division of this value by the other\n * value.\n * \n * The result is either zero or has the same sign as the _divisor_ and has the absolute value less than the\n * absolute value of the divisor.\n */\n\n*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun\nLong.mod(other: Byte): Byte = \n this.mod(other.toLong()).toByte()\n\n/** Divides this value by the other value,\n * flooring the result to an integer that is closer to negative infinity.
```

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Long.floorDiv(other: Short): Long = \n this.floorDiv(other.toLong())\n\n/**\n * Calculates the remainder of flooring division of this value by the other\n * value.\n * \n * The result is either zero or has the same sign as the _divisor_ and has the absolute value less than the\n * absolute value of the divisor.\n */\n\n*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun\nLong.mod(other: Short): Short = \n this.mod(other.toLong()).toShort()\n\n/** Divides this value by the other\n * value, flooring the result to an integer that is closer to negative infinity.
```

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Long.floorDiv(other: Int): Long = \n this.floorDiv(other.toLong())\n\n/**\n * Calculates the remainder of flooring division of this value by the other\n * value.\n * \n * The result is either zero or has the same sign as the _divisor_ and has the absolute value less than the\n * absolute value of the divisor.\n */\n\n*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun\nLong.mod(other: Int): Int = \n this.mod(other.toLong()).toInt()\n\n/** Divides this value by the other value,\n * flooring the result to an integer that is closer to negative infinity.
```

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Long.floorDiv(other: Long): Long {\n var q = this / other\n if (this xor other < 0 && q * other != this) q--\n return q\n}\n\n/**\n * Calculates the\n * remainder of flooring division of this value by the other value.\n * \n * The result is either zero or has the same sign\n * as the _divisor_ and has the absolute value less than the absolute value of the divisor.\n */
```

```
*\n@SinceKotlin("1.5")\n@kotlin.internal.InlineOnly\npublic inline fun Long.mod(other: Long): Long {\n val r = this % other\n return r + (other and (((r xor other) and (r or -r)) shr 63))\n}\n\n/**\n * Calculates the remainder\n * of flooring division of this value by the other value.\n * \n * The result is either zero or has the same sign as the\n * _divisor_ and has the absolute value less than the absolute value of the divisor.\n * \n * If the result cannot be\n * represented exactly, it is rounded to the nearest representable number. In this case the absolute value of the result\n * can be less than or _equal to_ the absolute value of the divisor.\n */
```



```

*^@SinceKotlin("1.5")^@kotlin.internal.InlineOnly^public inline fun Float.mod(other: Float): Float {^ val r
= this % other^ return if (r != 0.0.toFloat() && r.sign != other.sign) r + other else r}^n/^n/^n * Calculates the
remainder of flooring division of this value by the other value.^n * ^n * The result is either zero or has the same sign
as the _divisor_ and has the absolute value less than the absolute value of the divisor.^n * ^n * If the result cannot be
represented exactly, it is rounded to the nearest representable number. In this case the absolute value of the result
can be less than or _equal to_ the absolute value of the divisor.^n
*^@SinceKotlin("1.5")^@kotlin.internal.InlineOnly^public inline fun Float.mod(other: Double): Double = ^n
this.toDouble().mod(other)^n/^n/^n * Calculates the remainder of flooring division of this value by the other
value.^n * ^n * The result is either zero or has the same sign as the _divisor_ and has the absolute value less than the
absolute value of the divisor.^n * ^n * If the result cannot be represented exactly, it is rounded to the nearest
representable number. In this case the absolute value of the result can be less than or _equal to_ the absolute value of
the divisor.^n
*^@SinceKotlin("1.5")^@kotlin.internal.InlineOnly^public inline fun Double.mod(other: Float):
Double = ^n this.mod(other.toDouble())^n/^n/^n * Calculates the remainder of flooring division of this value by
the other value.^n * ^n * The result is either zero or has the same sign as the _divisor_ and has the absolute value less
than the absolute value of the divisor.^n * ^n * If the result cannot be represented exactly, it is rounded to the nearest
representable number. In this case the absolute value of the result can be less than or _equal to_ the absolute value of
the divisor.^n
*^@SinceKotlin("1.5")^@kotlin.internal.InlineOnly^public inline fun Double.mod(other:
Double): Double {^ val r = this % other^ return if (r != 0.0 && r.sign != other.sign) r + other else
r}^n/^n/^n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.^n * Use of
this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.^n
*^@package kotlin^@nimport kotlin.internal.InlineOnly^@n/^n/^n * Returns a hash code value for the object or
zero if the object is `null`.^n * ^n * @see Any.hashCode^@n
*^@SinceKotlin("1.3")^@InlineOnly^public inline
fun Any?.hashCode(): Int = this?.hashCode() ?: 0^",/^n/^n * Copyright 2010-2020 JetBrains s.r.o. and Kotlin
Programming Language contributors.^n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.^n
*^@package kotlin^@n/^n/^n * Represents a version of the Kotlin standard
library.^n * ^n * [major], [minor] and [patch] are integer components of a version.^n * they must be non-negative and
not greater than 255 (MAX_COMPONENT_VALUE).^n * ^n * @constructor Creates a version from all three
components.^n
*^@SinceKotlin("1.1")^public class KotlinVersion(val major: Int, val minor: Int, val patch: Int) :
Comparable<KotlinVersion> {^n /^^n * Creates a version from [major] and [minor] components, leaving
[patch] component zero.^n * ^n * public constructor(major: Int, minor: Int) : this(major, minor, 0)^n^ private val
version = versionOf(major, minor, patch)^n^ private fun versionOf(major: Int, minor: Int, patch: Int): Int {^n
require(major in 0..MAX_COMPONENT_VALUE && minor in 0..MAX_COMPONENT_VALUE && patch in
0..MAX_COMPONENT_VALUE) {^n "Version components are out of range: $major.$minor.$patch"^n
}^n return major.shl(16) + minor.shl(8) + patch^ }^n /^^n * Returns the string representation of this
version.^n
*^@ override fun toString(): String = "$major.$minor.$patch"^n^ override fun equals(other:
Any?): Boolean {^n if (this === other) return true^ val otherVersion = (other as? KotlinVersion) ?: return
false^ return this.version == otherVersion.version^ }^n^ override fun hashCode(): Int = version^n^
override fun compareTo(other: KotlinVersion): Int = version - other.version^n^ /^^n * Returns `true` if this
version is not less than the version specified^n * with the provided [major] and [minor] components.^n
*^@ public fun isAtLeast(major: Int, minor: Int): Boolean = // this.version >= versionOf(major, minor, 0)^n
this.major > major || (this.major == major &&^n this.minor >= minor)^n^ /^^n * Returns `true` if this
version is not less than the version specified^n * with the provided [major], [minor] and [patch] components.^n
*^@ public fun isAtLeast(major: Int, minor: Int, patch: Int): Boolean = // this.version >= versionOf(major, minor,
patch)^n this.major > major || (this.major == major &&^n (this.minor > minor || this.minor == minor
&&^n this.patch >= patch))^n^ companion object {^n /^^n * Maximum value a version
component can have, a constant value 255.^n * ^n // NOTE: Must be placed before CURRENT because its
initialization requires this field being initialized in JS^n public const val MAX_COMPONENT_VALUE =
255^n^ /^^n * Returns the current version of the Kotlin standard library.^n * ^n

```

```

@kotlin.jvm.JvmField\n public val CURRENT: KotlinVersion = KotlinVersionCurrentValue.get()\n
}\n}\n\n// this class is ignored during classpath normalization when considering whether to recompile dependencies\nin Kotlin build\nprivate object KotlinVersionCurrentValue {\n @kotlin.jvm.JvmStatic\n fun get():\n KotlinVersion = KotlinVersion(1, 6, 0) // value is written here automatically during build\n}", /*\n * Copyright\n2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed\nby the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n\n*/\n\n@file:kotlin.jvm.JvmName("LateinitKt")\n@file:Suppress("unused")\n\npackage kotlin\n\nimport\nkotlin.internal.InlineOnly\nimport kotlin.internal.AccessibleLateinitPropertyLiteral\nimport\nkotlin.reflect.KProperty0\n\n/**\n * Returns `true` if this lateinit property has been assigned a value, and `false`\notherwise.\n * Cannot be used in an inline function, to avoid binary compatibility issues.\n\n*/\n\n@SinceKotlin("1.2")\n@InlineOnly\ninline val @receiver: AccessibleLateinitPropertyLiteral\nKProperty0<*>.isInitialized: Boolean\n get() = throw NotImplementedError("Implementation is\nintrinsic")\n}", /*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use\nof this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n\n*/\n\n@file:kotlin.jvm.JvmName("LazyKt")\n@file:kotlin.jvm.JvmMultifileClass\n\npackage kotlin\n\nimport\nkotlin.reflect.KProperty\n\n/**\n * Represents a value with lazy initialization.\n * To create an instance of\n[Lazy] use the [lazy] function.\n\n*/\n\npublic interface Lazy<out T> {\n /**\n * Gets the lazily initialized value of\nthe current Lazy instance.\n * Once the value was initialized it must not change during the rest of lifetime of this\nLazy instance.\n *\n * public val value: T\n */\n /**\n * Returns `true` if a value for this Lazy instance has been\nalready initialized, and `false` otherwise.\n * Once this function has returned `true` it stays `true` for the rest of\nlifetime of this Lazy instance.\n *\n * public fun isInitialized(): Boolean\n}\n\n/**\n * Creates a new instance of\nthe [Lazy] that is already initialized with the specified [value].\n\n*/\n\npublic fun <T> lazyOf(value: T): Lazy<T> =\n InitializedLazyImpl(value)\n\n/**\n * An extension to delegate a read-only property of type [T] to an instance of\n[Lazy].\n * This extension allows to use instances of Lazy for property delegation:\n * `val property: String by\nlazy { initializer }`\n\n*/\n\n@kotlin.internal.InlineOnly\n\npublic inline operator fun <T> Lazy<T>.getValue(thisRef:\nAny?, property: KProperty<*>): T = value\n\n/**\n * Specifies how a [Lazy] instance synchronizes initialization\namong multiple threads.\n\n*/\n\npublic enum class LazyThreadSafetyMode {\n /**\n * Locks are used to ensure\nthat only a single thread can initialize the [Lazy] instance.\n *\n * SYNCHRONIZED,\n}\n\n/**\n * Initializer\nfunction can be called several times on concurrent access to uninitialized [Lazy] instance value,\n * but only the\nfirst returned value will be used as the value of [Lazy] instance.\n *\n * PUBLICATION,\n}\n\n/**\n * No\nlocks are used to synchronize an access to the [Lazy] instance value; if the instance is accessed from multiple\nthreads, its behavior is undefined.\n *\n * This mode should not be used unless the [Lazy] instance is\nguaranteed never to be initialized from more than one thread.\n *\n * NONE,\n}\n\n\n\ninternal object\nUNINITIALIZED_VALUE\n\n// internal to be called from lazy in JS\ninternal class UnsafeLazyImpl<out\nT>(initializer: () -> T) : Lazy<T>, Serializable {\n private var initializer: () -> T? = initializer\n private var\n_value: Any? = UNINITIALIZED_VALUE\n\n override val value: T\n get() {\n if (_value ===\nUNINITIALIZED_VALUE) {\n _value = initializer!!()\n initializer = null\n }\n\n @Suppress("UNCHECKED_CAST")\n return _value as T\n }\n\n override fun isInitialized():\nBoolean = _value !== UNINITIALIZED_VALUE\n\n override fun toString(): String = if (isInitialized())\nvalue.toString() else "Lazy value not initialized yet.\n\n private fun writeReplace(): Any =\n InitializedLazyImpl(value)\n}\n\n\n\ninternal class InitializedLazyImpl<out T>(override val value: T) : Lazy<T>,\nSerializable {\n override fun isInitialized(): Boolean = true\n\n override fun toString(): String =\nvalue.toString()\n}\n}", /*\n * Copyright 2010-2019 JetBrains s.r.o. and Kotlin Programming Language\ncontributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the\nlicense/LICENSE.txt file.\n\n*/\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("NumbersKt")\n\npackage kotlin\n\n/**\n * Counts the number of set bits in the binary representation of this [Int] number.\n\n*/\n\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n\npublic expect fun

```

Int.countOneBits(): Int\n\n/\*\*\n \* Counts the number of consecutive most significant bits that are zero in the binary representation of this [Int] number.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun

Int.countLeadingZeroBits(): Int\n\n/\*\*\n \* Counts the number of consecutive least significant bits that are zero in the binary representation of this [Int] number.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun

Int.countTrailingZeroBits(): Int\n\n/\*\*\n \* Returns a number having a single bit set in the position of the most significant set bit of this [Int] number,\n \* or zero, if this number is zero.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun

Int.takeHighestOneBit(): Int\n\n/\*\*\n \* Returns a number having a single bit set in the position of the least significant set bit of this [Int] number,\n \* or zero, if this number is zero.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun

Int.takeLowestOneBit(): Int\n\n/\*\*\n \* Rotates the binary representation of this [Int] number left by the specified [bitCount] number of bits.\n \* The most significant bits pushed out from the left side reenter the number as the least significant bits on the right side.\n \* Rotating the number left by a negative bit count is the same as rotating it right by the negated bit count:\n \* `number.rotateLeft(-n) == number.rotateRight(n)`\n \* Rotating by a multiple of [Int.SIZE\_BITS] (32) returns the same number, or more generally\n \* `number.rotateLeft(n) == number.rotateLeft(n % 32)`\n

\*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun

Int.rotateLeft(bitCount: Int): Int\n\n/\*\*\n \* Rotates the binary representation of this [Int] number right by the specified [bitCount] number of bits.\n \* The least significant bits pushed out from the right side reenter the number as the most significant bits on the left side.\n \* Rotating the number right by a negative bit count is the same as rotating it left by the negated bit count:\n \* `number.rotateRight(-n) == number.rotateLeft(n)`\n \* Rotating by a multiple of [Int.SIZE\_BITS] (32) returns the same number, or more generally\n \* `number.rotateRight(n) == number.rotateRight(n % 32)`\n

\*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun

Int.rotateRight(bitCount: Int): Int\n\n/\*\*\n \* Counts the number of set bits in the binary representation of this [Long] number.\n \*@\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun

Long.countOneBits(): Int\n\n/\*\*\n \* Counts the number of consecutive most significant bits that are zero in the binary representation of this [Long] number.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun

Long.countLeadingZeroBits(): Int\n\n/\*\*\n \* Counts the number of consecutive least significant bits that are zero in the binary representation of this [Long] number.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun

Long.countTrailingZeroBits(): Int\n\n/\*\*\n \* Returns a number having a single bit set in the position of the most significant set bit of this [Long] number,\n \* or zero, if this number is zero.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun

Long.takeHighestOneBit(): Long\n\n/\*\*\n \* Returns a number having a single bit set in the position of the least significant set bit of this [Long] number,\n \* or zero, if this number is zero.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun

Long.takeLowestOneBit(): Long\n\n/\*\*\n \* Rotates the binary representation of this [Long] number left by the specified [bitCount] number of bits.\n \* The most significant bits pushed out from the left side reenter the number as the least significant bits on the right side.\n \* Rotating the number left by a negative bit count is the same as rotating it right by the negated bit count:\n \* `number.rotateLeft(-n) == number.rotateRight(n)`\n \* Rotating by a multiple of [Long.SIZE\_BITS] (64) returns the same number, or more generally\n \* `number.rotateLeft(n) == number.rotateLeft(n % 64)`\n

\*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun

Long.rotateLeft(bitCount: Int): Long\n\n/\*\*\n \* Rotates the binary representation of this [Long] number right by the

specified [bitCount] number of bits.\n \* The least significant bits pushed out from the right side reenter the number as the most significant bits on the left side.\n \* Rotating the number right by a negative bit count is the same as rotating it left by the negated bit count:\n \* `number.rotateRight(-n) == number.rotateLeft(n)`\n \* Rotating by a multiple of [Long.SIZE\_BITS] (64) returns the same number, or more generally\n \* `number.rotateRight(n) == number.rotateRight(n % 64)`\n

\*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic expect fun  
Long.rotateRight(bitCount: Int): Long\n\n\*\*\n \* Counts the number of set bits in the binary representation of this [Byte] number.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun Byte.countOneBits(): Int = (toInt() and 0xFF).countOneBits()\n\n\*\*\n \* Counts the number of consecutive most significant bits that are zero in the binary representation of this [Byte] number.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun Byte.countLeadingZeroBits(): Int = (toInt() and 0xFF).countLeadingZeroBits() - (Int.SIZE\_BITS - Byte.SIZE\_BITS)\n\n\*\*\n \* Counts the number of consecutive least significant bits that are zero in the binary representation of this [Byte] number.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun Byte.countTrailingZeroBits(): Int = (toInt() or 0x100).countTrailingZeroBits()\n\n\*\*\n \* Returns a number having a single bit set in the position of the most significant set bit of this [Byte] number,\n \* or zero, if this number is zero.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun Byte.takeHighestOneBit(): Byte = (toInt() and 0xFF).takeHighestOneBit().toByte()\n\n\*\*\n \* Returns a number having a single bit set in the position of the least significant set bit of this [Byte] number,\n \* or zero, if this number is zero.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun Byte.takeLowestOneBit(): Byte = toInt().takeLowestOneBit().toByte()\n\n\*\*\n \* Rotates the binary representation of this [Byte] number left by the specified [bitCount] number of bits.\n \* The most significant bits pushed out from the left side reenter the number as the least significant bits on the right side.\n \* Rotating the number left by a negative bit count is the same as rotating it right by the negated bit count:\n \* `number.rotateLeft(-n) == number.rotateRight(n)`\n \* Rotating by a multiple of [Byte.SIZE\_BITS] (8) returns the same number, or more generally\n \* `number.rotateLeft(n) == number.rotateLeft(n % 8)`\n

\*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun  
Byte.rotateLeft(bitCount: Int): Byte =\n (toInt().shl(bitCount and 7) or (toInt() and 0xFF).ushr(8 - (bitCount and 7))).toByte()\n\n\*\*\n \* Rotates the binary representation of this [Byte] number right by the specified [bitCount] number of bits.\n \* The least significant bits pushed out from the right side reenter the number as the most significant bits on the left side.\n \* Rotating the number right by a negative bit count is the same as rotating it left by the negated bit count:\n \* `number.rotateRight(-n) == number.rotateLeft(n)`\n \* Rotating by a multiple of [Byte.SIZE\_BITS] (8) returns the same number, or more generally\n \* `number.rotateRight(n) == number.rotateRight(n % 8)`\n

\*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun  
Byte.rotateRight(bitCount: Int): Byte =\n (toInt().shl(8 - (bitCount and 7)) or (toInt() and 0xFF).ushr(bitCount and 7)).toByte()\n\n\*\*\n \* Counts the number of set bits in the binary representation of this [Short] number.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun Short.countOneBits(): Int = (toInt() and 0xFFFF).countOneBits()\n\n\*\*\n \* Counts the number of consecutive most significant bits that are zero in the binary representation of this [Short] number.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun Short.countLeadingZeroBits(): Int =\n (toInt() and 0xFFFF).countLeadingZeroBits() - (Int.SIZE\_BITS - Short.SIZE\_BITS)\n\n\*\*\n \* Counts the number of consecutive least significant bits that are zero in the binary representation of this [Short] number.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun Short.countTrailingZeroBits(): Int = (toInt() or 0x10000).countTrailingZeroBits()\n\n/\*\*\n \* Returns a number having a single bit set in the position of the most significant set bit of this [Short] number,\n \* or zero, if this number is zero.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun Short.takeHighestOneBit(): Short = (toInt() and 0xFFFF).takeHighestOneBit().toShort()\n\n/\*\*\n \* Returns a number having a single bit set in the position of the least significant set bit of this [Short] number,\n \* or zero, if this number is zero.\n

\*\n@SinceKotlin("1.4")\n@WasExperimental(ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun Short.takeLowestOneBit(): Short = toInt().takeLowestOneBit().toShort()\n\n/\*\*\n \* Rotates the binary representation of this [Short] number left by the specified [bitCount] number of bits.\n \* The most significant bits pushed out from the left side reenter the number as the least significant bits on the right side.\n \* Rotating the number left by a negative bit count is the same as rotating it right by the negated bit count:\n \* `number.rotateLeft(-n) == number.rotateRight(n)`\n \* Rotating by a multiple of [Short.SIZE\_BITS] (16) returns the same number, or more generally\n \* `number.rotateLeft(n) == number.rotateLeft(n % 16)`\n

\*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun Short.rotateLeft(bitCount: Int): Short =\n (toInt().shl(bitCount and 15) or (toInt() and 0xFFFF).ushr(16 - (bitCount and 15))).toShort()\n\n/\*\*\n \* Rotates the binary representation of this [Short] number right by the specified [bitCount] number of bits.\n \* The least significant bits pushed out from the right side reenter the number as the most significant bits on the left side.\n \* Rotating the number right by a negative bit count is the same as rotating it left by the negated bit count:\n \* `number.rotateRight(-n) == number.rotateLeft(n)`\n \* Rotating by a multiple of [Short.SIZE\_BITS] (16) returns the same number, or more generally\n \* `number.rotateRight(n) == number.rotateRight(n % 16)`\n

\*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class)\npublic fun Short.rotateRight(bitCount: Int): Short =\n (toInt().shl(16 - (bitCount and 15)) or (toInt() and 0xFFFF).ushr(bitCount and 15)).toShort()\n\n"/\*\n \* Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n \* Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n \*/\n\npackage kotlin\nimport kotlin.internal.RequireKotlin\nimport kotlin.internal.RequireKotlinVersionKind\n\n@kotlin.internal.InlineOnly\n@SinceKotlin("1.2")\n@Suppress("INVISIBLE\_MEMBER", "INVISIBLE\_REFERENCE")\n@RequireKotlin("1.2.30", level = DeprecationLevel.HIDDEN, versionKind = RequireKotlinVersionKind.COMPILER\_VERSION)\npublic inline fun <R> suspend(noinline block: suspend () -> R): suspend () -> R = block\n\n"/\*\n \* Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n \* Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n

\*\n@file:kotlin.jvm.JvmName("TuplesKt")\npackage kotlin\n\n/\*\*\n \* Represents a generic pair of two values.\n \* There is no meaning attached to values in this class, it can be used for any purpose.\n \* Pair exhibits value semantics, i.e. two pairs are equal if both components are equal.\n \* An example of decomposing it into values:\n \* @sample samples.misc.Tuples.pairDestructuring\n \* @param A type of the first value.\n \* @param B type of the second value.\n \* @property first First value.\n \* @property second Second value.\n \* @constructor Creates a new instance of Pair.\n \*/\npublic data class Pair<out A, out B>(\n public val first: A,\n public val second: B\n) : Serializable {\n\n /\*\*\n \* Returns string representation of the [Pair] including its [first] and [second] values.\n \*/\n public override fun toString(): String = "\$first, \$second"\n\n /\*\*\n \* Creates a tuple of type [Pair] from this and [that].\n \* This can be useful for creating [Map] literals with less noise, for example:\n \* @sample samples.collections.Maps.instantiation.mapFromPairs\n \*/\n public infix fun <A, B> A.to(that: B): Pair<A, B> = Pair(this, that)\n\n /\*\*\n \* Converts this pair into a list.\n \* @sample samples.misc.Tuples.pairToList\n \*/\n public fun <T> Pair<T, T>.toList(): List<T> = listOf(first, second)\n\n /\*\*\n \* Represents a triad of values\n \* There is no meaning attached to values in this class, it can be used for any purpose.\n \* Triple exhibits value semantics, i.e. two triples are equal if all three components are equal.\n \* An

```

example of decomposing it into values:\n * @sample samples.misc.Tuples.tripleDestructuring\n * \n * @param A
type of the first value.\n * @param B type of the second value.\n * @param C type of the third value.\n * @property
first First value.\n * @property second Second value.\n * @property third Third value.\n * \npublic data class
Triple<out A, out B, out C>(\n public val first: A,\n public val second: B,\n public val third: C\n) : Serializable
{\n\n /**\n * Returns string representation of the [Triple] including its [first], [second] and [third] values.\n
 */\n public override fun toString(): String = \"($first, $second, $third)\"\n\n /**\n * Converts this triple into a
list.\n */\n @sample samples.misc.Tuples.tripleToList\n \npublic fun <T> Triple<T, T, T>.toList(): List<T> =
listOf(first, second, third)\n\n},"/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n */\n\n// Auto-generated file. DO NOT EDIT!\n\npackage kotlin.ranges\n\nimport
kotlin.internal.*\n\n/**\n * A range of values of type `UInt`.\n
*/\n\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic class UIntRange(start:
UInt, endInclusive: UInt) : UIntProgression(start, endInclusive, 1), ClosedRange<UInt> {\n override val start:
UInt get() = first\n override val endInclusive: UInt get() = last\n\n override fun contains(value: UInt): Boolean =
first <= value && value <= last\n\n /**\n * Checks if the range is empty.\n */\n \n * The range is empty if its
start value is greater than the end value.\n */\n override fun isEmpty(): Boolean = first > last\n\n override fun
equals(other: Any?): Boolean =\n other is UIntRange && (isEmpty() && other.isEmpty()) ||\n first ==
other.first && last == other.last\n\n override fun hashCode(): Int =\n if (isEmpty()) -1 else (31 * first.toInt()
+ last.toInt())\n\n override fun toString(): String = \"$first..$last\"\n\n companion object {\n /** An empty
range of values of type UInt. */\n public val EMPTY: UIntRange = UIntRange(UInt.MAX_VALUE,
UInt.MIN_VALUE)\n }\n\n}\n\n/**\n * A progression of values of type `UInt`.\n
*/\n\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic open class
UIntProgression\n\ninternal constructor(\n start: UInt,\n endInclusive: UInt,\n step: Int\n) : Iterable<UInt> {\n
 init {\n if (step == 0.toInt()) throw kotlin.IllegalArgumentException("Step must be non-zero.")\n if (step
== Int.MIN_VALUE) throw kotlin.IllegalArgumentException("Step must be greater than Int.MIN_VALUE to
avoid overflow on negation.")\n }\n\n /**\n * The first element in the progression.\n */\n \n * public val first:
UInt = start\n\n /**\n * The last element in the progression.\n */\n \n * public val last: UInt =
getProgressionLastElement(start, endInclusive, step)\n\n /**\n * The step of the progression.\n */\n \n * public
val step: Int = step\n\n final override fun iterator(): Iterator<UInt> = UIntProgressionIterator(first, last, step)\n\n
 /**\n * Checks if the progression is empty.\n */\n \n * Progression with a positive step is empty if its first
element is greater than the last element.\n * Progression with a negative step is empty if its first element is less
than the last element.\n */\n \n * public open fun isEmpty(): Boolean = if (step > 0) first > last else first < last\n\n
 override fun equals(other: Any?): Boolean =\n other is UIntProgression && (isEmpty() && other.isEmpty()) ||\n first
== other.first && last == other.last && step == other.step\n\n override fun hashCode(): Int =\n if (isEmpty()) -1 else (31 * (31 * first.toInt() + last.toInt()) + step.toInt())\n\n override fun toString(): String = if
(step > 0) \"$first..$last step $step\" else \"$first downTo $last step ${-step}\"\n\n companion object {\n /**\n
 * Creates UIntProgression within the specified bounds of a closed range.\n */\n \n * The progression starts with
the [rangeStart] value and goes toward the [rangeEnd] value not excluding it, with the specified [step].\n */\n \n * In
order to go backwards the [step] must be negative.\n */\n \n * [step] must be greater than `Int.MIN_VALUE`
and not equal to zero.\n */\n \n * public fun fromClosedRange(rangeStart: UInt, rangeEnd: UInt, step: Int):
UIntProgression = UIntProgression(rangeStart, rangeEnd, step)\n }\n\n}\n\n\n\n/**\n * An iterator over a progression
of values of type `UInt`.\n */\n * @property step the number by which the value is incremented on each step.\n
*/\n\n@SinceKotlin("1.3")\n@Suppress("DEPRECATION_ERROR")\nprivate class UIntProgressionIterator(first:
UInt, last: UInt, step: Int) : UIntIterator() {\n private val finalElement = last\n private var hasNext: Boolean = if
(step > 0) first <= last else first >= last\n private val step = step.toInt() // use 2-complement math for negative
steps\n private var next = if (hasNext) first else finalElement\n\n override fun hasNext(): Boolean = hasNext\n\n
 override fun nextUInt(): UInt {\n val value = next\n if (value == finalElement) {\n if (!hasNext)
throw kotlin.NoSuchElementException()\n hasNext = false\n } else {\n next += step\n }\n }\n
}

```

```

return value\n }\n}\n\n"/\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language
contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be found in the
license/LICENSE.txt file.\n *\n\n// Auto-generated file. DO NOT EDIT!\n\npackage kotlin.collections\n\n/** An
iterator over a sequence of values of type `UByte`. *\n@Deprecated("This class is not going to be stabilized and is
to be removed soon.", level = DeprecationLevel.ERROR)\n@SinceKotlin("1.3")\npublic abstract class
UByteIterator : Iterator<UByte> {\n final override fun next() = nextUByte()\n /** Returns the next value in the
sequence without boxing. *\n public abstract fun nextUByte(): UByte\n}\n\n/** An iterator over a sequence of
values of type `UShort`. *\n@Deprecated("This class is not going to be stabilized and is to be removed soon.",
level = DeprecationLevel.ERROR)\n@SinceKotlin("1.3")\npublic abstract class UShortIterator : Iterator<UShort>
{\n final override fun next() = nextUShort()\n /** Returns the next value in the sequence without boxing. *\n
public abstract fun nextUShort(): UShort\n}\n\n/** An iterator over a sequence of values of type `UInt`.
*\n@Deprecated("This class is not going to be stabilized and is to be removed soon.", level =
DeprecationLevel.ERROR)\n@SinceKotlin("1.3")\npublic abstract class UIntIterator : Iterator<UInt> {\n final
override fun next() = nextUInt()\n /** Returns the next value in the sequence without boxing. *\n public
abstract fun nextUInt(): UInt\n}\n\n/** An iterator over a sequence of values of type `ULong`.
*\n@Deprecated("This class is not going to be stabilized and is to be removed soon.", level =
DeprecationLevel.ERROR)\n@SinceKotlin("1.3")\npublic abstract class ULongIterator : Iterator<ULong> {\n final
override fun next() = nextULong()\n /** Returns the next value in the sequence without boxing. *\n
public abstract fun nextULong(): ULong\n}\n\n"/\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n *\n\n// Auto-generated file. DO NOT EDIT!\n\npackage
kotlin.ranges\n\n\nimport kotlin.internal.*\n\n/** A range of values of type `ULong`. \n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic class
ULongRange(start: ULong, endInclusive: ULong) : ULongProgression(start, endInclusive, 1),
ClosedRange<ULong> {\n override val start: ULong get() = first\n override val endInclusive: ULong get() =
last\n override fun contains(value: ULong): Boolean = first <= value && value <= last\n /** \n * Checks
if the range is empty.\n \n * The range is empty if its start value is greater than the end value.\n *\n
override fun isEmpty(): Boolean = first > last\n override fun equals(other: Any?): Boolean =\n other is
ULongRange && (isEmpty() && other.isEmpty() ||\n first == other.first && last == other.last)\n \n
override fun hashCode(): Int =\n if (isEmpty()) -1 else (31 * (first xor (first shr 32)).toInt() + (last xor (last shr
32)).toInt())\n \n override fun toString(): String = "$first..$last"\n \n companion object {\n /** An empty
range of values of type ULong. *\n public val EMPTY: ULongRange = ULongRange(ULong.MAX_VALUE,
ULong.MIN_VALUE)\n }\n}\n\n/** A progression of values of type `ULong`. \n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class)\npublic open class
ULongProgression\n internal constructor(\n start: ULong,\n endInclusive: ULong,\n step: Long\n) :
Iterable<ULong> {\n init {\n if (step == 0.toLong()) throw kotlin.IllegalArgumentException("Step must be
non-zero.")\n if (step == Long.MIN_VALUE) throw kotlin.IllegalArgumentException("Step must be greater
than Long.MIN_VALUE to avoid overflow on negation.")\n }\n /**\n * The first element in the
progression.\n *\n public val first: ULong = start\n /**\n * The last element in the progression.\n *\n
public val last: ULong = getProgressionLastElement(start, endInclusive, step)\n /**\n * The step of the
progression.\n *\n public val step: Long = step\n \n final override fun iterator(): Iterator<ULong> =
ULongProgressionIterator(first, last, step)\n /**\n * Checks if the progression is empty.\n \n *
Progression with a positive step is empty if its first element is greater than the last element.\n * Progression with a
negative step is empty if its first element is less than the last element.\n *\n public open fun isEmpty(): Boolean
= if (step > 0) first > last else first < last\n \n override fun equals(other: Any?): Boolean =\n other is
ULongProgression && (isEmpty() && other.isEmpty() ||\n first == other.first && last == other.last &&
step == other.step)\n \n override fun hashCode(): Int =\n if (isEmpty()) -1 else (31 * (31 * (first xor (first shr
32)).toInt() + (last xor (last shr 32)).toInt()) + (step xor (step ushr 32)).toInt())\n \n override fun toString(): String =

```

```

if (step > 0) \"$first..$last step $step\" else \"$first downTo $last step ${-step}\"
 companion object {
 /**
 * Creates ULongProgression within the specified bounds of a closed range.
 * The progression starts with the [rangeStart] value and goes toward the [rangeEnd] value not excluding it, with the specified [step].
 * In order to go backwards the [step] must be negative.
 * [step] must be greater than `Long.MIN_VALUE` and not equal to zero.
 */
 public fun fromClosedRange(rangeStart: ULong, rangeEnd: ULong, step: Long): ULongProgression = ULongProgression(rangeStart, rangeEnd, step)
}
/**
 * An iterator over a progression of values of type `ULong`.
 * @property step the number by which the value is incremented on each step.
 */
@SinceKotlin("1.3")
@Suppress("DEPRECATION_ERROR")
private class ULongProgressionIterator(first: ULong, last: ULong, step: Long) : ULongIterator() {
 private val finalElement = last
 private var hasNext: Boolean = if (step > 0) first <= last else first >= last
 private val step = step.toULong() // use 2-complement math for negative steps
 private var next = if (hasNext) first else finalElement
 override fun hasNext(): Boolean = hasNext
 override fun nextULong(): ULong {
 val value = next
 if (value == finalElement) {
 if (!hasNext) throw kotlin.NoSuchElementException()
 hasNext = false
 } else {
 next += step
 }
 return value
 }
}
/**
 * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.
 * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.
 */
package kotlin.math

/**
 * Returns the smaller of two values.
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
@kotlin.internal.InlineOnly
public inline fun min(a: UInt, b: UInt): UInt {
 return minOf(a, b)
}
/**
 * Returns the smaller of two values.
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
@kotlin.internal.InlineOnly
public inline fun min(a: ULong, b: ULong): ULong {
 return minOf(a, b)
}
/**
 * Returns the greater of two values.
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
@kotlin.internal.InlineOnly
public inline fun max(a: UInt, b: UInt): UInt {
 return maxOf(a, b)
}
/**
 * Returns the greater of two values.
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class)
@kotlin.internal.InlineOnly
public inline fun max(a: ULong, b: ULong): ULong {
 return maxOf(a, b)
}
/**
 * Copyright 2010-2021 JetBrains s.r.o. and Kotlin Programming Language contributors.
 * Use of this source code is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.
 */
@file:kotlin.jvm.JvmName("UNumbersKt")
package kotlin

/**
 * Counts the number of set bits in the binary representation of this [UInt] number.
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class, ExperimentalStdlibApi::class)
@kotlin.internal.InlineOnly
public inline fun UInt.countOneBits(): Int = toInt().countOneBits()
/**
 * Counts the number of consecutive most significant bits that are zero in the binary representation of this [UInt] number.
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class, ExperimentalStdlibApi::class)
@kotlin.internal.InlineOnly
public inline fun UInt.countLeadingZeroBits(): Int = toInt().countLeadingZeroBits()
/**
 * Counts the number of consecutive least significant bits that are zero in the binary representation of this [UInt] number.
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class, ExperimentalStdlibApi::class)
@kotlin.internal.InlineOnly
public inline fun UInt.countTrailingZeroBits(): Int = toInt().countTrailingZeroBits()
/**
 * Returns a number having a single bit set in the position of the most significant set bit of this [UInt] number, or zero, if this number is zero.
 */
@SinceKotlin("1.5")
@WasExperimental(ExperimentalUnsignedTypes::class, ExperimentalStdlibApi::class)
@kotlin.internal.InlineOnly
public inline fun UInt.takeHighestOneBit(): UInt = toInt().takeHighestOneBit().toUInt()
/**
 * Returns a number having a single bit set in the position of the least

```



significant set bit of this [UInt] number, \n \* or zero, if this number is zero.\n

```

*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun UInt.takeLowestOneBit(): UInt =
toInt().takeLowestOneBit().toUInt()\n\n/**\n * Rotates the binary representation of this [UInt] number left by the
specified [bitCount] number of bits.\n * The most significant bits pushed out from the left side reenter the number as
the least significant bits on the right side.\n *\n * Rotating the number left by a negative bit count is the same as
rotating it right by the negated bit count:\n * `number.rotateLeft(-n) == number.rotateRight(n)`\n *\n * Rotating by a
multiple of [UInt.SIZE_BITS] (32) returns the same number, or more generally\n * `number.rotateLeft(n) ==
number.rotateLeft(n % 32)`\n *\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class,
ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\npublic inline fun UInt.rotateLeft(bitCount: Int):
UInt = toInt().rotateLeft(bitCount).toUInt()\n\n/**\n * Rotates the binary representation of this [UInt] number
right by the specified [bitCount] number of bits.\n * The least significant bits pushed out from the right side reenter
the number as the most significant bits on the left side.\n *\n * Rotating the number right by a negative bit count is
the same as rotating it left by the negated bit count:\n * `number.rotateRight(-n) == number.rotateLeft(n)`\n *\n *
Rotating by a multiple of [UInt.SIZE_BITS] (32) returns the same number, or more generally\n *
`number.rotateRight(n) == number.rotateRight(n % 32)`\n

```

```

*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class,
ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\npublic inline fun UInt.rotateRight(bitCount: Int):
UInt = toInt().rotateRight(bitCount).toUInt()\n\n/**\n * Counts the number of set bits in the binary representation
of this [ULong] number.\n *\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun ULong.countOneBits(): Int =
toLong().countOneBits()\n\n/**\n * Counts the number of consecutive most significant bits that are zero in the
binary representation of this [ULong] number.\n

```

```

*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun ULong.countLeadingZeroBits(): Int =
toLong().countLeadingZeroBits()\n\n/**\n * Counts the number of consecutive least significant bits that are zero
in the binary representation of this [ULong] number.\n

```

```

*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun ULong.countTrailingZeroBits(): Int =
toLong().countTrailingZeroBits()\n\n/**\n * Returns a number having a single bit set in the position of the most
significant set bit of this [ULong] number, \n * or zero, if this number is zero.\n

```

```

*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun ULong.takeHighestOneBit(): ULong =
toLong().takeHighestOneBit().toULong()\n\n/**\n * Returns a number having a single bit set in the position of the
least significant set bit of this [ULong] number, \n * or zero, if this number is zero.\n

```

```

*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun ULong.takeLowestOneBit(): ULong =
toLong().takeLowestOneBit().toULong()\n\n/**\n * Rotates the binary representation of this [ULong] number left
by the specified [bitCount] number of bits.\n * The most significant bits pushed out from the left side reenter the
number as the least significant bits on the right side.\n *\n * Rotating the number left by a negative bit count is the
same as rotating it right by the negated bit count:\n * `number.rotateLeft(-n) == number.rotateRight(n)`\n *\n *
Rotating by a multiple of [ULong.SIZE_BITS] (64) returns the same number, or more generally\n *
`number.rotateLeft(n) == number.rotateLeft(n % 64)`\n

```

```

*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class,
ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\npublic inline fun ULong.rotateLeft(bitCount:
Int): ULong = toLong().rotateLeft(bitCount).toULong()\n\n/**\n * Rotates the binary representation of this [ULong]
number right by the specified [bitCount] number of bits.\n * The least significant bits pushed out from the right side
reenter the number as the most significant bits on the left side.\n *\n * Rotating the number right by a negative bit

```

```

count is the same as rotating it left by the negated bit count:\n * `number.rotateRight(-n) == number.rotateLeft(n)`\n
*\n * Rotating by a multiple of [ULong.SIZE_BITS] (64) returns the same number, or more generally\n *
`number.rotateRight(n) == number.rotateRight(n % 64)`\n
*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class,
ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\npublic inline fun ULong.rotateRight(bitCount:
Int): ULong = toLong().rotateRight(bitCount).toULong()\n\n/**\n * Counts the number of set bits in the binary
representation of this [UByte] number.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun UByte.countOneBits(): Int =
toUInt().countOneBits()\n\n/**\n * Counts the number of consecutive most significant bits that are zero in the
binary representation of this [UByte] number.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun UByte.countLeadingZeroBits(): Int =
toByte().countLeadingZeroBits()\n\n/**\n * Counts the number of consecutive least significant bits that are zero in
the binary representation of this [UByte] number.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun UByte.countTrailingZeroBits(): Int =
toByte().countTrailingZeroBits()\n\n/**\n * Returns a number having a single bit set in the position of the most
significant set bit of this [UByte] number,\n * or zero, if this number is zero.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun UByte.takeHighestOneBit(): UByte
= toInt().takeHighestOneBit().toUByte()\n\n/**\n * Returns a number having a single bit set in the position of the
least significant set bit of this [UByte] number,\n * or zero, if this number is zero.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun UByte.takeLowestOneBit(): UByte =
toInt().takeLowestOneBit().toUByte()\n\n\n/**\n * Rotates the binary representation of this [UByte] number left by
the specified [bitCount] number of bits.\n * The most significant bits pushed out from the left side reenter the
number as the least significant bits on the right side.\n * \n * Rotating the number left by a negative bit count is the
same as rotating it right by the negated bit count:\n * `number.rotateLeft(-n) == number.rotateRight(n)`\n * \n *
Rotating by a multiple of [UByte.SIZE_BITS] (8) returns the same number, or more generally\n *
`number.rotateLeft(n) == number.rotateLeft(n % 8)`\n
*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class,
ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\npublic inline fun UByte.rotateLeft(bitCount:
Int): UByte = toByte().rotateLeft(bitCount).toUByte()\n\n/**\n * Rotates the binary representation of this [UByte]
number right by the specified [bitCount] number of bits.\n * The least significant bits pushed out from the right side
reenter the number as the most significant bits on the left side.\n * \n * Rotating the number right by a negative bit
count is the same as rotating it left by the negated bit count:\n * `number.rotateRight(-n) == number.rotateLeft(n)`\n
*\n * Rotating by a multiple of [UByte.SIZE_BITS] (8) returns the same number, or more generally\n *
`number.rotateRight(n) == number.rotateRight(n % 8)`\n
*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class,
ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\npublic inline fun UByte.rotateRight(bitCount:
Int): UByte = toByte().rotateRight(bitCount).toUByte()\n\n\n/**\n * Counts the number of set bits in the binary
representation of this [UShort] number.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun UShort.countOneBits(): Int =
toUInt().countOneBits()\n\n/**\n * Counts the number of consecutive most significant bits that are zero in the
binary representation of this [UShort] number.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,

```

```

ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun UShort.countLeadingZeroBits(): Int
= toShort().countLeadingZeroBits()\n\n/**\n * Counts the number of consecutive least significant bits that are zero
in the binary representation of this [UShort] number.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun UShort.countTrailingZeroBits(): Int
= toShort().countTrailingZeroBits()\n\n/**\n * Returns a number having a single bit set in the position of the most
significant set bit of this [UShort] number,\n * or zero, if this number is zero.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun UShort.takeHighestOneBit(): UShort
= toInt().takeHighestOneBit().toUShort()\n\n/**\n * Returns a number having a single bit set in the position of the
least significant set bit of this [UShort] number,\n * or zero, if this number is zero.\n
*\n@SinceKotlin("1.5")\n@WasExperimental(ExperimentalUnsignedTypes::class,
ExperimentalStdlibApi::class)\n@kotlin.internal.InlineOnly\npublic inline fun UShort.takeLowestOneBit(): UShort
= toInt().takeLowestOneBit().toUShort()\n\n/**\n * Rotates the binary representation of this [UShort] number left
by the specified [bitCount] number of bits.\n * The most significant bits pushed out from the left side reenter the
number as the least significant bits on the right side.\n * \n * Rotating the number left by a negative bit count is the
same as rotating it right by the negated bit count:\n * `number.rotateLeft(-n) == number.rotateRight(n)`\n * \n * Rotating by a multiple of [UShort.SIZE_BITS] (16) returns the same number, or more generally\n *
`number.rotateLeft(n) == number.rotateLeft(n % 16)`\n
*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class,
ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\npublic inline fun UShort.rotateLeft(bitCount:
Int): UShort = toShort().rotateLeft(bitCount).toUShort()\n\n/**\n * Rotates the binary representation of this
[UShort] number right by the specified [bitCount] number of bits.\n * The least significant bits pushed out from the
right side reenter the number as the most significant bits on the left side.\n * \n * Rotating the number right by a
negative bit count is the same as rotating it left by the negated bit count:\n * `number.rotateRight(-n) ==
number.rotateLeft(n)`\n * \n * Rotating by a multiple of [UShort.SIZE_BITS] (16) returns the same number, or more
generally\n * `number.rotateRight(n) == number.rotateRight(n % 16)`\n
*\n@SinceKotlin("1.6")\n@WasExperimental(ExperimentalStdlibApi::class,
ExperimentalUnsignedTypes::class)\n@kotlin.internal.InlineOnly\npublic inline fun UShort.rotateRight(bitCount:
Int): UShort = toShort().rotateRight(bitCount).toUShort()\n\n"/*\n * Copyright 2010-2021 JetBrains s.r.o. and Kotlin
Programming Language contributors.\n * Use of this source code is governed by the Apache 2.0 license that can be
found in the license/LICENSE.txt file.\n *\n@npackage kotlin.internal\n@n// (a - b) mod c\nprivate fun
differenceModulo(a: UInt, b: UInt, c: UInt): UInt {\n val ac = a % c\n val bc = b % c\n return if (ac >= bc) ac -
bc else ac - bc + c}\n\nprivate fun differenceModulo(a: ULong, b: ULong, c: ULong): ULong {\n val ac = a %
c\n val bc = b % c\n return if (ac >= bc) ac - bc else ac - bc + c}\n\n/**\n * Calculates the final element of a
bounded arithmetic progression, i.e. the last element of the progression which is in the range\n * from [start] to [end]
in case of a positive [step], or from [end] to [start] in case of a negative\n * [step].\n * \n * No validation on passed
parameters is performed. The given parameters should satisfy the condition:\n * \n * - either `step > 0` and `start <=
end`,\n * - or `step < 0` and `start >= end`.\n * \n * @param start first element of the progression\n * @param end
ending bound for the progression\n * @param step increment, or difference of successive elements in the
progression\n * @return the final element of the progression\n * @suppress\n
*\n@PublishedApi\n@SinceKotlin("1.3")\ninternal fun getProgressionLastElement(start: UInt, end: UInt, step:
Int): UInt = when {\n step > 0 -> if (start >= end) end else end - differenceModulo(end, start, step.toUInt())\n
step < 0 -> if (start <= end) end else end + differenceModulo(start, end, (-step).toUInt())\n else -> throw
kotlin.IllegalArgumentException("Step is zero.")\n}\n\n/**\n * Calculates the final element of a bounded
arithmetic progression, i.e. the last element of the progression which is in the range\n * from [start] to [end] in case
of a positive [step], or from [end] to [start] in case of a negative\n * [step].\n * \n * No validation on passed
parameters is performed. The given parameters should satisfy the condition:\n * \n * - either `step > 0` and `start <=
end`

```

```

end` ,\n * - or `step < 0` and `start >= end`. \n * \n * @param start first element of the progression \n * @param end
ending bound for the progression \n * @param step increment, or difference of successive elements in the
progression \n * @return the final element of the progression \n * @suppress \n
*\n @PublishedApi\n @SinceKotlin("1.3")\n internal fun getProgressionLastElement(start: ULong, end: ULong,
step: Long): ULong = when { \n step > 0 -> if (start >= end) end else end - differenceModulo(end, start,
step.toULong()) \n step < 0 -> if (start <= end) end else end + differenceModulo(start, end, (-step).toULong()) \n
else -> throw kotlin.IllegalArgumentException("Step is zero.") \n } \n", /* \n * Copyright 2010-2021 JetBrains s.r.o.
and Kotlin Programming Language contributors. \n * Use of this source code is governed by the Apache 2.0 license
that can be found in the license/LICENSE.txt file. \n * \n * @file: kotlin.jvm.JvmName("UStringsKt") // string
representation of unsigned numbers \n \n package kotlin.text \n \n /** \n * Returns a string representation of this [Byte]
value in the specified [radix]. \n * \n * @throws IllegalArgumentException when [radix] is not a valid radix for
number to string conversion. \n
*\n @SinceKotlin("1.5")\n @WasExperimental(ExperimentalUnsignedTypes::class)\n // @kotlin.internal.InlineOnly
\n public /*inline*/ fun UByte.toString(radix: Int): String = this.toInt().toString(radix) \n \n /** \n * Returns a string
representation of this [Short] value in the specified [radix]. \n * \n * @throws IllegalArgumentException when [radix]
is not a valid radix for number to string conversion. \n
*\n @SinceKotlin("1.5")\n @WasExperimental(ExperimentalUnsignedTypes::class)\n // @kotlin.internal.InlineOnly
\n public /*inline*/ fun UShort.toString(radix: Int): String = this.toInt().toString(radix) \n \n /** \n * Returns a string
representation of this [Int] value in the specified [radix]. \n * \n * @throws IllegalArgumentException when [radix] is
not a valid radix for number to string conversion. \n
*\n @SinceKotlin("1.5")\n @WasExperimental(ExperimentalUnsignedTypes::class)\n // @kotlin.internal.InlineOnly
\n public /*inline*/ fun UInt.toString(radix: Int): String = this.toLong().toString(radix) \n \n /** \n * Returns a string
representation of this [Long] value in the specified [radix]. \n * \n * @throws IllegalArgumentException when [radix]
is not a valid radix for number to string conversion. \n
*\n @SinceKotlin("1.5")\n @WasExperimental(ExperimentalUnsignedTypes::class)\n public fun
ULong.toString(radix: Int): String = ulongToString(this.toLong(), checkRadix(radix)) \n \n /** \n * Parses the string
as a signed [UByte] number and returns the result. \n * @throws NumberFormatException if the string is not a valid
representation of a number. \n
*\n @SinceKotlin("1.5")\n @WasExperimental(ExperimentalUnsignedTypes::class)\n public fun String.toUByte():
UByte = toUByteOrNull() ?: numberFormatException(this) \n \n /** \n * Parses the string as a signed [UByte] number and
returns the result. \n * @throws NumberFormatException if the string is not a valid representation of a number. \n *
@throws IllegalArgumentException when [radix] is not a valid radix for string to number conversion. \n
*\n @SinceKotlin("1.5")\n @WasExperimental(ExperimentalUnsignedTypes::class)\n public fun
String.toUByte(radix: Int): UByte = toUByteOrNull(radix) ?: numberFormatException(this) \n \n /** \n * Parses the
string as a [UShort] number and returns the result. \n * @throws NumberFormatException if the string is not a valid
representation of a number. \n
*\n @SinceKotlin("1.5")\n @WasExperimental(ExperimentalUnsignedTypes::class)\n public fun String.toUShort():
UShort = toUShortOrNull() ?: numberFormatException(this) \n \n /** \n * Parses the string as a [UShort] number and
returns the result. \n * @throws NumberFormatException if the string is not a valid representation of a number. \n *
@throws IllegalArgumentException when [radix] is not a valid radix for string to number conversion. \n
*\n @SinceKotlin("1.5")\n @WasExperimental(ExperimentalUnsignedTypes::class)\n public fun
String.toUShort(radix: Int): UShort = toUShortOrNull(radix) ?: numberFormatException(this) \n \n /** \n * Parses the
string as an [UInt] number and returns the result. \n * @throws NumberFormatException if the string is not a valid
representation of a number. \n
*\n @SinceKotlin("1.5")\n @WasExperimental(ExperimentalUnsignedTypes::class)\n public fun String.toUInt():
UInt = toUIntOrNull() ?: numberFormatException(this) \n \n /** \n * Parses the string as an [UInt] number and returns the
result. \n * @throws NumberFormatException if the string is not a valid representation of a number. \n * @throws
IllegalArgumentException when [radix] is not a valid radix for string to number conversion. \n

```



```
String.toULongOrNull(radix: Int): ULong? {\n checkRadix(radix)\n\n val length = this.length\n if (length == 0) return null\n\n val limit: ULong = ULong.MAX_VALUE\n val start: Int\n\n val firstChar = this[0]\n if (firstChar < '0') {\n if (length == 1 || firstChar != '+') return null\n start = 1\n } else {\n start = 0\n }\n\n val limitForMaxRadix = 512409557603043100uL // limit / 36\n var limitBeforeMul = limitForMaxRadix\n val uradix = radix.toULong()\n var result = 0uL\n for (i in start until length) {\n val digit = digitOf(this[i], radix)\n\n if (digit < 0) return null\n if (result > limitBeforeMul) {\n if (limitBeforeMul == limitForMaxRadix) {\n limitBeforeMul = limit / uradix\n\n if (result > limitBeforeMul) {\n return null\n }\n } else {\n return null\n }\n }\n\n result *= uradix\n\n val beforeAdding = result\n result += digit.toUInt()\n if (result < beforeAdding) return null // overflow has happened\n }\n\n return result\n}\n\n", "/*\n * Copyright 2010-2018\n JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code is governed by the\n Apache 2.0 license that can be found in the license/LICENSE.txt file.\n
```

```
/\n\n@file:Suppress("INVISIBLE_REFERENCE", "INVISIBLE_MEMBER")\npackage kotlin\n\nimport\n kotlin.annotation.AnnotationTarget.\nimport kotlin.internal.RequireKotlin\nimport\n kotlin.internal.RequireKotlinVersionKind\n\n/**\n * Marks the API that is dependent on the experimental unsigned\n types, including those types themselves.\n * Usages of such API will be reported as warnings unless an explicit\n opt-in with\n * the [OptIn] annotation, e.g. `@OptIn(ExperimentalUnsignedTypes::class)`,\n * or with the `-Xopt-in=kotlin.ExperimentalUnsignedTypes` compiler option is given.\n * It's recommended to propagate the\n experimental status to the API that depends on unsigned types by annotating it with this annotation.\n */\n@Suppress("DEPRECATION")\n@Experimental(level =\n Experimental.Level.WARNING)\n@RequiresOptIn(level =\n RequiresOptIn.Level.WARNING)\n@MustBeDocumented\n@Target(CLASS, ANNOTATION_CLASS,\n PROPERTY, FIELD, LOCAL_VARIABLE, VALUE_PARAMETER, CONSTRUCTOR, FUNCTION,\n PROPERTY_GETTER, PROPERTY_SETTER,\n TYPEALIAS)\n@Retention(AnnotationRetention.BINARY)\n@RequireKotlin("1.2.50", versionKind =\n RequireKotlinVersionKind.COMPILER_VERSION)\npublic annotation class ExperimentalUnsignedTypes\n\n/*\n * Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors.\n * Use of this source code\n is governed by the Apache 2.0 license that can be found in the license/LICENSE.txt file.\n */\n\n@file:kotlin.jvm.JvmMultifileClass\n@file:kotlin.jvm.JvmName("MathKt")\npackage\n kotlin.math\n\n// constants, can't use them from nativeMath as they are not constants there\n/**\n * Ratio of the\n circumference of a circle to its diameter, approximately 3.14159. */\n@SinceKotlin("1.2")\npublic const val PI:\n Double = 3.141592653589793\n/**\n * Base of the natural logarithms, approximately 2.71828. */\n@SinceKotlin("1.2")\npublic const val E: Double = 2.718281828459045\n\n// region =====\nDouble Math =====\n\n/**\n * Computes the sine of the angle [x]\n given in radians.\n * Special cases:\n * - `sin(NaN|+Inf|-Inf)` is `NaN`\n */\n@SinceKotlin("1.2")\npublic expect fun sin(x: Double): Double\n\n/**\n * Computes the cosine of the angle [x] given in radians.\n * Special\n cases:\n * - `cos(NaN|+Inf|-Inf)` is `NaN`\n */\n@SinceKotlin("1.2")\npublic expect fun cos(x: Double):\n Double\n\n/**\n * Computes the tangent of the angle [x] given in radians.\n * Special cases:\n * - `tan(NaN|+Inf|-\n Inf)` is `NaN`\n */\n@SinceKotlin("1.2")\npublic expect fun tan(x: Double): Double\n\n/**\n * Computes the arc\n sine of the value [x];\n * the returned value is an angle in the range from `-PI/2` to `PI/2` radians.\n * Special\n cases:\n * - `asin(x)` is `NaN`, when `abs(x) > 1` or x is `NaN`\n */\n@SinceKotlin("1.2")\npublic expect fun\n asin(x: Double): Double\n\n/**\n * Computes the arc cosine of the value [x];\n * the returned value is an angle in\n the range from `0.0` to `PI` radians.\n * Special cases:\n * - `acos(x)` is `NaN`, when `abs(x) > 1` or x is\n `NaN`\n */\n@SinceKotlin("1.2")\npublic expect fun acos(x: Double): Double\n\n/**\n * Computes the arc tangent\n of the value [x];\n * the returned value is an angle in the range from `-PI/2` to `PI/2` radians.\n * Special cases:\n * - `atan(NaN)` is `NaN`\n */\n@SinceKotlin("1.2")\npublic expect fun atan(x: Double): Double\n\n/**\n * Returns the angle `theta` of the polar coordinates `(r, theta)` that correspond\n * to the rectangular coordinates `(x,\n y)` by computing the arc tangent of the value [y] / [x];\n * the returned value is an angle in the range from `-PI` to
```

$\pi$  radians.  
 \* Special cases:  
 $\text{atan2}(0.0, 0.0)$  is  $0.0$   
 $\text{atan2}(0.0, x)$  is  $0.0$  for  $x > 0$  and  $\pi$  for  $x < 0$   
 $\text{atan2}(-0.0, x)$  is  $-0.0$  for  $x > 0$  and  $-\pi$  for  $x < 0$   
 $\text{atan2}(y, +\text{Inf})$  is  $0.0$  for  $0 < y < +\text{Inf}$  and  $-0.0$  for  $-\text{Inf} < y < 0$   
 $\text{atan2}(y, -\text{Inf})$  is  $\pi$  for  $0 < y < +\text{Inf}$  and  $-\pi$  for  $-\text{Inf} < y < 0$   
 $\text{atan2}(y, 0.0)$  is  $\pi/2$  for  $y > 0$  and  $-\pi/2$  for  $y < 0$   
 $\text{atan2}(+\text{Inf}, x)$  is  $\pi/2$  for finite  $x$   
 $\text{atan2}(-\text{Inf}, x)$  is  $-\pi/2$  for finite  $x$   
 $\text{atan2}(\text{NaN}, x)$  and  $\text{atan2}(y, \text{NaN})$  is  $\text{NaN}$

`@SinceKotlin("1.2")`public expect fun atan2(y: Double, x: Double): Double  
 Computes the hyperbolic sine of the value [x].  
 \* Special cases:  
 $\sinh(\text{NaN})$  is  $\text{NaN}$   
 $\sinh(+\text{Inf})$  is  $+\text{Inf}$   
 $\sinh(-\text{Inf})$  is  $-\text{Inf}$

`@SinceKotlin("1.2")`public expect fun sinh(x: Double): Double  
 Computes the hyperbolic cosine of the value [x].  
 \* Special cases:  
 $\cosh(\text{NaN})$  is  $\text{NaN}$   
 $\cosh(+\text{Inf}-\text{Inf})$  is  $+\text{Inf}$   
 $\cosh(-\text{Inf})$  is  $+\text{Inf}$

`@SinceKotlin("1.2")`public expect fun cosh(x: Double): Double  
 Computes the hyperbolic tangent of the value [x].  
 \* Special cases:  
 $\tanh(\text{NaN})$  is  $\text{NaN}$   
 $\tanh(+\text{Inf})$  is  $1.0$   
 $\tanh(-\text{Inf})$  is  $-1.0$

`@SinceKotlin("1.2")`public expect fun tanh(x: Double): Double  
 Computes the inverse hyperbolic sine of the value [x].  
 \* The returned value is  $y$  such that  $\sinh(y) == x$ .  
 \* Special cases:  
 $\text{asinh}(\text{NaN})$  is  $\text{NaN}$   
 $\text{asinh}(+\text{Inf})$  is  $+\text{Inf}$   
 $\text{asinh}(-\text{Inf})$  is  $-\text{Inf}$

`@SinceKotlin("1.2")`public expect fun asinh(x: Double): Double  
 Computes the inverse hyperbolic cosine of the value [x].  
 \* The returned value is positive  $y$  such that  $\cosh(y) == x$ .  
 \* Special cases:  
 $\text{acosh}(\text{NaN})$  is  $\text{NaN}$   
 $\text{acosh}(x)$  is  $\text{NaN}$  when  $x < 1$   
 $\text{acosh}(+\text{Inf})$  is  $+\text{Inf}$

`@SinceKotlin("1.2")`public expect fun acosh(x: Double): Double  
 Computes the inverse hyperbolic tangent of the value [x].  
 \* The returned value is  $y$  such that  $\tanh(y) == x$ .  
 \* Special cases:  
 $\text{atanh}(\text{NaN})$  is  $\text{NaN}$   
 $\text{atanh}(x)$  is  $\text{NaN}$  when  $x > 1$  or  $x < -1$   
 $\text{atanh}(1.0)$  is  $+\text{Inf}$   
 $\text{atanh}(-1.0)$  is  $-\text{Inf}$

`@SinceKotlin("1.2")`public expect fun atanh(x: Double): Double  
 Computes  $\sqrt{x^2 + y^2}$  without intermediate overflow or underflow.  
 \* Special cases:  
 - returns  $+\text{Inf}$  if any of arguments is infinite  
 - returns  $\text{NaN}$  if any of arguments is  $\text{NaN}$  and the other is not infinite

`@SinceKotlin("1.2")`public expect fun hypot(x: Double, y: Double): Double  
 Computes the positive square root of the value [x].  
 \* Special cases:  
 $\sqrt{x}$  is  $\text{NaN}$  when  $x < 0$  or  $x$  is  $\text{NaN}$

`@SinceKotlin("1.2")`public expect fun sqrt(x: Double): Double  
 Computes Euler's number  $e$  raised to the power of the value [x].  
 \* Special cases:  
 $\exp(\text{NaN})$  is  $\text{NaN}$   
 $\exp(+\text{Inf})$  is  $+\text{Inf}$   
 $\exp(-\text{Inf})$  is  $0.0$

`@SinceKotlin("1.2")`public expect fun exp(x: Double): Double  
 Computes  $\exp(x) - 1$ .  
 \* This function can be implemented to produce more precise result for [x] near zero.  
 \* Special cases:  
 $\text{expm1}(\text{NaN})$  is  $\text{NaN}$   
 $\text{expm1}(+\text{Inf})$  is  $+\text{Inf}$   
 $\text{expm1}(-\text{Inf})$  is  $-1.0$

`@see [exp]` function.  
`@SinceKotlin("1.2")`public expect fun expm1(x: Double): Double  
 Computes the logarithm of the value [x] to the given [base].  
 \* Special cases:  
 $\log(x, b)$  is  $\text{NaN}$  if either  $x$  or  $b$  are  $\text{NaN}$   
 $\log(x, b)$  is  $\text{NaN}$  when  $x < 0$  or  $b \leq 0$  or  $b == 1.0$   
 $\log(+\text{Inf}, +\text{Inf})$  is  $\text{NaN}$   
 $\log(+\text{Inf}, b)$  is  $+\text{Inf}$  for  $b > 1$  and  $-\text{Inf}$  for  $b < 1$   
 $\log(0.0, b)$  is  $-\text{Inf}$  for  $b > 1$  and  $+\text{Inf}$  for  $b < 1$   
 \* See also logarithm functions for common fixed bases: [ln], [log10] and [log2].

`@SinceKotlin("1.2")`public expect fun log(x: Double, base: Double): Double  
 Computes the natural logarithm (base  $E$ ) of the value [x].  
 \* Special cases:  
 $\ln(\text{NaN})$  is  $\text{NaN}$   
 $\ln(x)$  is  $\text{NaN}$  when  $x < 0.0$   
 $\ln(+\text{Inf})$  is  $+\text{Inf}$   
 $\ln(0.0)$  is  $-\text{Inf}$

`@SinceKotlin("1.2")`public expect fun ln(x: Double): Double  
 Computes the common logarithm (base 10) of the value [x].  
 \* @see [ln] function for special cases.

`@SinceKotlin("1.2")`public expect fun log10(x: Double): Double  
 Computes the binary logarithm (base 2) of the value [x].  
 \* @see [ln] function for special cases.

`@SinceKotlin("1.2")`public expect fun log2(x: Double): Double  
 Computes  $\ln(x + 1)$ .  
 \* This function can be implemented to produce more precise result for [x] near zero.  
 \* Special cases:  
 $\ln1p(\text{NaN})$  is  $\text{NaN}$   
 $\ln1p(x)$  is  $\text{NaN}$  where  $x < -1.0$   
 $\ln1p(-1.0)$  is  $-\text{Inf}$   
 $\ln1p(+\text{Inf})$  is  $+\text{Inf}$   
 \* @see [ln] function  
 \* @see [expm1] function

`@SinceKotlin("1.2")`public expect fun ln1p(x: Double): Double  
 Rounds the given value [x] to an integer towards positive infinity.  
 \* @return the smallest double value that is greater than or equal to the given value [x] and is a mathematical integer.  
 \* Special cases:  
 $\text{ceil}(x)$  is  $x$  where  $x$  is  $\text{NaN}$  or  $+\text{Inf}$  or  $-\text{Inf}$  or already a mathematical integer.

`*\n@SinceKotlin("1.2")\npublic expect fun ceil(x: Double): Double\n\n**\n * Rounds the given value [x] to an integer towards negative infinity.\n\n * @return the largest double value that is smaller than or equal to the given value [x] and is a mathematical integer.\n\n * Special cases:\n * - floor(x) is x where x is NaN or +Inf or -Inf or already a mathematical integer.\n\n *\n@SinceKotlin("1.2")\npublic expect fun floor(x: Double): Double\n\n**\n * Rounds the given value [x] to an integer towards zero.\n\n * @return the value [x] having its fractional part truncated.\n\n * Special cases:\n * - truncate(x) is x where x is NaN or +Inf or -Inf or already a mathematical integer.\n\n *\n@SinceKotlin("1.2")\npublic expect fun truncate(x: Double): Double\n\n**\n * Rounds the given value [x] towards the closest integer with ties rounded towards even integer.\n\n * Special cases:\n * - round(x) is x where x is NaN or +Inf or -Inf or already a mathematical integer.\n\n *\n@SinceKotlin("1.2")\npublic expect fun round(x: Double): Double\n\n**\n * Returns the absolute value of the given value [x].\n\n * Special cases:\n * - abs(NaN) is NaN\n\n * @see absoluteValue extension property for [Double]\n\n *\n@SinceKotlin("1.2")\npublic expect fun abs(x: Double): Double\n\n**\n * Returns the sign of the given value [x]:\n * - -1.0 if the value is negative,\n * - zero if the value is zero,\n * - 1.0 if the value is positive\n\n * Special case:\n * - sign(NaN) is NaN\n\n *\n@SinceKotlin("1.2")\npublic expect fun sign(x: Double): Double\n\n**\n * Returns the smaller of two values.\n\n * If either value is NaN, then the result is NaN.\n\n *\n@SinceKotlin("1.2")\npublic expect fun min(a: Double, b: Double): Double\n\n**\n * Returns the greater of two values.\n\n * If either value is NaN, then the result is NaN.\n\n *\n@SinceKotlin("1.2")\npublic expect fun max(a: Double, b: Double): Double\n\n\n// extensions\n\n**\n * Raises this value to the power [x].\n\n * Special cases:\n * - b.pow(0.0) is 1.0\n * - b.pow(1.0) == b\n * - b.pow(NaN) is NaN\n * - NaN.pow(x) is NaN for x != 0.0\n * - b.pow(Inf) is NaN for abs(b) == 1.0\n * - b.pow(x) is NaN for b < 0 and x is finite and not an integer\n\n *\n@SinceKotlin("1.2")\npublic expect fun Double.pow(x: Double): Double\n\n**\n * Raises this value to the integer power [n].\n\n * See the other overload of [pow] for details.\n\n *\n@SinceKotlin("1.2")\npublic expect fun Double.pow(n: Int): Double\n\n**\n * Returns the absolute value of this value.\n\n * Special cases:\n * - NaN.absoluteValue is NaN\n\n * @see abs function\n\n *\n@SinceKotlin("1.2")\npublic expect val Double.absoluteValue: Double\n\n**\n * Returns the sign of this value:\n * - -1.0 if the value is negative,\n * - zero if the value is zero,\n * - 1.0 if the value is positive\n\n * Special case:\n * - NaN.sign is NaN\n\n *\n@SinceKotlin("1.2")\npublic expect val Double.sign: Double\n\n**\n * Returns this value with the sign bit same as of the [sign] value.\n\n * If [sign] is NaN the sign of the result is undefined.\n\n *\n@SinceKotlin("1.2")\npublic expect fun Double.withSign(sign: Double): Double\n\n**\n * Returns this value with the sign bit same as of the [sign] value.\n\n *\n@SinceKotlin("1.2")\npublic expect fun Double.withSign(sign: Int): Double\n\n**\n * Returns the ulp (unit in the last place) of this value.\n\n * An ulp is a positive distance between this value and the next nearest [Double] value larger in magnitude.\n\n * Special Cases:\n * - NaN.ulp is NaN\n * - x.ulp is +Inf when x is +Inf or -Inf\n * - 0.0.ulp is Double.MIN_VALUE\n\n *\n@SinceKotlin("1.2")\npublic expect val Double.ulp: Double\n\n**\n * Returns the [Double] value nearest to this value in direction of positive infinity.\n\n *\n@SinceKotlin("1.2")\npublic expect fun Double.nextUp(): Double\n\n**\n * Returns the [Double] value nearest to this value in direction of negative infinity.\n\n *\n@SinceKotlin("1.2")\npublic expect fun Double.nextDown(): Double\n\n**\n * Returns the [Double] value nearest to this value in direction from this value towards the value [to].\n\n * Special cases:\n * - x.nextTowards(y) is NaN if either x or y are NaN\n * - x.nextTowards(x) == x\n\n *\n@SinceKotlin("1.2")\npublic expect fun Double.nextTowards(to: Double): Double\n\n**\n * Rounds this [Double] value to the nearest integer and converts the result to [Int].\n\n * Ties are rounded towards positive infinity.\n\n * Special cases:\n * - x.roundToInt() == Int.MAX_VALUE when x > Int.MAX_VALUE\n * - x.roundToInt() == Int.MIN_VALUE when x < Int.MIN_VALUE\n\n * @throws IllegalArgumentException when this value is NaN\n\n *\n@SinceKotlin("1.2")\npublic expect fun Double.roundToInt(): Int\n\n**\n * Rounds this [Double] value to the nearest integer and converts the result to [Long].\n\n * Ties are rounded towards positive infinity.\n\n * Special cases:\n * - x.roundToLong() == Long.MAX_VALUE when x > Long.MAX_VALUE\n * - x.roundToLong() == Long.MIN_VALUE when x < Long.MIN_VALUE\n\n *`



@throws IllegalArgumentException when this value is NaN\n \*^n@SinceKotlin("1.2")\npublic expect fun Double.roundToLong(): Long\n\n// endregion\n\n\n// region ===== Float Math =====\n\n\n\*\* Computes the sine of the angle [x] given in radians.\n \*n \* Special cases:\n \* - `sin(NaN|+Inf|-Inf)` is `NaN`\n \*^n@SinceKotlin("1.2")\npublic expect fun sin(x: Float): Float\n\n\*\* Computes the cosine of the angle [x] given in radians.\n \*n \* Special cases:\n \* - `cos(NaN|+Inf|-Inf)` is `NaN`\n \*^n@SinceKotlin("1.2")\npublic expect fun cos(x: Float): Float\n\n\*\* Computes the tangent of the angle [x] given in radians.\n \*n \* Special cases:\n \* - `tan(NaN|+Inf|-Inf)` is `NaN`\n \*^n@SinceKotlin("1.2")\npublic expect fun tan(x: Float): Float\n\n\*\*\n \*n \* Computes the arc sine of the value [x];\n \*n \* the returned value is an angle in the range from  $-\pi/2$  to  $\pi/2$  radians.\n \*n \* Special cases:\n \* - `asin(x)` is `NaN`, when  $abs(x) > 1$  or x is `NaN`\n \*^n@SinceKotlin("1.2")\npublic expect fun asin(x: Float): Float\n\n\*\*\n \*n \* Computes the arc cosine of the value [x];\n \*n \* the returned value is an angle in the range from  $0.0$  to  $\pi$  radians.\n \*n \* Special cases:\n \* - `acos(x)` is `NaN`, when  $abs(x) > 1$  or x is `NaN`\n \*^n@SinceKotlin("1.2")\npublic expect fun acos(x: Float): Float\n\n\*\*\n \*n \* Computes the arc tangent of the value [x];\n \*n \* the returned value is an angle in the range from  $-\pi/2$  to  $\pi/2$  radians.\n \*n \* Special cases:\n \* - `atan(NaN)` is `NaN`\n \*^n@SinceKotlin("1.2")\npublic expect fun atan(x: Float): Float\n\n\*\*\n \*n \* Returns the angle  $\theta$  of the polar coordinates  $(r, \theta)$  that correspond\n \*n \* to the rectangular coordinates  $(x, y)$  by computing the arc tangent of the value  $y / x$ ;\n \*n \* the returned value is an angle in the range from  $-\pi$  to  $\pi$  radians.\n \*n \* Special cases:\n \* - `atan2(0.0, 0.0)` is  $0.0$ \n \* - `atan2(0.0, x)` is  $0.0$  for  $x > 0$  and  $\pi$  for  $x < 0$ \n \* - `atan2(-0.0, x)` is  $-0.0$  for  $x > 0$  and  $-\pi$  for  $x < 0$ \n \* - `atan2(y, +Inf)` is  $0.0$  for  $0 < y < +Inf$  and  $-0.0$  for  $-Inf < y < 0$ \n \* - `atan2(y, -Inf)` is  $\pi$  for  $0 < y < +Inf$  and  $-\pi$  for  $-Inf < y < 0$ \n \* - `atan2(y, 0.0)` is  $\pi/2$  for  $y > 0$  and  $-\pi/2$  for  $y < 0$ \n \* - `atan2(+Inf, x)` is  $\pi/2$  for finite  $x$ \n \* - `atan2(-Inf, x)` is  $-\pi/2$  for finite  $x$ \n \* - `atan2(NaN, x)` and `atan2(y, NaN)` is `NaN`\n \*^n@SinceKotlin("1.2")\npublic expect fun atan2(y: Float, x: Float): Float\n\n\*\*\n \*n \* Computes the hyperbolic sine of the value [x].\n \*n \* Special cases:\n \* - `sinh(NaN)` is `NaN`\n \* - `sinh(+Inf)` is  $+Inf$ \n \* - `sinh(-Inf)` is  $-Inf$ \n \*^n@SinceKotlin("1.2")\npublic expect fun sinh(x: Float): Float\n\n\*\*\n \*n \* Computes the hyperbolic cosine of the value [x].\n \*n \* Special cases:\n \* - `cosh(NaN)` is `NaN`\n \* - `cosh(+Inf|-Inf)` is  $+Inf$ \n \*^n@SinceKotlin("1.2")\npublic expect fun cosh(x: Float): Float\n\n\*\*\n \*n \* Computes the hyperbolic tangent of the value [x].\n \*n \* Special cases:\n \* - `tanh(NaN)` is `NaN`\n \* - `tanh(+Inf)` is  $1.0$ \n \* - `tanh(-Inf)` is  $-1.0$ \n \*^n@SinceKotlin("1.2")\npublic expect fun tanh(x: Float): Float\n\n\*\*\n \*n \* Computes the inverse hyperbolic sine of the value [x].\n \*n \* The returned value is  $y$  such that  $\sinh(y) == x$ .\n \*n \* Special cases:\n \* - `asinh(NaN)` is `NaN`\n \* - `asinh(+Inf)` is  $+Inf$ \n \* - `asinh(-Inf)` is  $-Inf$ \n \*^n@SinceKotlin("1.2")\npublic expect fun asinh(x: Float): Float\n\n\*\*\n \*n \* Computes the inverse hyperbolic cosine of the value [x].\n \*n \* The returned value is positive  $y$  such that  $\cosh(y) == x$ .\n \*n \* Special cases:\n \* - `acosh(NaN)` is `NaN`\n \* - `acosh(x)` is `NaN` when  $x < 1$ \n \* - `acosh(+Inf)` is  $+Inf$ \n \*^n@SinceKotlin("1.2")\npublic expect fun acosh(x: Float): Float\n\n\*\*\n \*n \* Computes the inverse hyperbolic tangent of the value [x].\n \*n \* The returned value is  $y$  such that  $\tanh(y) == x$ .\n \*n \* Special cases:\n \* - `tanh(NaN)` is `NaN`\n \* - `tanh(x)` is `NaN` when  $x > 1$  or  $x < -1$ \n \* - `tanh(1.0)` is  $+Inf$ \n \* - `tanh(-1.0)` is  $-Inf$ \n \*^n@SinceKotlin("1.2")\npublic expect fun atanh(x: Float): Float\n\n\*\*\n \*n \* Computes  $\sqrt{x^2 + y^2}$  without intermediate overflow or underflow.\n \*n \* Special cases:\n \* - returns  $+Inf$  if any of arguments is infinite\n \* - returns `NaN` if any of arguments is `NaN` and the other is not infinite\n \*^n@SinceKotlin("1.2")\npublic expect fun hypot(x: Float, y: Float): Float\n\n\*\*\n \*n \* Computes the positive square root of the value [x].\n \*n \* Special cases:\n \* - `sqrt(x)` is `NaN` when  $x < 0$  or  $x$  is `NaN`\n \*^n@SinceKotlin("1.2")\npublic expect fun sqrt(x: Float): Float\n\n\*\*\n \*n \* Computes Euler's number  $e$  raised to the power of the value [x].\n \*n \* Special cases:\n \* - `exp(NaN)` is `NaN`\n \* - `exp(+Inf)` is  $+Inf$ \n \* - `exp(-Inf)` is  $0.0$ \n \*^n@SinceKotlin("1.2")\npublic expect fun exp(x: Float): Float\n\n\*\*\n \*n \* Computes  $\exp(x)$  -  $1$ .\n \*n \* This function can be implemented to produce more precise result for [x] near zero.\n \*n \* Special cases:\n \* - `expm1(NaN)` is `NaN`\n \* - `expm1(+Inf)` is  $+Inf$ \n \* - `expm1(-Inf)` is  $-1.0$ \n \*n \* @see [exp] function.\n \*^n@SinceKotlin("1.2")\npublic expect fun expm1(x: Float): Float\n\n\*\*\n \*n \* Computes the

logarithm of the value [x] to the given [base].  
 \* Special cases:  
 -  $\log(x, b)$  is `NaN` if either `x` or `b` are `NaN`  
 -  $\log(x, b)$  is `NaN` when `x < 0` or `b <= 0` or `b == 1.0`  
 -  $\log(+Inf, +Inf)$  is `NaN`  
 -  $\log(+Inf, b)$  is `+Inf` for `b > 1` and `-Inf` for `b < 1`  
 -  $\log(0.0, b)$  is `-Inf` for `b > 1` and `+Inf` for `b > 1`  
 \* See also logarithm functions for common fixed bases: [ln], [log10] and [log2].

```

* Since Kotlin("1.2")
public expect fun log(x: Float, base: Float): Float
 * Computes the natural logarithm (base 'E') of the value [x].
 * Special cases:
 * - ln(NaN) is NaN
 * - ln(x) is NaN when x < 0.0
 * - ln(+Inf) is +Inf
 * - ln(0.0) is -Inf
* Since Kotlin("1.2")
public expect fun ln(x: Float): Float
 * Computes the common logarithm (base 10) of the value [x].
 * @see [ln] function for special cases.
* Since Kotlin("1.2")
public expect fun log10(x: Float): Float
 * Computes the binary logarithm (base 2) of the value [x].
 * @see [ln] function for special cases.
* Since Kotlin("1.2")
public expect fun log2(x: Float): Float
 * Computes ln(a + 1).
 * This function can be implemented to produce more precise result for [x] near zero.
 * Special cases:
 * - ln1p(NaN) is NaN
 * - ln1p(x) is NaN where x < -1.0
 * - ln1p(-1.0) is -Inf
 * - ln1p(+Inf) is +Inf
 * @see [ln] function
 * @see [expm1] function
* Since Kotlin("1.2")
public expect fun ln1p(x: Float): Float
 * Rounds the given value [x] to an integer towards positive infinity.
 * @return the smallest Float value that is greater than or equal to the given value [x] and is a mathematical integer.
 * Special cases:
 * - ceil(x) is x where x is NaN or +Inf or -Inf or already a mathematical integer.
* Since Kotlin("1.2")
public expect fun ceil(x: Float): Float
 * Rounds the given value [x] to an integer towards negative infinity.
 * @return the largest Float value that is smaller than or equal to the given value [x] and is a mathematical integer.
 * Special cases:
 * - floor(x) is x where x is NaN or +Inf or -Inf or already a mathematical integer.
* Since Kotlin("1.2")
public expect fun floor(x: Float): Float
 * Rounds the given value [x] to an integer towards zero.
 * @return the value [x] having its fractional part truncated.
 * Special cases:
 * - truncate(x) is x where x is NaN or +Inf or -Inf or already a mathematical integer.
* Since Kotlin("1.2")
public expect fun truncate(x: Float): Float
 * Rounds the given value [x] towards the closest integer with ties rounded towards even integer.
 * Special cases:
 * - round(x) is x where x is NaN or +Inf or -Inf or already a mathematical integer.
* Since Kotlin("1.2")
public expect fun round(x: Float): Float
 * Returns the absolute value of the given value [x].
 * Special cases:
 * - abs(NaN) is NaN
 * @see absoluteValue extension property for [Float]
* Since Kotlin("1.2")
public expect fun abs(x: Float): Float
 * Returns the sign of the given value [x]:
 * - -1.0 if the value is negative,
 * - zero if the value is zero,
 * - 1.0 if the value is positive
 * Special case:
 * - sign(NaN) is NaN
* Since Kotlin("1.2")
public expect fun sign(x: Float): Float
 * Returns the smaller of two values.
 * If either value is NaN, then the result is NaN.
* Since Kotlin("1.2")
public expect fun min(a: Float, b: Float): Float
 * Returns the greater of two values.
 * If either value is NaN, then the result is NaN.
* Since Kotlin("1.2")
public expect fun max(a: Float, b: Float): Float
 * // extensions
 * Raises this value to the power [x].
 * Special cases:
 * - b.pow(0.0) is 1.0
 * - b.pow(1.0) == b
 * - b.pow(NaN) is NaN
 * - NaN.pow(x) is NaN for x != 0.0
 * - b.pow(Inf) is NaN for abs(b) == 1.0
 * - b.pow(x) is NaN for b < 0 and x is finite and not an integer
* Since Kotlin("1.2")
public expect fun Float.pow(x: Float): Float
 * Raises this value to the integer power [n].
 * See the other overload of [pow] for details.
* Since Kotlin("1.2")
public expect fun Float.pow(n: Int): Float
 * Returns the absolute value of this value.
 * Special cases:
 * - NaN.absoluteValue is NaN
 * @see abs function
* Since Kotlin("1.2")
public expect val Float.absoluteValue: Float
 * Returns the sign of this value:
 * - -1.0 if the value is negative,
 * - zero if the value is zero,
 * - 1.0 if the value is positive
 * Special case:
 * - NaN.sign is NaN
* Since Kotlin("1.2")
public expect val Float.sign: Float
 * Returns this value with the sign bit same as of the [sign] value.
 * If [sign] is NaN the sign of the result is undefined.
* Since Kotlin("1.2")
public expect fun Float.withSign(sign: Float): Float
 * Returns this value with the sign bit same as of the [sign] value.
* Since Kotlin("1.2")
public expect fun Float.withSign(sign: Int): Float
 * Rounds this [Float] value to the nearest integer and converts the result to [Int].
 * Ties are

```

rounded towards positive infinity.\n \* Special cases:\n \* - `x.roundToInt() == Int.MAX\_VALUE` when `x > Int.MAX\_VALUE`\n \* - `x.roundToInt() == Int.MIN\_VALUE` when `x < Int.MIN\_VALUE`\n \* @throws IllegalArgumentException when this value is `NaN`\n \* \n \* @SinceKotlin("1.2")\n \* \n \* public expect fun Float.roundToInt(): Int\n \* \n \* Rounds this [Float] value to the nearest integer and converts the result to [Long].\n \* Ties are rounded towards positive infinity.\n \* Special cases:\n \* - `x.roundToLong() == Long.MAX\_VALUE` when `x > Long.MAX\_VALUE`\n \* - `x.roundToLong() == Long.MIN\_VALUE` when `x < Long.MIN\_VALUE`\n \* @throws IllegalArgumentException when this value is `NaN`\n \* \n \* @SinceKotlin("1.2")\n \* \n \* public expect fun Float.roundToLong(): Long\n \* \n \* // endregion\n \* \n \* ===== Integer Math =====\n \* \n \* Returns the absolute value of the given value [n].\n \* Special cases:\n \* - `abs(Int.MIN\_VALUE)` is `Int.MIN\_VALUE` due to an overflow\n \* \n \* @see absoluteValue extension property for [Int]\n \* \n \* @SinceKotlin("1.2")\n \* \n \* public expect fun abs(n: Int): Int\n \* \n \* Returns the smaller of two values.\n \* \n \* @SinceKotlin("1.2")\n \* \n \* public expect fun min(a: Int, b: Int): Int\n \* \n \* Returns the greater of two values.\n \* \n \* @SinceKotlin("1.2")\n \* \n \* public expect fun max(a: Int, b: Int): Int\n \* \n \* Returns the absolute value of this value.\n \* Special cases:\n \* - `Int.MIN\_VALUE.absoluteValue` is `Int.MIN\_VALUE` due to an overflow\n \* \n \* @see abs function\n \* \n \* @SinceKotlin("1.2")\n \* \n \* public expect val Int.absoluteValue: Int\n \* \n \* Returns the sign of this value:\n \* - `-1` if the value is negative,\n \* - `0` if the value is zero,\n \* - `1` if the value is positive\n \* \n \* @SinceKotlin("1.2")\n \* \n \* public expect val Int.sign: Int\n \* \n \* Returns the absolute value of the given value [n].\n \* Special cases:\n \* - `abs(Long.MIN\_VALUE)` is `Long.MIN\_VALUE` due to an overflow\n \* \n \* @see absoluteValue extension property for [Long]\n \* \n \* @SinceKotlin("1.2")\n \* \n \* public expect fun abs(n: Long): Long\n \* \n \* Returns the smaller of two values.\n \* \n \* @SinceKotlin("1.2")\n \* \n \* public expect fun min(a: Long, b: Long): Long\n \* \n \* Returns the greater of two values.\n \* \n \* @SinceKotlin("1.2")\n \* \n \* public expect fun max(a: Long, b: Long): Long\n \* \n \* Returns the absolute value of this value.\n \* Special cases:\n \* - `Long.MIN\_VALUE.absoluteValue` is `Long.MIN\_VALUE` due to an overflow\n \* \n \* @see abs function\n \* \n \* @SinceKotlin("1.2")\n \* \n \* public expect val Long.absoluteValue: Long\n \* \n \* Returns the sign of this value:\n \* - `-1` if the value is negative,\n \* - `0` if the value is zero,\n \* - `1` if the value is positive\n \* \n \* @SinceKotlin("1.2")\n \* \n \* public expect val Long.sign: Int\n \* \n \* // endregion\n \* \n \* "names": [], "mappings": "AAWC,CAXA,yB;EACG,IAAI,OAAO,MAAO,KAAI,UAAW,IAAG,MAAM,IAA1C,C;IACI,MAAM,CAAC,QAAD,EA AW,CAAC,SAAD,CAAX,EA AW,B,OAAxB,C;SAEL,IAAI,OAAO,OAAQ,KAAI,QAAvB,C;IACD,OAAO,CAAC,MAAM,QAAP,C;;IAGP,IAAI,OAAQ,GAAE,E;IACd,OAAO,CAAC,IAAI,OAAL,C;;CAEd,CAAC,IAAD,EA AO,kB;EACJ,IAAI,IAAI,M;ECPZ,MAAM,eAAgB,GAAE,a;IACpB,OA AoD,CAA5C,KAAK,QAAQ,CAAC,CAAD,CAAI,IAAG,CAA E,YAAW,SAAW,KAA G,CAAC,OAAQ,KAAI,c;G ;EAGxE,MAAM,YAAa,GAAE,a;IACjB,OAAO,CAA E,YAAW,SAAU,IAAG,CAAC,OAAQ,KAAI,c;G;EAGID,MAAM,aAAc,GAAE,a;IACIB,OAAO,CAA E,YAAW,U;G;EAGxB,MAAM,YAAa,GAAE,a;IACjB,OAAO,CAA E,YAAW,WAAY,IAAG,CAAC,OAAQ,KAAI,W;G;EAGpD,MAAM,WAAY,GAAE,a;IACbB,OAAO,CAA E,YAAW,U;G;EAGxB,MAAM,aAAc,GAAE,a;IACIB,OAAO,CAA E,YAAW,Y;G;EAGxB,MAAM,cAAe,GAAE,a;IACnB,OAAO,CAA E,YAAW,Y;G;EAGxB,MAAM,YAAa,GAAE,a;IACjB,OAAO,KAAK,QAAQ,CAAC,CAAD,CAAI,IAAG,CAAC,OAAQ,KAAI,W;G;EAG5C,MAAM,QAAS,GAAE,a;IACb,OAAO,KAAK,QAAQ,CAAC,CAAD,CAA I,IAAG,CAAC,CAAC,O;G;EAGjC,MAAM,WAAY,GAAE,a;IACbB,OAAO,KAAK,QAAQ,CAAC,CAAD,CAAI,IAAG,WAAW,OAAO,CAAC,CAAD,C;G;EAGjD,MAAM,cAAe,GAAE,a;IACnB,IAAI,CAA E,KAAI,IAAV,C;M AA gB,OAAO,M;IACvB,IAAI,WA AW,MAAM,YAA Y,CAAC,CAAD,CAAI,GAAE,MAAM,aAAR,GAAwB,MAAM,S;IACnE,OAAO,GA AI,GAAE,KAAK,UAAU,IAAI,KAAK,CAAC,CAAD,EA AI,a;MAAc,OAAO,QAAQ,CAAC,CAAD,C;KAAjC,CAAwC,KAAK,CAAC,IAAD,CAA O,GAAE,G;G;EAG/F,MAAM,kBAAmB,GAAE,e;IACvB,OAAO,MAAM,OAAO,YAA Y,wBAAwB,CAAC,GAAD,C;G;EAG5D,MAAM,YAAa,GAAE,gB;IACjB,IAAI,CAA E,KAAI,CAAV,C;MACI,OAAO,I;KAEX,IAAI,CAA E,KAAI,IAAK,IAAG,CAA E,KAAI,IAAK,IAAG,CAAC,MAAM,WA AW,CAAC,CAAD,CAAI,IAAG,CAAC,OAAQ,KAAI,CAAC,OAAvE,C;MACI,OAAO,K;KAGX,KAAK,IAAI,IAAI,CAAR,EA AW,IAAI,CAAC,OAArB,EA A8B,CAA E,GAAE,CAAIC,EA AqC,CAAC,EAAtC,C;MACI,IAAI,CAAC,MAAM,OAAO,CAAC,CAAC,CAAC,CAAD,CAAF,EA AO,CAAC,CAAC,CAAD,CAAR,CAAIB

,C;QACI,OAAO,K;;IAGf,OAAO,I;G;EAGX,MAAM,gBAAiB,GAAE,gB;IACrB,OAAO,MAAM,OAAO,YAAY,s  
BAAsB,CAAC,CAAD,EAAl,CAAJ,C;G;EAG1D,MAAM,cAAe,GAAE,e;IACnB,IAAI,GAAl,KAAI,IAAZ,C;MA  
AkB,OAAO,C;IACzB,IAAI,SAAS,C;IACb,KAAK,IAAI,IAAI,CAAR,EAaw,IAAI,GAAG,OAAvB,EAAGc,CAA  
E,GAAE,CAApC,EAauC,CAAC,EAaxC,C;MACI,MAAO,GAAqB,CAAjB,EAAG,GAAE,MAAO,GAAE,CAAG  
,IAAE,MAAM,SAAS,CAAC,GAAG,CAAC,CAAD,CAAJ,CAAU,GAAE,C;;IAE7D,OAAO,M;G;EAGX,MAAM,  
kBAaMB,GAAE,e;IACvB,OAAO,MAAM,OAAO,YAAY,wBAawB,CAAC,GAAD,C;G;EAG5D,MAAM,mBAA  
oB,GAAE,iB;IACxB,KAAK,KAAK,CAAC,MAAM,gBAAP,C;G;ECpFd,MAAM,eAAgB,GAAE,mB;IACpB,CA  
AC,aAAc,GAAE,I;IACjB,OAAO,C;G;EAGX,MAAM,uBAawB,GAAE,4C;IAC5B,MAAM,IAAK,GAAE,M;IAC  
b,MAAM,IAAK,GAAE,M;IACb,MAAM,aAAc,GAAE,I;IACtB,OAAO,mBAAmB,CAAC,MAAD,EAAS,MAAT,  
EAAiB,6BAA6B,CAAC,UAAD,CAA9C,C;G;EAG9B,iD;IACI,GAAG,WAAY,GAAE,sBAAsB,CAAC,OAAO,M  
AAO,KAAI,UAAW,GAAE,KAAK,QAAP,GAakB,KAAK,UAArD,C;IACvC,GAAG,YAAa,GAAE,G;IACIB,OA  
AO,G;G;EAGX,IAAI,gCAAgC,CACcC,UACa,QAAS,IAAT,wBAAqC,Y;IAC1C,OAAO,MAAM,OAAO,QAAQ,k  
B;GADvB,CADb,aAIe,QAAS,IAAT,wBAAqC,Y;IAC5C,OAAO,MAAM,OAAO,QAAQ,W;GADrB,CAJf,CADgC  
,EAShC,UACa,QAAS,IAAT,wBAAqC,Y;IAC1C,OAAO,MAAM,OAAO,QAAQ,kB;GADvB,CADb,aAIe,QAAS,I  
AAT,wBAAqC,Y;IAC5C,OAAO,MAAM,OAAO,QAAQ,W;GADrB,CAJf,CATgC,C;EAmBpC,uC;IACI,IAAI,KA  
AK,MAAO,KAAI,IAApB,C;MACI,KAAK,MAAO,GAAE,aACE,CAAC,KAAK,qBAAqB,EAA3B,CADF,aAEC,I  
AFD,aAGC,EAHD,cAIE,EAJF,SAKH,EALG,iBAMK,EANL,C;KASIB,OAAO,KAAK,M;G;EChDhB,MAAM,QA  
AS,GAAE,a;IACb,OAAoB,CAAZ,CAAE,GAAE,KAAQ,KAAG,EAAG,IAAG,E;G;EAGjC,MAAM,OAAQ,GAA  
E,a;IACZ,OAAkB,CAAV,CAAE,GAAE,GAAM,KAAG,EAAG,IAAG,E;G;EAG/B,MAAM,OAAQ,GAAE,a;IAC  
Z,OAAO,CAAE,GAAE,K;G;EAGf,MAAM,aAAc,GAAE,a;IACIB,OAAO,CAAE,YAAW,MAAM,KAAM,GAAE,  
CAAF,GAAM,MAAM,KAAK,WAaw,CAAC,CAAD,C;G;EAGhE,MAAM,YAAa,GAAE,a;IACjB,OAAO,CAAE  
,YAAW,MAAM,KAAM,GAAE,CAAC,MAAM,EAAT,GAAC,MAAM,YAAY,CAAC,CAAD,C;G;EAGpE,MAA  
M,cAAe,GAAE,a;IACnB,OAAO,MAAM,QAAQ,CAAC,MAAM,YAAY,CAAC,CAAD,CAAnB,C;G;EAGzB,MA  
AM,aAAc,GAAE,a;IACIB,OAAO,MAAM,OAAO,CAAC,MAAM,YAAY,CAAC,CAAD,CAAnB,C;G;EAGxB,M  
AAM,eAAgB,GAAE,a;IACpB,OAAO,CAAC,C;G;EAGZ,MAAM,aAAc,GAAE,a;IACIB,OAAO,MAAM,OAAO,  
CAAC,MAAM,YAAY,CAAC,CAAD,CAAnB,C;G;EAGxB,MAAM,YAAa,GAAE,a;IACjB,IAAI,CAAE,GAAE,U  
AAR,C;MAAoB,OAAO,U;IAC3B,IAAI,CAAE,GAAE,WAAR,C;MAAqB,OAAO,W;IAC5B,OAAO,CAAE,GAA  
E,C;G;EAGf,MAAM,YAAa,GAAE,a;IACjB,IAAI,CAAE,IAAG,IAAT,C;MAAe,OAAO,C;IACtB,IAAI,CAAE,Y  
AAW,MAAM,UAAvB,C;MAAmC,OAAO,C;IAC1C,OAAO,IAAI,MAAM,UAAV,CAAqB,CAArB,C;G;EAGX,M  
AAM,UAAW,GAAE,a;IACf,IAAI,CAAE,IAAG,IAAT,C;MAAe,OAAO,C;IACtB,OAAO,MAAM,OAAO,CAAC,  
CAAD,C;G;ECIDxB,MAAM,OAAQ,GAAE,sB;IACZ,IAAI,IAAK,IAAG,IAAZ,C;MACI,OAAO,IAAK,IAAG,I;K  
AGnB,IAAI,IAAK,IAAG,IAAZ,C;MACI,OAAO,K;KAGX,IAAI,IAAK,KAAI,IAAb,C;MACI,OAAO,IAAK,KAA  
LI;KAGpB,IAAI,OAAO,IAAK,KAAI,QAAS,IAAG,OAAO,IAAI,OAAQ,KAAI,UAAvD,C;MACI,OAAO,IAAI,O  
AAO,CAAC,IAAD,C;KAGtB,IAAI,OAAO,IAAK,KAAI,QAAS,IAAG,OAAO,IAAK,KAAI,QAahD,C;MACI,OA  
AO,IAAK,KAAI,IAAK,KAAI,IAAK,KAAI,CAAE,IAAG,CAAE,GAAE,IAAK,KAAI,CAAE,GAAE,IAAnC,C;K  
AGzB,OAAO,IAAK,KAAI,I;G;EAGpB,MAAM,SAAU,GAAE,e;IACd,IAAI,GAAl,IAAG,IAAX,C;MACI,OAAO,  
C;KAEX,IAAI,UAAU,OAAO,G;IACrB,IAAI,QAAS,KAAI,OAAjB,C;MACI,OAAO,UAAW,KAAI,OAAO,GAA  
G,SAAU,GAAE,GAAG,SAAS,EAAd,GAAMb,iBAAiB,CAAC,GAAD,C;KAEIF,IAAI,UAAW,KAAI,OAAAnB,C;  
MACI,OAAO,iBAAiB,CAAC,GAAD,C;KAE5B,IAAI,QAAS,KAAI,OAAjB,C;MACI,OAAO,MAAM,eAAe,CAA  
C,GAAD,C;KAEhC,IAAI,SAAU,KAAI,OAAIB,C;MACI,OAAO,MAAM,CAAC,GAAD,C;KAGjB,IAAI,MAAM,  
MAAM,CAAC,GAAD,C;IACb,OAAO,iBAAiB,CAAC,GAAD,C;G;EAI5B,MAAM,SAAU,GAAE,a;IACd,IAAI,  
CAAE,IAAG,IAAT,C;MACI,OAAO,M;WAEN,IAAI,MAAM,WAaw,CAAC,CAAD,CAArB,C;MACD,OAAO,O  
;;MAGP,OAAO,CAAC,SAAS,E;G;EAKzB,IAAI,WAaw,a;EAGf,IAAI,iCAAiC,sB;EAErC,gC;IACI,IAAI,EAEE  
,8BAA+B,IAAG,GAAPC,CAAJ,C;MACI,IAAI,OAAQ,IAAI,OAAO,EAAG,GAAE,QAAU,GAAE,C;MACxC,MA  
AM,eAAe,CAAC,GAAD,EAAM,8BAAN,EAAsC,QAAU,IAAV,cAA4B,KAA5B,CAAtC,C;KAEzB,OAAO,GAA  
G,CAAC,8BAAD,C;G;EAGd,gC;IACI,IAAI,OAAO,C;IACX,KAAK,IAAI,IAAI,CAAb,EAAGB,CAAE,GAAE,G  
AAG,OAAvB,EAAGC,CAAC,EAajC,C;MACI,IAAI,OAAQ,GAAG,WAaw,CAAC,CAAD,C;MACIB,IAAM,G  
AAG,IAAK,GAAE,EAAG,GAAE,IAAM,GAAE,C;;IAEjC,OAAO,I;G;EAGX,MAAM,iBAakB,GAAE,iB;EC9CI

B,MAAM,KAAM,GAAE,qB;IAKZ,IAAI,KAAM,GAAE,GAAl,GAAE,C;IAMIB,IAAI,MAAO,GAAE,IAAK,GA  
AE,C;G;EAGtB,MAAM,KAAC,WAAY,GAAE,OACf,OADe,cAET,MAFS,cAGV,EAHU,C;EAgBzB,MAAM,KA  
AK,UAAW,GAAE,E;EAQxB,MAAM,KAAC,QAAS,GAAE,iB;IACpB,IAAI,IAAK,IAAG,KAAM,IAAG,KAAM,  
GAAE,GAA7B,C;MACE,IAAI,YAAY,MAAM,KAAC,UAAU,CAAC,KAAD,C;MACrC,IAAI,SAAJ,C;QACE,O  
AAO,S;QAIX,IAAI,MAAM,IAAI,MAAM,KAAC,CAAGB,KAAM,GAAE,CAAxB,EAA2B,KAAM,GAAE,CAAE  
,GAAE,EAfF,GAAO,CAA5C,C;IACV,IAAI,IAAK,IAAG,KAAM,IAAG,KAAM,GAAE,GAA7B,C;MACE,MAA  
M,KAAC,UAAU,CAAC,KAAD,CAAQ,GAAE,G;KAEjC,OAAO,G;G;EAYT,MAAM,KAAC,WAAY,GAAE,iB;I  
ACvB,IAAI,KAAC,CAAC,KAAD,CAAT,C;MACE,OAAO,MAAM,KAAC,K;WACb,IAAI,KAAM,IAAG,CAAC,  
MAAM,KAAC,gBAAzB,C;MACL,OAAO,MAAM,KAAC,U;WACb,IAAI,KAAM,GAAE,CAAE,IAAG,MAAM,  
KAAC,gBAA5B,C;MACL,OAAO,MAAM,KAAC,U;WACb,IAAI,KAAM,GAAE,CAAZ,C;MACL,OAAO,MAA  
M,KAAC,WAAY,CAAC,CAAC,KAAC,CAAQ,OAAO,E;:MAE5C,OAAO,IAAI,MAAM,KAAC,CACF,KAAM,  
GAAE,MAAM,KAAC,gBAAkB,GAAE,CADrC,EAfF,KAAM,GAAE,MAAM,KAAC,gBAAkB,GAAE,CAFrC,C  
;G;EAcX,MAAM,KAAC,SAAU,GAAE,6B;IACrB,OAAO,IAAI,MAAM,KAAC,CAAGB,OAAhB,EAAyB,QAAz  
B,C;G;EAWT,MAAM,KAAC,WAAY,GAAE,0B;IACvB,IAAI,GAAG,OAAQ,IAAG,CAAIB,C;MACE,MAAM,K  
AAK,CAAC,mCAAD,C;KAGb,IAAI,QAAQ,SAAU,IAAG,E;IACzB,IAAI,KAAM,GAAE,CAAE,IAAG,EAAG,G  
AAE,KAAtB,C;MACE,MAAM,KAAC,CAAC,sBAAuB,GAAE,KAA1B,C;KAGb,IAAI,GAAG,OAAO,CAAC,C  
AAD,CAAI,IAAG,GAAR,C;MACE,OAAO,MAAM,KAAC,WAAY,CAAC,GAAG,UAAU,CAAC,CAAD,CAAd  
,EAAmB,KAAmB,CAAyB,OAAO,E;WACxD,IAAI,GAAG,QAAQ,CAAC,GAAD,CAAM,IAAG,CAAxB,C;MAC  
L,MAAM,KAAC,CAAC,+CAAGD,GAAE,GAAnD,C;KAKb,IAAI,eAAe,MAAM,KAAC,WAAY,CAAC,IAAI,IA  
AI,CAAC,KAAD,EAAQ,CAAR,CAAT,C;IAEzC,IAAI,SAAS,MAAM,KAAC,K;IACxB,KAAC,IAAI,IAAI,CAA  
b,EAAgB,CAAE,GAAE,GAAG,OAAvB,EAAgC,CAAE,IAAG,CAArC,C;MACE,IAAI,OAAO,IAAI,IAAI,CAAC  
,CAAD,EAAl,GAAG,OAAQ,GAAE,CAAjB,C;MACnB,IAAI,QAAQ,QAAQ,CAAC,GAAG,UAAU,CAAC,CAA  
D,EAAl,CAAE,GAAE,IAAR,CAAd,EAA6B,KAA7B,C;MACpB,IAAI,IAAK,GAAE,CAAX,C;QACE,IAAI,QAA  
Q,MAAM,KAAC,WAAY,CAAC,IAAI,IAAI,CAAC,KAAD,EAAQ,IAAR,CAAT,C;QACIC,MAAO,GAAE,MAA  
M,SAAS,CAAC,KAAD,CAAO,IAAI,CAAC,MAAM,KAAC,WAAY,CAAC,KAAD,CAAvB,C;:QAEnC,MAAO,  
GAAE,MAAM,SAAS,CAAC,YAAD,C;QACxB,MAAO,GAAE,MAAM,IAAI,CAAC,MAAM,KAAC,WAAY,CA  
AC,KAAD,CAAvB,C;:;IAGvB,OAAO,M;G;EAcT,MAAM,KAAC,gBAAiB,GAAE,CAAE,IAAG,E;EAOnC,MA  
AM,KAAC,gBAAiB,GAAE,CAAE,IAAG,E;EAOnC,MAAM,KAAC,gBAAiB,GACxB,MAAM,KAAC,gBAAiB,  
GAAE,MAAM,KAAC,gB;EA07C,MAAM,KAAC,gBAAiB,GACxB,MAAM,KAAC,gBAAiB,GAAE,C;EA0IC,  
MAAM,KAAC,gBAAiB,GACxB,MAAM,KAAC,gBAAiB,GAAE,MAAM,KAAC,gB;EA07C,MAAM,KAAC,gBAAiB,GACxB,MA  
AM,KAAC,gBAAiB,GAAE,C;EAIIC,MAAM,KAAC,KAAM,GAAE,MAAM,KAAC,QAAQ,CAAC,CAAD,C;EA  
IIC,MAAM,KAAC,IAAK,GAAE,MAAM,KAAC,QAAQ,CAAC,CAAD,C;EAIrC,MAAM,KAAC,QAAS,GAAE,  
MAAM,KAAC,QAAQ,CAAC,EAAD,C;EAIzC,MAAM,KAAC,UAAW,GACIB,MAAM,KAAC,SAAS,CAAC,aA  
AW,GAAE,CAAd,EAAiB,UAAW,GAAE,CAA9B,C;EAIxB,MAAM,KAAC,UAAW,GAAE,MAAM,KAAC,SA  
S,CAAC,CAAD,EAAl,aAAW,GAAE,CAAjB,C;EA05C,MAAM,KAAC,YAAa,GAAE,MAAM,KAAC,QAAQ,C  
AAC,CAAE,IAAG,EAAN,C;EAI7C,MAAM,KAAC,UAAU,MAAO,GAAE,Y;IAC5B,OAAO,IAAI,K;G;EAKb,M  
AAM,KAAC,UAAU,SAAU,GAAE,Y;IAC/B,OAAO,IAAI,MAAO,GAAE,MAAM,KAAC,gBAAiB,GACzC,IAAI  
,mBAAmB,E;G;EAIhC,MAAM,KAAC,UAAU,SAAU,GAAE,Y;IAC/B,OAAO,IAAI,MAAO,GAAE,IAAI,K;G;E  
AQ1B,MAAM,KAAC,UAAU,SAAU,GAAE,qB;IAC/B,IAAI,QAAQ,SAAU,IAAG,E;IACzB,IAAI,KAAM,GAAE  
,CAAE,IAAG,EAAG,GAAE,KAAtB,C;MACE,MAAM,KAAC,CAAC,sBAAuB,GAAE,KAA1B,C;KAGb,IAAI,I  
AAI,OAAO,EAfF,C;MACE,OAAO,G;KAGT,IAAI,IAAI,WAAY,EAAmB,C;MACE,IAAI,IAAI,WAAY,CAAC,  
MAAM,KAAC,UAAZ,CAAnB,C;QAGE,IAAI,YAAY,MAAM,KAAC,WAAY,CAAC,KAAD,C;QACIC,IAAI,M  
AAM,IAAI,IAAI,CAAC,SAAD,C;QACIB,IAAI,MAAM,GAAG,SAAS,CAAC,SAAD,CAAW,SAAS,CAAC,IAA  
D,C;QACIC,OAAO,GAAG,SAAS,CAAC,KAAD,CAAQ,GAAE,GAAG,MAAM,EAAE,SAAS,CAAC,KAAD,C;:  
QAEjD,OAAO,GAAl,GAAE,IAAI,OAAO,EAAE,SAAS,CAAC,KAAD,C;:KAMvC,IAAI,eAAe,MAAM,KAAC,  
WAAY,CAAC,IAAI,IAAI,CAAC,KAAD,EAAQ,CAAR,CAAT,C;IAEzC,IAAI,MAAM,I;IACV,IAAI,SAAS,E;IA  
Cb,OAAO,IAAP,C;MACE,IAAI,SAAS,GAAG,IAAI,CAAC,YAAD,C;MACpB,IAAI,SAAS,GAAG,SAAS,CAAC

,MAAM,SAAS,CAAC,YAAD,CAAhB,CAA+B,MAAM,E;MAC9D,IAAI,SAAS,MAAM,SAAS,CAAC,KAAD,C;  
MAE5B,GAAI,GAAE,M;MACN,IAAI,GAAG,OAAO,EAAd,C;QACE,OAAO,MAAO,GAAE,M;;QAEhB,OAAO,  
MAAM,OAAQ,GAAE,CAAvB,C;UACE,MAAO,GAAE,GAAL,GAAE,M;;QAEjB,MAAO,GAAE,EAAG,GAAE,  
MAAO,GAAE,M;;G;EAO7B,MAAM,KAAK,UAAU,YAAa,GAAE,Y;IACiC,OAAO,IAAI,M;G;EAKb,MAAM,K  
AAK,UAAU,WAAY,GAAE,Y;IACjC,OAAO,IAAI,K;G;EAKb,MAAM,KAAK,UAAU,mBAAoB,GAAE,Y;IACz  
C,OAAQ,IAAI,KAAM,IAAG,CAAG,GACpB,IAAI,KADgB,GACR,MAAM,KAAK,gBAAiB,GAAE,IAAI,K;G;E  
AQpD,MAAM,KAAK,UAAU,cAAe,GAAE,Y;IACpC,IAAI,IAAI,WAAW,EAAnB,C;MACE,IAAI,IAAI,WAAW,  
CAAC,MAAM,KAAK,UAAZ,CAAnB,C;QACE,OAAO,E;;QAEp,OAAO,IAAI,OAAO,EAAE,cAAc,E;;MAGpC,  
IAAI,MAAM,IAAI,MAAO,IAAG,CAAE,GAAE,IAAI,MAAN,GAAe,IAAI,K;MAC7C,KAAK,IAAI,MAAM,EA  
Af,EAAmB,GAAI,GAAE,CAAzB,EAA4B,GAAG,EAA/B,C;QACE,IAAuB,CAAI,B,GAAI,GAAG,CAAE,IAAG,  
GAAM,KAAG,CAA1B,C;UACE,K;;MAGJ,OAAO,IAAI,MAAO,IAAG,CAAE,GAAE,GAAL,GAAE,EAAR,GAA  
a,GAAI,GAAE,C;;G;EAM9C,MAAM,KAAK,UAAU,OAAQ,GAAE,Y;IAC7B,OAAO,IAAI,MAAO,IAAG,CAAE  
,IAAG,IAAI,KAAM,IAAG,C;G;EAKzC,MAAM,KAAK,UAAU,WAAY,GAAE,Y;IACjC,OAAO,IAAI,MAAO,G  
AAE,C;G;EAKtB,MAAM,KAAK,UAAU,MAAO,GAAE,Y;IAC5B,OAAuB,CAAf,IAAI,KAAM,GAAE,CAAG,K  
AAG,C;G;EAQ5B,MAAM,KAAK,UAAU,WAAY,GAAE,iB;IACjC,OAAQ,IAAI,MAAO,IAAG,KAAK,MAAQ,I  
AAI,IAAI,KAAM,IAAG,KAAK,K;G;EAQ3D,MAAM,KAAK,UAAU,cAAe,GAAE,iB;IACpC,OAAQ,IAAI,MAA  
O,IAAG,KAAK,MAAQ,IAAI,IAAI,KAAM,IAAG,KAAK,K;G;EAQ3D,MAAM,KAAK,UAAU,SAAU,GAAE,iB;  
IAC/B,OAAO,IAAI,QAAQ,CAAC,KAAD,CAAQ,GAAE,C;G;EAQ/B,MAAM,KAAK,UAAU,gBAAiB,GAAE,iB  
;IACtC,OAAO,IAAI,QAAQ,CAAC,KAAD,CAAQ,IAAG,C;G;EAQhC,MAAM,KAAK,UAAU,YAAa,GAAE,iB;I  
ACiC,OAAO,IAAI,QAAQ,CAAC,KAAD,CAAQ,GAAE,C;G;EAQ/B,MAAM,KAAK,UAAU,mBAAoB,GAAE,iB  
;IACzC,OAAO,IAAI,QAAQ,CAAC,KAAD,CAAQ,IAAG,C;G;EAUhC,MAAM,KAAK,UAAU,QAAS,GAAE,iB;I  
AC9B,IAAI,IAAI,WAAW,CAAC,KAAD,CAAnB,C;MACE,OAAO,C;KAGT,IAAI,UAAU,IAAI,WAAW,E;IAC7  
B,IAAI,WAAW,KAAK,WAAW,E;IAC/B,IAAI,OAAQ,IAAG,CAAC,QAAhB,C;MACE,OAAO,E;KAET,IAAI,C  
AAC,OAAQ,IAAG,QAAhB,C;MACE,OAAO,C;KAIT,IAAI,IAAI,SAAS,CAAC,KAAD,CAAO,WAAW,EAAnC,  
C;MACE,OAAO,E;;MAEP,OAAO,C;;G;EAMX,MAAM,KAAK,UAAU,OAAQ,GAAE,Y;IAC7B,IAAI,IAAI,WA  
AW,CAAC,MAAM,KAAK,UAAZ,CAAnB,C;MACE,OAAO,MAAM,KAAK,U;;MAEiB,OAAO,IAAI,IAAI,EAA  
E,IAAI,CAAC,MAAM,KAAK,IAAZ,C;;G;EAUzB,MAAM,KAAK,UAAU,IAAK,GAAE,iB;IAG1B,IAAI,MAAM  
,IAAI,MAAO,KAAL,E;IACzB,IAAI,MAAM,IAAI,MAAO,GAAE,K;IACvB,IAAI,MAAM,IAAI,KAAM,KAAL,E;I  
ACxB,IAAI,MAAM,IAAI,KAAM,GAAE,K;IAEtB,IAAI,MAAM,KAAK,MAAO,KAAL,E;IAC1B,IAAI,MAAM,K  
AAK,MAAO,GAAE,K;IACxB,IAAI,MAAM,KAAK,KAAM,KAAL,E;IACzB,IAAI,MAAM,KAAK,KAAM,GAA  
E,K;IAEvB,IAAI,MAAM,CAAV,EAAa,MAAM,CAAnB,EAAsB,MAAM,CAA5B,EAA+B,MAAM,C;IACrC,GA  
AL,IAAG,GAAI,GAAE,G;IACb,GAAL,IAAG,GAAL,KAAL,E;IACf,GAAL,IAAG,K;IACP,GAAL,IAAG,GAAL,GA  
AE,G;IACb,GAAL,IAAG,GAAL,KAAL,E;IACf,GAAL,IAAG,K;IACP,GAAL,IAAG,GAAL,GAAE,G;IACb,GAAL,I  
AAG,GAAL,KAAL,E;IACf,GAAL,IAAG,K;IACP,GAAL,IAAG,GAAL,GAAE,G;IACb,GAAL,IAAG,K;IACP,OAAO  
,MAAM,KAAK,SAAS,CAAE,GAAL,IAAG,EAAL,GAAE,GAaf,EAAqB,GAAL,IAAG,EAAL,GAAE,GAAL,C;G;  
EAS7B,MAAM,KAAK,UAAU,SAAU,GAAE,iB;IAC/B,OAAO,IAAI,IAAI,CAAC,KAAK,OAAO,EAAb,C;G;EA  
SjB,MAAM,KAAK,UAAU,SAAU,GAAE,iB;IAC/B,IAAI,IAAI,OAAO,EAaf,C;MACE,OAAO,MAAM,KAAK,K  
;WACb,IAAI,KAAK,OAAO,EAAhB,C;MACL,OAAO,MAAM,KAAK,K;KAGpB,IAAI,IAAI,WAAW,CAAC,M  
AAM,KAAK,UAAZ,CAAnB,C;MACE,OAAO,KAAK,MAAM,EAAG,GAAE,MAAM,KAAK,UAAb,GAA0B,M  
AAM,KAAK,K;WACrD,IAAI,KAAK,WAAW,CAAC,MAAM,KAAK,UAAZ,CAApB,C;MACL,OAAO,IAAI,M  
AAM,EAAG,GAAE,MAAM,KAAK,UAAb,GAA0B,MAAM,KAAK,K;KAG3D,IAAI,IAAI,WAAW,EAAnB,C;M  
ACE,IAAI,KAAK,WAAW,EAAPB,C;QACE,OAAO,IAAI,OAAO,EAAE,SAAS,CAAC,KAAK,OAAO,EAAb,C;;  
QAE7B,OAAO,IAAI,OAAO,EAAE,SAAS,CAAC,KAAD,CAAO,OAAO,E;;WAExC,IAAI,KAAK,WAAW,EAAP  
B,C;MACL,OAAO,IAAI,SAAS,CAAC,KAAK,OAAO,EAAb,CAAqB,OAAO,E;KAI7C,IAAI,IAAI,SAAS,CAAC,  
MAAM,KAAK,YAAZ,CAA0B,IACvC,KAAK,SAAS,CAAC,MAAM,KAAK,YAAZ,CADiB,C;MAEE,OAAO,M  
AAM,KAAK,WAAW,CAAC,IAAI,SAAS,EAAG,GAAE,KAAK,SAAS,EAjC,C;KAM/B,IAAI,MAAM,IAAI,M  
AAO,KAAL,E;IACzB,IAAI,MAAM,IAAI,MAAO,GAAE,K;IACvB,IAAI,MAAM,IAAI,KAAM,KAAL,E;IACxB,I  
AAI,MAAM,IAAI,KAAM,GAAE,K;IAEtB,IAAI,MAAM,KAAK,MAAO,KAAL,E;IAC1B,IAAI,MAAM,KAAK,



Q,IAAG,E;IACX,IAAI,OAAQ,IAAG,CAAf,C;MACE,OAAO,I;;MAEP,IAAI,OAAO,IAAI,M;MACf,IAAI,OAAQ,  
GAAE,EAAd,C;QACE,IAAI,MAAM,IAAI,K;QACd,OAAO,MAAM,KAAK,SAAS,CACtB,GAAI,KAAl,OAAS,G  
AAG,IAAK,IAAI,EAAG,GAAE,OADZ,EAEvB,IAAK,KAAl,OAfC,C;aAgTb,IAAI,OAAQ,IAAG,EAaf,C;QACL  
,OAAO,MAAM,KAAK,SAAS,CAAC,IAAD,EAAO,CAAP,C;;QAE3B,OAAO,MAAM,KAAK,SAAS,CAAC,IAA  
K,KAAK,OAAQ,GAAE,EAARb,EAA0B,CAA1B,C;;;G;EAMjC,MAAM,KAAK,UAAU,OAAQ,GAAE,iB;IAC3B,  
OAAO,KAAM,YAAW,MAAM,KAAM,IAAG,IAAI,WAAW,CAAC,KAAD,C;G;EAG1D,MAAM,KAAK,UAAU,  
gBAAiB,GAAE,MAAM,KAAK,UAAU,Q;EAE7D,MAAM,KAAK,UAAU,IAAK,GAAE,Y;IACxB,OAAO,IAAI,I  
AAI,CAAC,MAAM,KAAK,IAAZ,C;G;EAGnB,MAAM,KAAK,UAAU,IAAK,GAAE,Y;IACxB,OAAO,IAAI,IAA  
I,CAAC,MAAM,KAAK,QAAZ,C;G;EAGnB,MAAM,KAAK,UAAU,QAAS,GAAE,Y;IAC5B,OAAO,IAAI,SAAS  
,E;G;EAGxB,MAAM,KAAK,UAAU,UAAW,GAAE,Y;IAC9B,OAAO,I;G;EAGX,MAAM,KAAK,UAAU,WAA Y,  
GAAE,MAAM,KAAK,UAAU,O;EACxD,MAAM,KAAK,UAAU,IAAK,GAAE,MAAM,KAAK,UAAU,I;EAEjD,  
MAAM,KAAK,UAAU,QAAS,GAAE,iB;IAC5B,OAAO,IAAI,MAAM,OAAO,OAAO,UAAxB,CAAmC,IAAnC,E  
AAyC,KAAzC,C;G;EC1zBX,MAAM,aAAc,GAAE,2B;G;EAGtB,MAAM,qBAAsB,GAAE,oB;IAC1B,OAAO,G;  
G;EAGX,MAAM,aAAc,GAAE,e;IACIB,IAAI,IAAI,Y;MACJ,CAAE,GAAE,GAAG,E;MACP,OAAO,CAAC,MA  
AM,CAAC,IAAD,EAAO,SAAP,C;K;IAEiB,OAAO,Y;MACH,OAAO,CAAC,MAAM,CAAC,IAAD,EAAO,SAAP  
,C;K;G;EAItB,MAAM,SAAU,GAAE,gB;IACd,OAAO,kB;MACH,OAAO,OAAO,MAAO,KAAl,I;K;G;EAIjC,MA  
AM,aAAc,GAAE,iB;IACIB,OAAO,kB;MACH,OAAO,MAAM,OAAO,CAAC,MAAD,EAAS,KAAT,C;K;G;EAI5  
B,MAAM,OAAQ,GAAE,c;IACZ,OAAO,kB;MACH,OAAO,MAAO,IAAG,IAAK,IAAG,EAAE,CAAC,MAAD,C;  
K;G;EAIInC,MAAM,aAAc,GAAE,gB;IACIB,OAAO,kB;MACH,OAAO,CAAC,CAAC,MAAD,CAAS,IAAG,CAA  
C,CAAC,MAAD,C;K;G;EAI7B,MAAM,qBAAsB,GAAE,wC;G;EAG9B,MAAM,YAAa,GAAE,iB;IACjB,OAAO,  
K;G;EAGX,MAAM,gBAAiB,GAAE,qB;IACrB,gBAAgB,E;G;EAGpB,MAAM,oBAAqB,GAAE,qB;IACzB,gBA  
AgB,E;G;EAGpB,MAAM,kBAAmB,GAAE,qB;IACvB,gBAAgB,E;G;EAGpB,MAAM,mBAAoB,GAAE,4B;IACx  
B,gBAAgB,E;G;EAGpB,MAAM,6BAA8B,GAAE,yB;IACIC,gBAAgB,E;G;EAGpB,4B;IACI,MAAM,IAAI,KAAl  
,CACf,iDAaKd,GACID,qDAAsD,GACtD,uDAHE,C;G;EAMV,MAAM,gBAAiB,GAAE,4B;IACrB,OAAO,Y;M  
ACH,OAAO,Y;K;G;ECJfF,MAAM,UAAW,GAAE,gB;IACf,IAAI,QAAQ,OAAO,C;IACnB,IAAI,KAAM,KAAl,Q  
AAAd,C;MACl,IAAI,OAAO,CAAE,KAAl,QAAjB,C;QACI,OAAO,MAAM,gBAAgB,CAAC,CAAD,EAAI,CAAJ,  
C;OAEjC,OAAO,MAAM,mBAAmB,CAAC,CAAD,EAAI,CAAJ,C;KAEPc,IAAI,KAAM,KAAl,QAAS,IAAG,K  
AAM,KAAl,SAAPc,C;MACl,OAAO,MAAM,mBAAmB,CAAC,CAAD,EAAI,CAAJ,C;KAEPc,OAAO,CAAC,g  
BAAgB,CAAC,CAAD,C;G;EAG5B,MAAM,mBAAoB,GAAE,gB;IACxB,OAAO,CAAE,GAAE,CAAE,GAAE,E  
AAf,GAAO,CAAE,GAAE,CAAE,GAAE,CAAF,GAAM,C;G;EAGpC,MAAM,gBAAiB,GAAE,gB;IACrB,IAAI,C  
AAE,GAAE,CAAR,C;MAAW,OAAO,E;IACIB,IAAI,CAAE,GAAE,CAAR,C;MAAW,OAAO,C;IAEiB,IAAI,CA  
AE,KAAl,CAAV,C;MACl,IAAI,CAAE,KAAl,CAAV,C;QAAa,OAAO,C;MAEPb,IAAI,KAAK,CAAE,GAAE,C;  
MACb,OAAO,EAAG,KAAl,CAAE,GAAE,CAAE,GAAE,CAAF,GAAO,EAAG,GAAE,CAAE,GAAE,EAAf,GA  
AO,C;KAG7C,OAAO,CAAE,KAAl,CAAE,GAAG,CAAE,KAAl,CAAE,GAAE,CAAF,GAAM,CAAjB,GAAsB,E  
;G;EAGzC,MAAM,QAAS,GAAE,iB;IACb,OAAO,MAAM,OAAO,CAAC,KAAK,GAAC,CAAP,C;G;EAGxB,M  
AAM,QAAS,GAAE,iB;IACb,OAAO,MAAM,OAAO,CAAC,KAAK,GAAC,CAAP,C;G;EAGxB,MAAM,KAAM,  
GAAE,IAAI,KAAM,IAAG,I;EAE3B,MAAM,aAAc,GAAE,I;EAEtB,oB;IACI,OAAyB,CAAhB,CAAE,GAAE,YA  
AY,KAAG,CAAE,GAAE,KAAP,CAAE,GAAE,CAAZ,CAAE,GAAE,KAAQ,KAAG,CAAE,GAAE,CAAP,CAAW  
,GAAE,C;G;EA6DtE,CA1DD,Y;IACG,IAAI,MAAM,IAAI,WAAJ,CAAgB,CAAhB,C;IACV,IAAI,aAAa,IAAI,Y  
AAJ,CAAiB,GAAjB,C;IACjB,IAAI,aAAa,IAAI,YAAJ,CAAiB,GAAjB,C;IACjB,IAAI,WAAW,IAAI,UAAJ,CAA  
e,GAaf,C;IACf,IAAI,WAAW,C;IACf,IAAI,YAA Y,C;IAEHb,UAAU,CAAC,CAAD,CAAI,GAAE,E;IACHb,IAAI,  
QAAQ,CAAC,QAAD,CAAW,KAAl,CAA3B,C;MACl,QAAS,GAAE,C;MACX,SAAU,GAAE,C;KAGhB,MAAM  
,aAAc,GAAE,iB;MACIB,OAAO,MAAM,gBAAgB,CAAC,KAAK,CAAC,KAAD,CAAQ,GAAE,GAAf,GAAQ,K  
AAtB,C;K;IAGjC,MAAM,gBAAiB,GAAE,iB;MACrB,UAAU,CAAC,CAAD,CAAI,GAAE,K;MACHb,OAAO,M  
AAM,KAAK,SAAS,CAAC,QAAQ,CAAC,QAAD,CAAT,EAAqB,QAAQ,CAAC,SAAD,CAA7B,C;K;IAG/B,MA  
AM,eAAgB,GAAE,iB;MACpB,QAAQ,CAAC,QAAD,CAAW,GAAE,KAAK,K;MAC1B,QAAQ,CAAC,SAAD,C  
AA Y,GAAE,KAAK,M;MAC3B,OAAO,UAAU,CAAC,CAAD,C;K;IAGrB,MAAM,YAAa,GAAE,iB;MACjB,OA  
AO,MAAM,eAAe,CAAC,KAAK,CAAC,KAAD,CAAQ,GAAE,GAAf,GAAQ,KAAtB,C;K;IAGhC,MAAM,eAAg



B,GAAE,iB;MACpB,UAAU,CAAC,CAAD,CAAI,GAAE,K;MACHb,OAAO,QAAQ,CAAC,CAAD,C;K;IAGnB, MAAM,cAAe,GAAE,iB;MACnB,QAAQ,CAAC,CAAD,CAAI,GAAE,K;MACd,OAAO,UAAU,CAAC,CAAD,C; K;IAIrB,MAAM,cAAe,GAAE,iB;MACnB,UAAU,CAAC,CAAD,CAAI,GAAE,K;MACHb,OAAO,QAAQ,CAAC, SAAD,CAAY,GAAE,a;K;IAGjC,MAAM,eAAgB,GAAE,e;MACpB,IAAc,CAAT,GAAl,GAAE,CAAG,MAAI,GA AIB,C;QACI,OAAO,GAAl,GAAE,C;;QAGb,UAAU,CAAC,CAAD,CAAI,GAAE,G;QACHb,OAAc,CAA9B,QA AQ,CAAC,SAAD,CAAY,GAAE,EAAG,GAAE,CAAG,IAAE,QAAQ,CAAC,QAAD,CAAW,GAAE,C;;K;GAGvE ,G;EAEF,MAAM,cAAe,GAAE,a;IACnB,OAAO,CAAE,IAAG,IAAK,GAAE,CAAF,GAAM,MAAM,SAAS,E;G;E C7G1C,IAAI,OAAO,MAAM,UAAU,WAAY,KAAI,WAA3C,C;IACI,MAAM,eAAe,CAAC,MAAM,UAAP,EAA mB,YAAAnB,EAAiC,QAC3C,kC;MACH,QAAS,GAAE,QAAS,IAAG,C;MACvB,OAAO,IAAI,YAAY,CAAC,YA AD,EAAe,QAaf,CAAyB,KAAI,Q;KAHN,CAAjC,C;GAOzB,IAAI,OAAO,MAAM,UAAU,SAAU,KAAI,WAAzC ,C;IACI,MAAM,eAAe,CAAC,MAAM,UAAP,EAAmB,UAAAnB,EAA+B,QACzC,kC;MACH,IAAI,gBAAgB,IAAI ,SAAS,E;MACjC,IAAI,QAAS,KAAI,SAAU,IAAG,QAAS,GAAE,aAAa,OAAtD,C;QACI,QAAS,GAAE,aAAa,O; OAE5B,QAAS,IAAG,YAAY,O;MACxB,IAAI,YAAY,aAAa,QAAQ,CAAC,YAAD,EAAe,QAaf,C;MACrC,OAA O,SAAU,KAAI,EAAG,IAAG,SAAU,KAAI,Q;KARG,CAA/B,C;GAazB,IAAI,OAAO,IAAI,KAAM,KAAI,WAAz B,C;IACI,IAAI,KAAM,GAAE,a;MACR,CAAE,GAAE,CAAC,C;MACL,IAAI,CAAE,KAAI,CAAE,IAAG,KAAC ,CAAC,CAAD,CAApB,C;QACI,OAAO,MAAM,CAAC,CAAD,C;OAEjB,OAAO,CAAE,GAAE,CAAE,GAAE,C AAF,GAAM,E;K;GAG3B,IAAI,OAAO,IAAI,MAAO,KAAI,WAA1B,C;IACI,IAAI,MAAO,GAAE,a;MACT,IAAI ,KAAK,CAAC,CAAD,CAAT,C;QACI,OAAO,G;OAEX,IAAI,CAAE,GAAE,CAAR,C;QACI,OAAO,IAAI,MAA M,CAAC,CAAD,C;OAErB,OAAO,IAAI,KAAK,CAAC,CAAD,C;K;GAuKtB,CAnKD,Y;IACG,IAAI,UAAU,qB;I ACd,IAAI,iBAaiB,IAAI,KAAK,CAAC,OAAD,C;IAC9B,IAAI,iBAaiB,IAAI,KAAK,CAAC,cAAD,C;IAC9B,IA AI,uBAAuB,CAAC,GAAC,c;IAC7B,IAAI,uBAAuB,CAAC,GAAC,c;IAE7B,IAAI,OAAO,IAAI,KAAM,KAAI,W AAzB,C;MACI,IAAI,KAAM,GAAE,a;QACR,IAAI,IAAI,IAAI,CAAC,CAAD,CAAI,GAAE,cAAIB,C;UACI,IAAI ,SAAS,C;UACb,IAAI,IAAI,IAAI,CAAC,CAAD,CAAI,GAAE,cAAIB,C;YACI,MAAO,IAAI,CAAE,GAAE,CAA E,GAAE,CAAG,GAAE,C;WAE5B,OAAO,M;;UAEP,IAAI,IAAI,IAAI,IAAI,CAAC,CAAD,C;UACHb,IAAI,KAA K,CAAE,GAAE,C;UACb,IAAI,CAAC,QAAQ,CAAC,CAAD,CAAb,C;YAakB,OAAO,IAAI,IAAI,CAAC,CAAE, GAAE,IAAI,IAAT,C;UACjC,IAAI,CAAC,QAAQ,CAAC,EAAD,CAAb,C;YAAmB,OAAO,CAAC,IAAI,IAAI,CA AC,CAAC,CAAE,GAAE,IAAI,IAAV,C;UACnC,OAAgB,CAAR,CAAE,GAAE,EAAl,IAAE,C;;O;KAI9B,IAAI,O AAO,IAAI,KAAM,KAAI,WAAzB,C;MACI,IAAI,KAAM,GAAE,a;QACR,IAAI,IAAI,IAAI,IAAI,CAAC,CAAD, C;QACHb,IAAI,KAAK,CAAE,GAAE,C;QACb,IAAI,CAAC,QAAQ,CAAC,CAAD,CAAI,IAAG,CAAC,QAAQ,C AAC,EAAD,CAA7B,C;UAAmC,OAAO,IAAI,IAAI,CAAC,IAAI,IAAI,CAAC,CAAD,CAAI,GAAE,IAAI,IAAnB, C;QACID,OAAgB,CAAR,CAAE,GAAE,EAAl,IAAE,C;O;KAI1B,IAAI,OAAO,IAAI,KAAM,KAAI,WAAzB,C; MACI,IAAI,KAAM,GAAE,a;QACR,IAAI,IAAI,IAAI,CAAC,CAAD,CAAI,GAAE,cAAIB,C;UACI,IAAI,SAAS,C ;UACb,IAAI,IAAI,IAAI,CAAC,CAAD,CAAI,GAAE,cAAIB,C;YACI,MAAO,IAAI,CAAE,GAAE,CAAE,GAAE, CAAG,GAAE,C;WAE5B,OAAO,M;;UAGP,IAAI,IAAI,IAAI,IAAI,CAAC,CAAC,CAAF,CAAhB,EAASB,IAAI,I AAI,IAAI,CAAC,CAAC,CAAF,C;UACIC,OAAO,CAAE,KAAI,QAAS,GAAE,CAAF,GAAM,CAAE,KAAI,QAAS ,GAAE,EAAF,GAAe,CAAP,CAAE,GAAE,CAAG,KAAG,CAAE,GAAE,CAAP,C;;O;KAQtE,IAAI,OAAO,IAAI ,MAAO,KAAI,WAA1B,C;MACI,IAAI,QAAQ,a;QACR,IAAI,CAAE,IAAG,CAAC,cAAV,C;UAEI,IAAI,CAAE,G AAE,oBAAR,C;YAEI,IAAI,CAAE,GAAE,oBAAR,C;cAGI,OAAO,IAAI,IAAI,CAAC,CAAD,CAAI,GAAE,IAAI, I;cAKzB,OAAO,IAAI,IAAI,CAAC,CAAE,GAAE,CAAE,GAAG,CAAE,IAAG,CAAE,GAAE,CAAP,CAAZ,C;;; YAKnB,OAAO,IAAI,IAAI,CAAC,CAAE,GAAE,IAAI,KAAK,CAAC,CAAE,GAAE,CAAE,GAAE,CAAT,CAAD ,C;;eAGIB,IAAI,CAAE,IAAG,CAAC,cAAV,C;UAED,OAAO,CAAC,KAAK,CAAC,CAAC,CAAF,C;;UAKb,IAA I,SAAS,C;UACb,IAAI,IAAI,IAAI,CAAC,CAAD,CAAI,IAAG,cAAAnB,C;YAEI,IAAI,KAAK,CAAE,GAAE,CAA E,GAAE,C;YAEjB,MAAO,IAAG,EAAG,GAAE,C;WAEhB,OAAO,M;;O;MAGf,IAAI,MAAO,GAAE,K;KAEjB,IA AI,OAAO,IAAI,MAAO,KAAI,WAA1B,C;MACI,IAAI,MAAO,GAAE,a;QACT,IAAI,CAAE,GAAE,CAAR,C;U AEI,OAAO,G;eAEN,IAAI,CAAE,GAAE,CAAE,IAAG,cAAAb,C;UAED,IAAI,CAAE,GAAE,oBAAR,C;YAGI,OA AO,IAAI,IAAI,CAAC,CAAD,CAAI,GAAE,IAAI,I;;YAIzB,OAAO,IAAI,IAAI,CAAC,CAAE,GAAE,IAAI,KAAK ,CAAC,CAAE,GAAE,CAAE,GAAE,CAAT,CAAd,C;;;UAKnB,IAAI,IAAI,IAAI,KAAK,CAAC,CAAE,GAAE,C AAL,C;UAEjB,IAAI,SAAS,C;UACb,IAAI,CAAE,IAAG,cAAT,C;YAEI,IAAI,KAAK,CAAE,GAAE,CAAE,GAA

E,C;YAEjB,MAAO,IAAG,EAAG,GAAE,E;WAGnB,OAAO,IAAI,KAAK,CAAC,CAAD,CAAI,GAAE,M;;O;KAI  
IC,IAAI,OAAO,IAAI,MAAO,KAAI,WAA1B,C;MACI,IAAI,MAAO,GAAE,a;QACT,IAAI,IAAI,IAAI,CAAC,CA  
AD,CAAI,GAAE,cAAIB,C;UACI,IAAI,SAAS,C;UACb,IAAI,IAAI,IAAI,CAAC,CAAD,CAAI,GAAE,cAAIB,C;Y  
ACI,MAAO,IAAI,CAAE,GAAE,CAAE,GAAE,CAAG,GAAE,C;WAE5B,OAAO,M;SAEX,OAAO,IAAI,IAAI,CA  
AS,CAAP,CAAE,GAAE,CAAG,KAAG,CAAE,GAAE,CAAP,CAAT,CAAoB,GAAE,C;O;KAG7C,IAAI,OAAO,I  
AAI,MAAO,KAAI,WAA1B,C;MACI,IAAI,MAAO,GAAE,a;QACT,IAAI,IAAI,IAAI,CAAC,CAAD,CAAI,GAAE  
,cAAIB,C;UACI,IAAI,KAAK,CAAE,GAAE,C;UACb,IAAI,KAAK,EAAG,GAAE,C;UACd,IAAI,KAAK,EAAG,  
GAAE,C;UAEEd,OAAQ,CAAC,EAAG,GAAE,CAAE,GAAE,EAAG,GAAE,CAAE,GAAE,EAAG,GAAE,CAAE,G  
AAE,C;SAEXc,OAAO,IAAI,IAAI,CAAC,CAAE,GAAE,CAAL,C;O;KAGvB,IAAI,OAAO,IAAI,MAAO,KAAI,W  
AA1B,C;MACI,IAAI,MAAO,GAAE,a;QACT,IAAI,IAAI,IAAI,CAAC,CAAD,CAAI,GAAE,cAAIB,C;UACI,IAAI  
,KAAK,CAAE,GAAE,C;UACb,IAAI,KAAK,EAAG,GAAE,C;UACd,IAAI,KAAK,EAAG,GAAE,C;UAEEd,OAAQ  
,EAAG,GAAE,EAAG,GAAE,EAAG,GAAE,CAAE,GAAE,EAAG,GAAE,CAAE,GAAE,C;SAEXc,OAAO,IAAI,I  
AAI,CAAC,CAAD,CAAI,GAAE,C;O;MAG/B,G;EACF,IAAI,OAAO,IAAI,MAAO,KAAI,WAA1B,C;IACI,IAAI,  
MAAO,GAAE,Y;MACT,IAAI,IAAI,C;MACR,IAAI,SAAS,SAAS,O;MAEtB,KAAK,IAAI,IAAI,CAAAb,EAAGb,C  
AAE,GAAE,MAApB,EAA4B,CAAC,EAA7B,C;QACI,IAAI,SAAS,CAAC,CAAD,CAAI,KAAI,QAAS,IAAG,SA  
AS,CAAC,CAAD,CAAI,KAAI,CAAC,QAAnD,C;UACI,OAAO,Q;SAEX,CAAE,IAAG,SAAS,CAAC,CAAD,CA  
AI,GAAE,SAAS,CAAC,CAAD,C;;MAEjC,OAAO,IAAI,KAAK,CAAC,CAAD,C;K;GAGxB,IAAI,OAAO,IAAI,  
MAAO,KAAI,WAA1B,C;IACI,IAAI,MAAO,GAAE,a;MACT,OAAO,IAAI,IAAI,CAAC,CAAD,CAAI,GAAE,IA  
AI,O;K;GAGjC,IAAI,OAAO,IAAI,KAAM,KAAI,WAAzB,C;IACI,IAAI,KAAM,GAAE,a;MACR,OAAO,IAAI,IA  
AI,CAAC,CAAD,CAAI,GAAE,IAAI,M;K;GAGjC,IAAI,OAAO,IAAI,MAAO,KAAI,WAA1B,C;IACI,IAAI,MAA  
O,GAAG,oB;MACV,OAAO,a;QACH,IAAI,SAAS,CAAE,KAAI,C;QACnB,IAAI,MAAO,KAAI,CAAf,C;UACI,O  
AAO,E;SAEX,OAAO,EAAG,IAAG,GAAG,CAAC,MAAD,CAAS,GAAE,GAAL,GAAE,CAAvB,CAA0B,GAAE,  
C;O;KAE5C,CAAC,IAAI,IAAL,EAAW,IAALI,AAf,C;GAIN,IAAI,OAAO,WAAW,OAAQ,KAAI,WAAIC,C;IACI  
,WAAW,OAAQ,GAAE,a;MACjB,OAAO,CAAE,IAAG,IAAK,IAAG,CAAC,UAAW,IAAG,IAAK,IAAG,CAAC,  
UAAU,UAAW,KAAI,SAAS,UAAU,U;K;GAIhG,IAAI,OAAO,KAAK,UAAU,KAAM,KAAI,WAApC,C;IAEI,M  
AAM,eAAe,CAAC,KAAK,UAAAN,EAakB,MAAI,EA0B,QACpC,iB;MAGH,IAAI,IAAK,IAAG,IAAZ,C;QAC  
I,MAAM,IAAI,SAAJ,CAAc,6BAAd,C;OAGV,IAAI,IAAI,MAAM,CAAC,IAAD,C;MAGd,IAAI,MAAM,CAAC,  
OAAQ,KAAI,C;MAGvB,IAAI,QAAQ,SAAS,CAAC,CAAD,C;MACrB,IAAI,gBAAgB,KAAM,IAAG,C;MAG7B,  
IAAI,IAAI,aAAc,GAAE,CAAE,GACIB,IAAI,IAAI,CAAC,GAAL,GAAE,aAAP,EAAsB,CAAtB,CADU,GAEIB,I  
AAI,IAAI,CAAC,aAAD,EAAGb,GAAhB,C;MAGhB,IAAI,MAAM,SAAS,CAAC,CAAD,C;MACnB,IAAI,cAAc,  
GAAL,KAAI,SAAU,GACIB,GADkB,GACZ,GAAL,IAAG,C;MAG/B,IAAI,aAAa,WAAY,GAAE,CAAE,GACHb,I  
AAI,IAAI,CAAC,GAAL,GAAE,WAAP,EAAoB,CAAPb,CADQ,GAehB,IAAI,IAAI,CAAC,WAAD,EAAC,GAAD,  
C;MAGzB,OAAO,CAAE,GAAE,UAX,C;QACI,CAAC,CAAC,CAAD,CAAI,GAAE,K;QACP,CAAC,E;;MAIL,  
OAAO,C;KAvCgC,CAA1B,C;GA4HvB,CahFD,Y;IACG,yC;MACI,IAAI,MAAO,GAAE,CAAb,C;QAAgB,OAA  
O,IAAI,IAAI,CAAC,CAAD,EAAL,MAAO,GAAE,MAAb,C;MAC/B,OAAO,IAAI,IAAI,CAAC,MAAD,EAAS,M  
AAT,C;K;IAEnB,qC;MACI,IAAI,OAAO,GAAL,KAAI,WAAAnB,C;QACI,GAAL,GAAE,IAAI,O;OAEEd,KAAM,GA  
AE,eAAe,CAAC,KAAM,IAAG,CAAV,EAAa,IAAI,OAAjB,C;MACvB,GAAL,GAAE,IAAI,IAAI,CAAC,KAAD,E  
AAQ,eAAe,CAAC,GAAD,EAAM,IAAI,OAAV,CAAvB,C;MACd,OAAO,IAAI,IAAI,YAAR,CAAqB,IAAI,SAAS  
,CAAC,KAAD,EAAQ,GAAR,CAAIC,C;K;IAGX,IAAI,SAAS,CAAC,SAAD,EAAY,UAAZ,EAAwB,WAAxB,EA  
AqC,UAArC,EAAdD,YAAjD,EAA+D,YAA/D,C;IACb,KAAK,IAAI,IAAI,CAAAb,EAAGb,CAAE,GAAE,MAAM,  
OAA1B,EAAMc,EAAE,CAArC,C;MACI,IAAI,aAAa,MAAM,CAAC,CAAD,C;MACvB,IAAI,OAAO,UAAU,UA  
AU,KAAM,KAAI,WAAzC,C;QACI,MAAM,eAAe,CAAC,UAAU,UAX,EAauB,MAAvB,EAA+B,QACzC,KA  
AK,UAAU,KAD0B,CAA/B,C;OAIzB,IAAI,OAAO,UAAU,UAAU,MAAO,KAAI,WAA1C,C;QACI,MAAM,eAA  
e,CAAC,UAAU,UAX,EAauB,OAAvB,EAAGC,QAC1C,eAD0C,CAAhC,C;;MAQJ,CAAPb,Y;OAAc,MAAM,  
CAAC,IAAD,EAAO,IAAI,UAAJ,CAAe,CAAf,CAAP,E;;MAErB,IAAI,QAAQ,QAAQ,UAAU,M;MAC9B,MAA  
M,eAAe,CAAC,QAAQ,UAAE,EAAGb,OAARb,EAA8B,QACxC,uB;QACH,OAAO,KAAK,KAAK,CAAC,IAAD,  
EAAO,IAAP,EAAa,EAAE,MAAM,KAAK,CAAC,KAAD,CAA1B,C;OAF0B,CAA9B,C;;IASzB,KAAK,IAAI,IA  
AI,CAAAb,EAAGb,CAAE,GAAE,MAAM,OAA1B,EAAMc,EAAE,CAArC,C;MACI,IAAI,aAAa,MAAM,CAAC,C

AAD,C;MACvB,IAAI,OAAO,UAAU,UAAU,IAAK,KAAL,WAAxC,C;QACI,MAAM,eAAe,CAAC,UAAU,UAA  
X,EAAuB,KAAbV,EAA8B,QACxC,0B;UACH,OAAO,EAAE,MAAM,KAAL,CAAC,IAAD,CAAM,IAAI,CAAC,  
QAAD,EAAW,IAAX,C;SAFa,CAA9B,C;;IAU7B,IAAI,uBAAuB.gB;MACvB,IAAI,CAAe,GAAE,CAAR,C;QAA  
W,OAAO,E;MACIB,IAAI,CAAe,GAAE,CAAR,C;QAAW,OAAO,C;MAEIB,IAAI,CAAe,KAAL,CAAV,C;QACI,  
IAAI,CAAe,KAAL,CAAV,C;UAAa,OAAO,C;QAEpB,IAAI,KAAL,CAAe,GAAE,C;QACb,OAAO,EAAG,KAAL,  
CAAe,GAAE,CAAe,GAAE,CAAF,GAAO,EAAG,GAAE,CAAe,GAAE,EAAF,GAAO,C;OAG7C,OAAO,CAAe,  
KAAL,CAAe,GAAG,CAAe,KAAL,CAAe,GAAE,CAAF,GAAM,CAAjB,GAAsB,E;K;IAGzC,KAAL,IAAI,IAAI,  
CAAb,EAAGB,CAAe,GAAE,MAAM,OAAIB,EAAMC,EAAE,CAArC,C;MACI,IAAI,aAAa,MAAM,CAAC,CAA  
D,C;MACvB,IAAI,OAAO,UAAU,UAAU,KAAM,KAAL,WAAzC,C;QACI,MAAM,eAAe,CAAC,UAAU,UAAE,  
AAuB,MAAvB,EAA+B,QACzC,2B;UACH,OAAO,KAAL,UAAU,KAAL,KAAL,CAAC,IAAD,EAAO,eAAGB,I  
AAG,oBAAIB,C;SAFY,CAA/B,C;;GAO/B,G;ECxXF,MAAM,KAAM,GAAE,QACH,OADG,aAEC,WAFD,UAG  
F,QAHE,C;EAMd,MAAM,WAAy,GAAE,2C;IACHB,IAAI,qBAAqB,MAAM,yBAAyB,CAAC,KAAD,EAAG,YA  
AR,C;IACxD,IAAI,kBAAmB,IAAG,IAAK,IAAG,kBAaKB,IAAK,IAAG,IAA5D,C;MACI,OAAO,kBAaKB,IAAI,  
KAAL,CAAC,UAAD,C;KAGtC,kBAAmB,GAAE,MAAM,yBAAyB,CAAC,UAAD,EAAa,YAAb,C;IACpD,IAAI,  
kBAAmB,IAAG,IAAK,IAAG,OAAQ,IAAG,kBAA7C,C;MACI,OAAO,UAAU,CAAC,YAAD,C;KAGrB,OAAO,  
MAAM,WAAW,CAAC,UAAD,EAAa,MAAM,eAAe,CAAC,KAAD,CAAIC,EAA2C,YAA3C,C;G;EAG5B,MAA  
M,WAAy,GAAE,kD;IACHB,IAAI,qBAAqB,MAAM,yBAAyB,CAAC,KAAD,EAAG,YAAR,C;IACxD,IAAI,kBA  
AmB,IAAG,IAAK,IAAG,kBAaKB,IAAK,IAAG,IAA5D,C;MACI,kBAaKB,IAAI,KAAL,CAAC,UAAD,EAAa,K  
AAb,C;MAC3B,M;KAGJ,kBAAmB,GAAE,MAAM,yBAAyB,CAAC,UAAD,EAAa,YAAb,C;IACpD,IAAI,kBAA  
mB,IAAG,IAAK,IAAG,OAAQ,IAAG,kBAA7C,C;MACI,UAAU,CAAC,YAAD,CAAe,GAAE,K;MAC3B,M;KA  
GJ,MAAM,WAAW,CAAC,UAAD,EAAa,MAAM,eAAe,CAAC,KAAD,CAAIC,EAA2C,YAA3C,EAAYD,KAAzD  
,C;G;EAGrB,iD;IACI,IAAI,IAAK,KAAL,KAAb,C;MAAoB,OAAO,I;IAE3B,IAAI,WAAW,IAAI,W;IACnB,IAAI,  
QAAS,IAAG,IAAhB,C;MACI,IAAI,aAAa,QAAQ,W;MACzB,KAAL,IAAI,IAAI,CAAb,EAAGB,CAAe,GAAE,U  
AAU,OAA9B,EAAuC,CAAC,EAAxC,C;QACI,IAAI,0BAA0B,CAAC,UAAU,CAAC,CAAD,CAAX,EAAGB,KA  
AhB,CAA9B,C;UACI,OAAO,I;;KAKnB,IAAI,iBAAiB,IAAI,UAAW,IAAG,IAAK,GAAE,MAAM,eAAe,CAAC,I  
AAI,UAAAL,CAAvB,GAA0C,I;IACtF,IAAI,mBAAmB,cAAe,IAAG,IAAK,GAAE,cAAc,YAAhB,GAA+B,I;IAC7  
E,OAAO,gBAAiB,IAAG,IAAK,IAAG,0BAA0B,CAAC,gBAAD,EAAMB,KAAhB,C;G;EASjE,MAAM,OAAQ,G  
AAE,yB;IACZ,IAAI,KAAM,KAAL,MAAd,C;MACI,QAAQ,OAAO,MAAf,C;aACS,Q;aACA,Q;aACA,S;aACA,U;  
UACD,OAAO,I;gBAEP,OAAO,MAAO,YAAW,M;;KAIrC,IAAI,MAAO,IAAG,IAAK,IAAG,KAAM,IAAG,IAA  
K,KAAL,OAAO,MAAO,KAAL,QAAS,IAAG,OAAO,MAAO,KAAL,UAApD,CAApC,C;MACI,OAAO,K;KAGX,I  
AAI,OAAO,KAAM,KAAL,UAAW,IAAG,MAAO,YAAW,KAArD,C;MACI,OAAO,I;KAGX,IAAI,QAAQ,MAA  
M,eAAe,CAAC,KAAD,C;IACjC,IAAI,cAAc,KAAM,IAAG,IAAK,GAAE,KAAL,YAAP,GAAsB,I;IACtD,IAAI,  
WAAy,IAAG,IAAK,IAAG,YAAa,IAAG,WAA3C,C;MACI,IAAI,WAAW,WAAW,W;MACIB,IAAI,QAAQ,KA  
AM,KAAL,MAAM,KAAL,OAAjC,C;QACI,OAAO,MAAO,KAAL,K;QAIIB,IAAI,gBAAgB,KAAL,W;IAGzB,IA  
AI,aAAc,IAAG,IAArB,C;MACI,OAAO,MAAO,YAAW,K;KAG7B,IAAI,aAAa,KAAM,KAAL,MAAM,KAAL,U  
AAW,IAAG,MAAM,YAAa,IAAG,IAAIE,C;MACI,OAAO,0BAA0B,CAAC,MAAM,YAAP,EAAqB,KAArB,C;K  
AGrC,OAAO,K;G;EAGX,MAAM,SAAU,GAAE,a;IACd,OAAO,OAAO,CAAe,IAAG,QAAS,IAAG,CAAe,YAA  
W,MAAM,K;G;EAGtD,MAAM,OAAQ,GAAE,iB;IACZ,OAAO,KAAM,YAAW,MAAM,U;G;EAGIC,MAAM,aA  
Ac,GAAE,iB;IACIB,IAAI,OAAO,OAAO,K;IAEIB,OAAO,IAAK,KAAL,QAAS,IACIB,IAAK,KAAL,SAAU,IACn  
B,MAAM,SAAS,CAAC,KAAD,CAAQ,IACvB,MAAM,OAAO,CAAC,KAAD,EAAG,MAAM,OAAO,WAArB,C;  
G;EAGxB,MAAM,eAAGB,GAAE,iB;IACpB,OAAO,OAAO,KAAM,KAAL,QAAS,IAAG,MAAM,OAAO,CAAC,  
KAAD,EAAG,MAAM,OAAO,aAArB,C;G;;;;;;aCnDV,gB;;;;ICrE3C,gB;MAkBI,4B;MAjBA,aAA6C,E;MAC7C,  
gBAAGD,C;K;4EAG5C,Y;MAAQ,iB;K;+EAGR,Y;MAAQ,oB;K;qCAEZ,iB;MAAyC,OAAQ,0BAAR,YAAQ,EA  
AU,KAAM,QAAb,C;K;4BAEjD,iB;MAAMC,gBAAS,K;K;8BAE5C,Y;MAA+B,OAAhC,MAAMC,kBAA8B,IA  
A9B,C;K;8BAE/B,Y;MAA0B,gB;K;IAE1B,0B;MAAA,8B;K;;;IAAA,sC;MAAA,qC;QAAA,oB;OAAA,8B;K;;IDf  
J,mC;MAC4C,oBAAa,MAAS,IAAT,CAAb,EAA6B,SAAT7B,C;K;gEAE5C,yB;MAAA,mB;MAAA,6B;QAC2D,Y  
AAa,QAAS,IAAT,C;QAIvD,Q;QAAA,OAAA,KAAM,OAAhC,GAAa,CAAb,I;QAAb,aAAU,CAAV,iB;UACI,MA  
AM,CAAN,IALgF,IAKrE,CAAK,CAAL,C;;QALwC,OAOhD,K;O;KARX,C;gEAGA,uB;MAEiB,Q;MAAA,OAA

A,KAAM,OAAN,GAAa,CAAb,I;MAAb,aAAU,CAAV,iB;QACI,MAAM,CAAN,IAAW,KAAK,CAAL,C;;MAEf,  
OAAO,K;K;IAGX,kC;MAliB,IAAN,I;MAFP,aAAsB,MAAe,IAAf,C;MACtB,gBAAkB,c;MAEd,IADS,IACT,mB  
ADS,IACT,EAAM,IAAN,E;QAAC,oBAAa,MAAb,EAAqB,KAArB,C;WACd,WAFS,IAET,S;QAAS,a;;QAZA,U;  
QAAA,SAaqB,MAbf,OAAN,GAAa,CAAb,I;QAAb,aAAU,CAAV,mB;UAakC,MAZ9B,CAAM,CAAN,IAyS,C,IA  
Z3B,CAAK,CAAL,C;;QAYH,OAAsB,M;;MAHiC,W;K;2EAOJ,yB;MAAA,iC;MAAA,6B;QACoF,YAAa,aAAa,I  
AAb,EAAmB,KAAAnB,C;QAlBhF,Q;QAAA,OAAA,KAAM,OAAN,GAAa,CAAb,I;QAAb,aAAU,CAAV,iB;UACI  
,MAAM,CAAN,IAiBoH,IAjBzG,CAAK,CAAL,C;;QAIbIE,OafzE,K;O;KAcX,C;IAGA,+B;MAKiB,IAAN,I;MAF  
P,aAAa,IAAb,WAAa,CAAD,IAAC,C;MACb,gBAAkB,W;MAEd,IADS,IACT,mBADs,IACT,EAAM,IAAN,YAD  
S,IACT,EAAY,KAAZ,E;QAaqB,a;;QA1BZ,U;QAAA,SA2BkB,MA3BZ,OAAN,GAAa,CAAb,I;QAAb,aAAU,CA  
AV,mB;UA2B+B,MA1B3B,CAAM,CAAN,IA0BmC,IA1BxB,CAAK,CAAL,C;;QA0BH,OAAmB,M;;MAF/B,W;  
K;qEAMJ,yB;MAAA,2B;MAAA,gC;MAAA,6B;QAGiB,Q;QADb,YAAY,UAAU,IAAV,EAAGB,IAAhB,C;QACC  
,OAAA,KAAM,OAAN,GAAa,CAAb,I;QAAb,aAAU,CAAV,iB;UACI,YACY,eAAK,CAAL,E;UACpB,KAAK,CA  
AC,CAAD,CAAG,GAAG,K;;QAEP,OAAO,K;O;KARX,C;mFAWA,yB;MAAA,mB;MAAA,gC;MAAA,6B;QAGi  
B,Q;QADb,YAAY,QAAY,IAAZ,C;QACC,OAAA,KAAM,OAAN,GAAa,CAAb,I;QAAb,aAAU,CAAV,iB;UACI,  
YACY,eAAK,CAAL,E;UACpB,KAAK,CAAC,CAAD,CAAG,GAAG,K;;QAEP,OAAO,K;O;KARX,C;IAWA,+B;  
MAliB,IAAN,I;MAFP,aAAsB,MAAY,IAAZ,C;MACtB,gBAAkB,W;MAEd,IADS,IACT,mBADs,IACT,EAAM,I  
AAN,E;QAAC,oBAAa,MAAb,K;WACd,WAFS,IAET,S;QAAS,a;;QA3DA,U;QAAA,SA4DkB,MA5DZ,OAAN,G  
AAa,CAAb,I;QAAb,aAAU,CAAV,mB;UA4D+B,MA3D3B,CAAM,CAAN,IA2DmC,IA3DxB,CAAK,CAAL,C;;Q  
A2DH,OAAmB,M;;MAH/B,W;K;qEAOJ,yB;MAAA,2B;MAAA,6B;QAC2E,YAAa,UAAU,IAAV,EAAGB,KAAh  
B,C;QAjEvE,Q;QAAA,OAAA,KAAM,OAAN,GAAa,CAAb,I;QAAb,aAAU,CAAV,iB;UACI,MAAM,CAAN,IAg  
EwG,IAhE7F,CAAK,CAAL,C;;QAjEwD,OA9DhE,K;O;KA6DX,C;IAGA,wC;MACiB,Q;MAAA,OAAA,KAAM,  
OAAN,GAAa,CAAb,I;MAAb,aAAU,CAAV,iB;QACI,MAAM,CAAN,IAAW,S;;MAEf,OAAO,K;K;IEIFX,iC;MA  
AA,qC;MAEL,iBAC8B,Q;MAE9B,iBAC8B,sB;MAE9B,yBAEsC,MAAM,G;MAE5C,yBAEsC,CAAC,GAAD,GA  
AO,G;MAE7C,WAEwB,EAAE,MAAM,GAAR,C;MAExB,kBACuB,C;MAEvB,iBACsB,E;K;;IAxB1B,6C;MAA  
A,4C;QAAA,2B;OAAA,qC;K;IA2BA,gC;MAAA,oC;MAEL,iBAC6B,O;MAE7B,iBAC6B,Y;MAE7B,yBAEqC,M  
AAO,G;MAE5C,yBAEqC,CAAC,GAAD,GAAQ,G;MAE7C,WAEuB,EAAE,MAAO,GAAT,C;MAEvB,kBACuB,  
C;MAEvB,iBACsB,E;K;;IAxB1B,4C;MAAA,2C;QAAA,0B;OAAA,oC;K;IA2BA,8B;MAAA,kC;MAEL,iBACqB,  
W;MAErB,iBACqB,U;MAErB,kBACuB,C;MAEvB,iBACsB,E;K;;IAZ1B,0C;MAAA,yC;QAAA,wB;OAAA,kC;  
K;IAeA,+B;MAAA,mC;MAEL,iBACJ,MAAM,KAAoB,U;MAEtB,iBACJ,MAAM,KAAoB,U;MAEtB,kBACuB,C;  
MAEvB,iBACsB,E;K;;IAZ1B,2C;MAAA,0C;QAAA,yB;OAAA,mC;K;IAeA,gC;MAAA,oC;MAEL,iBACuB,U;M  
AEvB,iBACuB,K;MAEvB,kBACuB,C;MAEvB,iBACsB,E;K;;IAZ1B,4C;MAAA,2C;QAAA,0B;OAAA,oC;K;IAe  
A,+B;MAAA,mC;MAEL,iBACsB,Q;MAEtB,iBACsB,G;MAEtB,kBACuB,C;MAEvB,iBACsB,C;K;;IAZ1B,2C;M  
AAA,0C;QAAA,yB;OAAA,mC;K;IAeA,+B;MAAA,mC;MAEL,iBACmC,C;MAEnC,iBACmC,K;MAEnC,0BAC4  
C,K;MAE5C,0BAC4C,K;MAE5C,yBAC2C,K;MAE3C,yBAC2C,K;MAE3C,qBACuC,uB;MAEvC,qBACuC,sB;M  
AEvC,kBACuB,C;MAEvB,iBACsB,E;K;;IA9B1B,2C;MAAA,0C;QAAA,yB;OAAA,mC;K;IAiCA,iC;MAAA,qC;  
K;;IAAA,6C;MAAA,4C;QAAA,2B;OAAA,qC;K;IAEA,kC;MAAA,sC;K;;IAAA,8C;MAAA,6C;QAAA,4B;OAA  
A,sC;K;;aCkkuBoB,gB;;cC/ntB0C,mB;;gBAyEvC,yB;eAAyB,wB;;uBAgBzB,gC;sBAA  
wB,+B;mCA4JjC,qB;mCA5ImC,qB;;kBAQ1B,2B;iBAA0B,0B;;eC3YgB,wB;sBCoBA,sB;iBCnBA,0B;;aC5P8  
B,e;;gCCIDhD,yC;+BCVA,uC;+BCAA,sC;;gCCyJ/B,+B;+BAIW,sC;gCCqwCc,+B;0BAHvB,kC;uBAr6B  
O,gC;yBA8WD,iC;0BACA,mC;yBA4JA,iC;gCAmZP,oC;+BAbc,oC;+BAEC,+B;yBAEQ,kC;;gBCr0C6C,yB;;;  
;IC/ErF,kD;MAMuF,wC;K;IANvF,4CAOI,Y;MAAuC,8B;K;IAP3C,8E;ICGA,k  
D;MAQuF,wC;K;IARvF,4CASI,Y;MAAuC,8B;K;IAT3C,8E;0FbOA,qB;MAQI,OAAO,UAAI,CAAJ,C;K;4FAGX,  
qB;MAQI,OAAO,UAAI,CAAJ,C;K;4FAGX,qB;MAQI,OAAO,UAAI,CAAJ,C;K;4FAGX,qB;MAQI,OAAO,UAA  
I,CAAJ,C;K;4FAGX,qB;MAQI,OAAO,UAAI,CAAJ,C;K;4FAGX,qB;MAQI,OAAO,UAAI,CAAJ,C;K;4FAGX,qB  
;MAQI,OAAO,UAAI,CAAJ,C;K;4FAGX,qB;MAQI,OAAO,UAAI,CAAJ,C;K;4FAGX,qB;MAQI,OAAO,UAAI,C  
AAJ,C;K;0FAGX,qB;MAQI,OAAO,UAAI,CAAJ,C;K;4FAGX,qB;MAQI,OAAO,UAAI,CAAJ,C;K;4FAGX,qB;M  
AQI,OAAO,UAAI,CAAJ,C;K;4FAGX,qB;MAQI,OAAO,UAAI,CAAJ,C;K;4FAGX,qB;MAQI,OAAO,UAAI,CA



AhB,iD;UAAgB,cAAhB,e;UAAaB,IA3aH,SA2aO,CAAU,OAAV,CAAJ,C;YAAwB,qBAAO,O;YAAP,uB;;QAC9  
C,qBAAO,I;;MA5aP,yB;K:gFAGJ,yB;MA4aA,oC;MAAA,gC;MA5aA,uC;QAOW,sB;;UayaS,Q;UAAhB,iD;YA  
AgB,cAAhB,0B;YAAaB,IAzaH,SAyaO,CAAU,oBAAV,CAAJ,C;cAAwB,qBAAO,O;cAAP,uB;;UAC9C,qBAAO,  
I;;QA1aP,yB;O;KAPJ,C;sFAUA,yB;MAw1CA,0D;MAAA,+C;MAx1CA,uC;QAOW,qB;;UAu1CO,Q;UAAA,OA  
Aa,SAAR,sBAAQ,CAAb,W;UAAAd,OAAc,cAAAd,C;YAAc,uB;YACV,cAAc,UAAK,KAAL,C;YACd,IAz1Cc,SAy  
1CV,CAAU,OAAV,CAAJ,C;cAAwB,oBAAO,O;cAAP,sB;;UAE5B,oBAAO,I;;QA31CP,wB;O;KAPJ,C;wFAUA,  
yB;MA21CA,0D;MAAA,+C;MA31CA,uC;QAOW,qB;;UA01CO,Q;UAAA,OAAa,SAAR,sBAAQ,CAAb,W;UAA  
d,OAAc,cAAAd,C;YAAc,uB;YACV,cAAc,UAAK,KAAL,C;YACd,IA51Cc,SA41CV,CAAU,OAAV,CAAJ,C;cAA  
wB,oBAAO,O;cAAP,sB;;UAE5B,oBAAO,I;;QA91CP,wB;O;KAPJ,C;wFAUA,yB;MA81CA,0D;MAAA,+C;MA9  
1CA,uC;QAOW,qB;;UA61CO,Q;UAAA,OAAa,SAAR,sBAAQ,CAAb,W;UAAAd,OAAc,cAAAd,C;YAAc,uB;YACV  
cAAc,UAAK,KAAL,C;YACd,IA1CC,SA+1CV,CAAU,OAAV,CAAJ,C;cAAwB,oBAAO,O;cAAP,sB;;UAE5B,o  
BAAO,I;;QAj2CP,wB;O;KAPJ,C;wFAUA,yB;MAi2CA,0D;MAAA,+C;MAj2CA,uC;QAOW,qB;;UAg2CO,Q;UA  
AA,OAAa,SAAR,sBAAQ,CAAb,W;UAAAd,OAAc,cAAAd,C;YAAc,uB;YACV,cAAc,UAAK,KAAL,C;YACd,IAI2  
Cc,SAk2CV,CAAU,OAAV,CAAJ,C;cAAwB,oBAAO,O;cAAP,sB;;UAE5B,oBAAO,I;;QAp2CP,wB;O;KAPJ,C;w  
FAUA,yB;MAo2CA,0D;MAAA,+C;MAp2CA,uC;QAOW,qB;;UAm2CO,Q;UAAA,OAAa,SAAR,sBAAQ,CAAb,  
W;UAAAd,OAAc,cAAAd,C;YAAc,uB;YACV,cAAc,UAAK,KAAL,C;YACd,IAr2Cc,SAq2CV,CAAU,OAAV,CAAJ,  
C;cAAwB,oBAAO,O;cAAP,sB;;UAE5B,oBAAO,I;;QAv2CP,wB;O;KAPJ,C;wFAUA,yB;MAu2CA,0D;MAAA,+  
C;MAv2CA,uC;QAOW,qB;;UAs2CO,Q;UAAA,OAAa,SAAR,sBAAQ,CAAb,W;UAAAd,OAAc,cAAAd,C;YAAc,uB  
;YACV,cAAc,UAAK,KAAL,C;YACd,IAx2Cc,SAw2CV,CAAU,OAAV,CAAJ,C;cAAwB,oBAAO,O;cAAP,sB;;U  
AE5B,oBAAO,I;;QA12CP,wB;O;KAPJ,C;wFAUA,yB;MA02CA,0D;MAAA,+C;MA12CA,uC;QAOW,qB;;UAY2  
CO,Q;UAAA,OAAa,SAAR,sBAAQ,CAAb,W;UAAAd,OAAc,cAAAd,C;YAAc,uB;YACV,cAAc,UAAK,KAAL,C;Y  
ACd,IA32Cc,SA22CV,CAAU,OAAV,CAAJ,C;cAAwB,oBAAO,O;cAAP,sB;;UAE5B,oBAAO,I;;QA72CP,wB;O;  
KAPJ,C;wFAUA,yB;MA62CA,0D;MAAA,+C;MA72CA,uC;QAOW,qB;;UA42CO,Q;UAAA,OAAa,SAAR,sBAA  
Q,CAAb,W;UAAAd,OAAc,cAAAd,C;YAAc,uB;YACV,cAAc,UAAK,KAAL,C;YACd,IA92Cc,SA82CV,CAAU,OA  
AV,CAAJ,C;cAAwB,oBAAO,O;cAAP,sB;;UAE5B,oBAAO,I;;QAh3CP,wB;O;KAPJ,C;wFAUA,yB;MAg3CA,0  
D;MAAA,+C;MAAA,oC;MAh3CA,uC;QAOW,qB;;UA+2CO,Q;UAAA,OAAa,SAAR,sBAAQ,CAAb,W;UAAAd,OA  
Ac,cAAAd,C;YAAc,uB;YACV,cAAc,UAAK,KAAL,C;YACd,IAj3Cc,SAi3CV,CAAU,oBAAV,CAAJ,C;cAAwB,  
oBAAO,O;cAAP,sB;;UAE5B,oBAAO,I;;QAn3CP,wB;O;KAPJ,C;IAUA,0B;MAKI,IA4uNO,qBAAQ,CA5uNf,C;  
QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAK,CAAL,C;K;IAGX,4B;MAKI,IA0uNO,qBAAQ,CA1u  
Nf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAK,CAAL,C;K;IAGX,4B;MAKI,IAwuNO,qBAAQ,  
CAxuNf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAK,CAAL,C;K;IAGX,4B;MAKI,IASuNO,qBA  
AQ,CAtuNf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAK,CAAL,C;K;IAGX,4B;MAKI,IAouNO,  
qBAAQ,CApuNf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAK,CAAL,C;K;IAGX,4B;MAKI,IAku  
NO,qBAAQ,CAluNf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAK,CAAL,C;K;IAGX,4B;MAKI,IA  
AguNO,qBAAQ,CAhuNf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAK,CAAL,C;K;IAGX,4B;MA  
AKI,IA8tNO,qBAAQ,CA9tNf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAK,CAAL,C;K;IAGX,4  
B;MAKI,IA4tNO,qBAAQ,CA5tNf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAK,CAAL,C;K;kFA  
GX,yB;MAAA,iE;MAAA,uC;QAKoB,Q;QAAhB,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UAAaB,IAAI,  
UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QACrD,MAAM,gCAAuB,mDAAvB,C;O;KANV,C;kFASA,yB;MAA  
A,iE;MAAA,uC;QAKoB,Q;QAAhB,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UAAaB,IAAI,UAAU,OAA  
V,CAAJ,C;YAAwB,OAAO,O;;QACrD,MAAM,gCAAuB,mDAAvB,C;O;KANV,C;mFASA,yB;MAAA,iE;MAAA  
,uC;QAKoB,Q;QAAhB,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UAAaB,IAAI,UAAU,OAAV,CAAJ,C;Y  
AAwB,OAAO,O;;QACrD,MAAM,gCAAuB,mDAAvB,C;O;KANV,C;mFASA,yB;MAAA,iE;MAAA,uC;QAKoB,  
Q;QAAhB,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UAAaB,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAA  
O,O;;QACrD,MAAM,gCAAuB,mDAAvB,C;O;KANV,C;mFASA,yB;MAAA,iE;MAAA,uC;QAKoB,Q;QAAhB,w  
BAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UAAaB,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QACrD  
,MAAM,gCAAuB,mDAAvB,C;O;KANV,C;mFASA,yB;MAAA,iE;MAAA,uC;QAKoB,Q;QAAhB,wBAAgB,SA  
AhB,gB;UAAgB,cAAA,SAAhB,M;UAAaB,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QACrD,MAAM,gC

AAuB,mDAAvB,C;O;KANV,C;mFASA,yB;MAAA,iE;MAAA,uC;QAKoB,Q;QAAhB,wBAAgB,SAAhB,gB;UA  
AgB,cAAA,SAAhB,M;UAAAsB,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QACrD,MAAM,gCAAuB,mDA  
AvB,C;O;KANV,C;mFASA,yB;MAAA,iE;MAAA,uC;QAKoB,Q;QAAhB,wBAAgB,SAAhB,gB;UAAgB,cAAA,S  
AAhB,M;UAAAsB,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QACrD,MAAM,gCAAuB,mDAAvB,C;O;KA  
NV,C;mFASA,yB;MAAA,oC;MAAA,gC;MAAA,iE;MAAA,uC;QAKoB,Q;QAAhB,wBAAgB,SAAhB,gB;UAAg  
B,cAAhB,UAAgB,SAAhB,O;UAAAsB,IAAI,UAAU,oBAAV,CAAJ,C;YAAwB,OAAO,O;;QACrD,MAAM,gCAAu  
B,mDAAvB,C;O;KANV,C;kGASA,yB;MAAA,iE;MAAA,uC;QASW,Q;QAAA,+B;;UAYS,U;UAAhB,uD;YAAg  
B,cAAhB,iB;YACI,aAbwB,SAaX,CAAU,OAAV,C;YACb,IAAI,cAAJ,C;cACI,8BAAO,M;cAAP,gC;;UAGR,8BA  
AO,I;;;QAIBA,kC;QAAA,iB;UAAmC,MAAM,gCAAuB,8DAAvB,C;SAAhD,OAAO,I;O;KATX,C;8GAYA,gC;M  
ASoB,Q;MAAhB,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,aAAa,UAAU,OAAV,C;QACb,IAAI,cA  
AJ,C;UACI,OAAO,M;;MAGf,OAAO,I;K;IAGX,gC;MAII,OAoiNO,qBAAQ,CApiNR,GAAe,IAAf,GAAyB,UAA  
K,CAAL,C;K;IAGpC,kC;MAII,OAqiNO,qBAAQ,CAriNR,GAAe,IAAf,GAAyB,UAAK,CAAL,C;K;IAGpC,kC;M  
AII,OAsiNO,qBAAQ,CAtiNR,GAAe,IAAf,GAAyB,UAAK,CAAL,C;K;IAGpC,kC;MAII,OAuiNO,qBAAQ,CAvi  
NR,GAAe,IAAf,GAAyB,UAAK,CAAL,C;K;IAGpC,kC;MAII,OAwiNO,qBAAQ,CAXiNR,GAAe,IAAf,GAAyB,U  
AAK,CAAL,C;K;IAGpC,kC;MAII,OAYiNO,qBAAQ,CAziNR,GAAe,IAAf,GAAyB,UAAK,CAAL,C;K;IAGpC,k  
C;MAII,OA0iNO,qBAAQ,CA1iNR,GAAe,IAAf,GAAyB,UAAK,CAAL,C;K;IAGpC,kC;MAII,OA2iNO,qBAAQ,  
CA3iNR,GAAe,IAAf,GAAyB,UAAK,CAAL,C;K;IAGpC,kC;MAII,OA4iNO,qBAAQ,CA5iNR,GAAe,IAAf,GAA  
yB,UAAK,CAAL,C;K;8FAGpC,gC;MAIoB,Q;MAAhB,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QAAsB,  
IAAI,UAAU,OAAV,CAAJ,C;UAAwB,OAAO,O;;MACrD,OAAO,I;K;8FAGX,gC;MAIoB,Q;MAAhB,wBAAgB,S  
AAhB,gB;QAAgB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,OAAO,O;;MACrD,OAAO,I;  
K;+FAGX,gC;MAIoB,Q;MAAhB,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OAAV,  
CAAJ,C;UAAwB,OAAO,O;;MACrD,OAAO,I;K;+FAGX,gC;MAIoB,Q;MAAhB,wBAAgB,SAAhB,gB;QAAgB,c  
AAA,SAAhB,M;QAAsB,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,OAAO,O;;MACrD,OAAO,I;K;+FAGX,gC;MAIo  
B,Q;MAAhB,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,O  
AAO,O;;MACrD,OAAO,I;K;+FAGX,gC;MAIoB,Q;MAAhB,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QA  
AsB,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,OAAO,O;;MACrD,OAAO,I;K;+FAGX,gC;MAIoB,Q;MAAhB,wBA  
AgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,OAAO,O;;MACrD,O  
AAO,I;K;+FAGX,gC;MAIoB,Q;MAAhB,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,  
OAAV,CAAJ,C;UAAwB,OAAO,O;;MACrD,OAAO,I;K;+FAGX,yB;MAAA,oC;MAAA,gC;MAAA,uC;QAIoB,Q  
;QAAhB,wBAAgB,SAAhB,gB;UAAgB,cAAhB,UAAgB,SAAhB,O;UAAAsB,IAAI,UAAU,oBAAV,CAAJ,C;YAA  
wB,OAAO,O;;QACrD,OAAO,I;O;KALX,C;wFAQA,yB;MAAA,8D;MAAA,iD;QAKI,OAAW,SAAS,CAAT,IAA  
c,SAAS,wBAA3B,GAAsC,UAAI,KAJ,CAAtC,GAAsD,aAAa,KAAb,C;O;KALjE,C;0FAQA,yB;MAAA,8D;MA  
AA,iD;QAKI,OAAW,SAAS,CAAT,IAAc,SAAS,wBAA3B,GAAsC,UAAI,KAJ,CAAtC,GAAsD,aAAa,KAAb,C;  
O;KALjE,C;0FAQA,yB;MAAA,8D;MAAA,iD;QAKI,OAAW,SAAS,CAAT,IAAc,SAAS,wBAA3B,GAAsC,UAA  
I,KAJ,CAAtC,GAAsD,aAAa,KAAb,C;O;KALjE,C;0FAQA,yB;MAAA,8D;MAAA,iD;QAKI,OAAW,SAAS,CA  
AT,IAAc,SAAS,wBAA3B,GAAsC,UAAI,KAJ,CAAtC,GAAsD,aAAa,KAAb,C;O;KALjE,C;0FAQA,yB;MAAA,  
8D;MAAA,iD;QAKI,OAAW,SAAS,CAAT,IAAc,SAAS,wBAA3B,GAAsC,UAAI,KAJ,CAAtC,GAAsD,aAAa,K  
AAb,C;O;KALjE,C;0FAQA,yB;MAAA,8D;MAAA,iD;QAKI,OAAW,SAAS,CAAT,IAAc,SAAS,wBAA3B,GAAs  
C,UAAI,KAJ,CAAtC,GAAsD,aAAa,KAAb,C;O;KALjE,C;0FAQA,yB;MAAA,8D;MAAA,iD;QAKI,OAAW,SA  
AS,CAAT,IAAc,SAAS,wBAA3B,GAAsC,UAAI,KAJ,CAAtC,GAAsD,aAAa,KAAb,C;O;KALjE,C;0FAQA,yB;  
MAAA,8D;MAAA,iD;QAKI,OAAW,SAAS,CAAT,IAAc,SAAS,wBAA3B,GAAsC,UAAI,KAJ,CAAtC,GAAsD,  
aAAa,KAAb,C;O;KALjE,C;0FAQA,yB;MAAA,8D;MAAA,gC;MAAA,iD;QAKI,OAAW,SAAS,CAAT,IAAc,SA  
AS,wBAA3B,GAAsC,UAAI,KAJ,CAAtC,GAAsD,uBAAa,KAAb,E;O;KALjE,C;IAQA,qC;MAMI,OAAW,SA  
S,CAAT,IAAc,SAAS,wBAA3B,GAAsC,UAAI,KAJ,CAAtC,GAAsD,I;K;IAGjE,uC;MAMI,OAAW,SAAS,CAA  
T,IAAc,SAAS,0BAA3B,GAAsC,UAAI,KAJ,CAAtC,GAAsD,I;K;IAGjE,uC;MAMI,OAAW,SAAS,CAAT,IAAc,  
SAAS,0BAA3B,GAAsC,UAAI,KAJ,CAAtC,GAAsD,I;K;IAGjE,uC;MAMI,OAAW,SAAS,CAAT,IAAc,SAAS,0  
BAA3B,GAAsC,UAAI,KAJ,CAAtC,GAAsD,I;K;IAGjE,uC;MAMI,OAAW,SAAS,CAAT,IAAc,SAAS,0BAA3B  
,GAAsC,UAAI,KAJ,CAAtC,GAAsD,I;K;IAGjE,uC;MAMI,OAAW,SAAS,CAAT,IAAc,SAAS,0BAA3B,GAAs

C,UAAI,KAAJ,CAAtC,GAAsD,I;K;IAGjE,uC;MAMI,OAAW,SAAS,CAAT,IAAc,SAAS,0BAA3B,GAAsC,UAAI ,KAAJ,CAAtC,GAAsD,I;K;IAGjE,uC;MAMI,OAAW,SAAS,CAAT,IAAc,SAAS,0BAA3B,GAAsC,UAAI,KAAJ, CAAtC,GAAsD,I;K;IAGjE,uC;MAMI,OAAW,SAAS,CAAT,IAAc,SAAS,0BAA3B,GAAsC,UAAI,KAAJ,CAAtC, GAAsD,I;K;IAGjE,qC;MAII,IAAI,eAAJ,C;QACI,wD;UACI,IAAI,UAAK,KAAL,SAAJ,C;YACI,OAAO,K;;QAI f ,8D;UACI,IAAI,gBAAW,UAAK,OAAL,CAAX,CAAJ,C;YACI,OAAO,O;;;MAInB,OAAO,E;K;IAGX,uC;MAII,w D;QACI,IAAI,YAAW,UAAK,KAAL,CAAf,C;UACI,OAAO,K;;MAGf,OAAO,E;K;IAGX,uC;MAII,wD;QACI,IA AI,YAAW,UAAK,KAAL,CAAf,C;UACI,OAAO,K;;MAGf,OAAO,E;K;IAGX,uC;MAII,wD;QACI,IAAI,YAAW, UAAK,KAAL,CAAf,C;UACI,OAAO,K;;MAGf,OAAO,E;K;IAGX,uC;MAII,wD;QACI,IAAI,gBAAW,UAAK,KA AL,CAAX,CAAJ,C;UACI,OAAO,K;;MAGf,OAAO,E;K;IAGX,uC;MAMI,wD;QACI,IAAI,YAAW,UAAK,KAAL, CAAf,C;UACI,OAAO,K;;MAGf,OAAO,E;K;IAGX,uC;MAMI,wD;QACI,IAAI,YAAW,UAAK,KAAL,CAAf,C; UACI,OAAO,K;;MAGf,OAAO,E;K;IAGX,uC;MAII,wD;QACI,IAAI,YAAW,UAAK,KAAL,CAAf,C;UACI,OAA O,K;;MAGf,OAAO,E;K;IAGX,uC;MAII,wD;QACI,IAAI,YAAW,UAAK,KAAL,CAAf,C;UACI,OAAO,K;;MAGf, OAAO,E;K;8FAGX,gC;MAII,wD;QACI,IAAI,UAAU,UAAK,KAAL,CAAV,CAAJ,C;UACI,OAAO,K;;MAGf,O AAO,E;K;gGAGX,gC;MAII,wD;QACI,IAAI,UAAU,UAAK,KAAL,CAAV,CAAJ,C;UACI,OAAO,K;;MAGf,OA AO,E;K;gGAGX,gC;MAII,wD;QACI,IAAI,UAAU,UAAK,KAAL,CAAV,CAAJ,C;UACI,OAAO,K;;MAGf,OAA O,E;K;gGAGX,gC;MAII,wD;QACI,IAAI,UAAU,UAAK,KAAL,CAAV,CAAJ,C;UACI,OAAO,K;;MAGf,OAAO, E;K;gGAGX,gC;MAII,wD;QACI,IAAI,UAAU,UAAK,KAAL,CAAV,CAAJ,C;UACI,OAAO,K;;MAGf,OAAO,E; K;gGAGX,gC;MAII,wD;QACI,IAAI,UAAU,UAAK,KAAL,CAAV,CAAJ,C;UACI,OAAO,K;;MAGf,OAAO,E;K; gGAGX,gC;MAII,wD;QACI,IAAI,UAAU,UAAK,KAAL,CAAV,CAAJ,C;UACI,OAAO,K;;MAGf,OAAO,E;K;gG AGX,gC;MAII,wD;QACI,IAAI,UAAU,UAAK,KAAL,CAAV,CAAJ,C;UACI,OAAO,K;;MAGf,OAAO,E;K;gGA GX,yB;MAAA,oC;MAAA,uC;QAIi,wD;UACI,IAAI,UAAU,sBAAK,KAAL,EAAV,CAAJ,C;YACI,OAAO,K;;QA Gf,OAAO,E;O;KATX,C;4FAYA,yB;MAAA,0D;MAAA,+C;MAAA,uC;QAIkB,Q;QAAA,OAAQ,SAAR,sBAAQ, CAAR,W;QAAd,OAAC,cAAd,C;UAAc,uB;UACV,IAAI,UAAU,UAAK,KAAL,CAAV,CAAJ,C;YACI,OAAO,K;; QAGf,OAAO,E;O;KATX,C;8FAYA,yB;MAAA,0D;MAAA,+C;MAAA,uC;QAIkB,Q;QAAA,OAAQ,SAAR,sBA AQ,CAAR,W;QAAd,OAAC,cAAd,C;UAAc,uB;UACV,IAAI,UAAU,UAAK,KAAL,CAAV,CAAJ,C;YACI,OAAO ,K;;QAGf,OAAO,E;O;KATX,C;8FAYA,yB;MAAA,0D;MAAA,+C;MAAA,uC;QAIkB,Q;QAAA,OAAQ,SAAR,s BAAQ,CAAR,W;QAAd,OAAC,cAAd,C;UAAc,uB;UACV,IAAI,UAAU,UAAK,KAAL,CAAV,CAAJ,C;YACI,OA AO,K;;QAGf,OAAO,E;O;KATX,C;8FAYA,yB;MAAA,0D;MAAA,+C;MAAA,uC;QAIkB,Q;QAAA,OAAQ,SAA R,sBAAQ,CAAR,W;QAAd,OAAC,cAAd,C;UAAc,uB;UACV,IAAI,UAAU,UAAK,KAAL,CAAV,CAAJ,C;YACI, OAAO,K;;QAGf,OAAO,E;O;KATX,C;8FAYA,yB;MAAA,0D;MAAA,+C;MAAA,uC;QAIkB,Q;QAAA,OAAQ,S AAR,sBAAQ,CAAR,W;QAAd,OAAC,cAAd,C;UAAc,uB;UACV,IAAI,UAAU,UAAK,KAAL,CAAV,CAAJ,C;YA CI,OAAO,K;;QAGf,OAAO,E;O;KATX,C;8FAYA,yB;MAAA,0D;MAAA,+C;MAAA,uC;QAIkB,Q;QAAA,OAA Q,SAAR,sBAAQ,CAAR,W;QAAd,OAAC,cAAd,C;UAAc,uB;UACV,IAAI,UAAU,UAAK,KAAL,CAAV,CAAJ,C; YACI,OAAO,K;;QAGf,OAAO,E;O;KATX,C;8FAYA,yB;MAAA,0D;MAAA,+C;MAAA,oC;MAAA,uC; QAIkB,Q;QAAA,OAAQ,SAAR,sBAAQ,CAAR,W;QAAd,OAAC,cAAd,C;UAAc,uB;UACV,IAAI,UAAU,sBAAK ,KAAL,EAAV,CAAJ,C;YACI,OAAO,K;;QAGf,OAAO,E;O;KATX,C;IAYA,yB;MAQI,IAg7LO,qBAAQ,CAh7Lf, C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAK,wBAAL,C;K;IAGX,2B;MAQI,IA26LO,qBAAQ,CA 36Lf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAK,0BAAL,C;K;IAGX,2B;MAQI,IA56LO,qBAA Q,CAt6Lf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAK,0BAAL,C;K;IAGX,2B;MAQI,IAi6LO,q BAAQ,CAj6Lf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAK,0BAAL,C;K;IAGX,2B;MAQI,IA45 LO,qBAAQ,CA55Lf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAK,0BAAL,C;K;IAGX,2B;MAQI, IAU5LO,qBAAQ,CAv5Lf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAK,0BAAL,C;K;IAGX,2B;M AQI,IAk5LO,qBAAQ,CAi5Lf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAK,0BAAL,C;K;IAGX,2 B;MAQI,IA64LO,qBAAQ,CA74Lf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAK,0BAAL,C;K;IA



GX,2B;MAQI,IAw4LO,qBAAQ,CAx4Lf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAK,0BAAL,C ;K;gFAGX,yB;MAAA,0D;MAAA,+C;MAAA,iE;MAAA,uC;QAQkB,Q;QAAA,OAAa,SAAR,YAAL,SAAK,CAA Q,CAAb,W;QAAd,OAAc,cAAAd,C;UAAc,uB;UACV,cAAc,UAAK,KAAL,C;UACd,IAAI,UAAU,OAAV,CAAJ,C; YAAwB,OAAO,O;;QAEEnC,MAAM,gCAAuB,mDAAvB,C;O;KAZV,C;gFAeA,yB;MAAA,0D;MAAA,+C;MAAA ,iE;MAAA,uC;QAQkB,Q;QAAA,OAAa,SAAR,YAAL,SAAK,CAAQ,CAAb,W;QAAd,OAAc,cAAAd,C;UAAc,uB; UACV,cAAc,UAAK,KAAL,C;UACd,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QAEEnC,MAAM,gCAAu B,mDAAvB,C;O;KAZV,C;iFAeA,yB;MAAA,0D;MAAA,+C;MAAA,iE;MAAA,uC;QAQkB,Q;QAAA,OAAa,SA AR,YAAL,SAAK,CAAQ,CAAb,W;QAAd,OAAc,cAAAd,C;UAAc,uB;UACV,cAAc,UAAK,KAAL,C;UACd,IAAI, UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QAEEnC,MAAM,gCAAuB,mDAAvB,C;O;KAZV,C;iFAeA,yB;MAA A,0D;MAAA,+C;MAAA,iE;MAAA,uC;QAQkB,Q;QAAA,OAAa,SAAR,YAAL,SAAK,CAAQ,CAAb,W;QAAd, OAAc,cAAAd,C;UAAc,uB;UACV,cAAc,UAAK,KAAL,C;UACd,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O; ;QAEEnC,MAAM,gCAAuB,mDAAvB,C;O;KAZV,C;iFAeA,yB;MAAA,0D;MAAA,+C;MAAA,iE;MAAA,uC;QA QkB,Q;QAAA,OAAa,SAAR,YAAL,SAAK,CAAQ,CAAb,W;QAAd,OAAc,cAAAd,C;UAAc,uB;UACV,cAAc,UAA K,KAAL,C;UACd,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QAEEnC,MAAM,gCAAuB,mDAAvB,C;O;K AZV,C;iFAeA,yB;MAAA,0D;MAAA,+C;MAAA,iE;MAAA,uC;QAQkB,Q;QAAA,OAAa,SAAR,YAAL,SAAK,C AAQ,CAAb,W;QAAd,OAAc,cAAAd,C;UAAc,uB;UACV,cAAc,UAAK,KAAL,C;UACd,IAAI,UAAU,OAAV,CAA J,C;YAAwB,OAAO,O;;QAEEnC,MAAM,gCAAuB,mDAAvB,C;O;KAZV,C;iFAeA,yB;MAAA,0D;MAAA,+C;MA AA,iE;MAAA,uC;QAQkB,Q;QAAA,OAAa,SAAR,YAAL,SAAK,CAAQ,CAAb,W;QAAd,OAAc,cAAAd,C;UAAc, uB;UACV,cAAc,UAAK,KAAL,C;UACd,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QAEEnC,MAAM,gCA AuB,mDAAvB,C;O;KAZV,C;iFAeA,yB;MAAA,0D;MAAA,+C;MAAA,iE;MAAA,uC;QAQkB,Q;QAAA,OAAa, SAAR,YAAL,SAAK,CAAQ,CAAb,W;QAAd,OAAc,cAAAd,C;UAAc,uB;UACV,cAAc,UAAK,KAAL,C;UACd,IA AI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QAEEnC,MAAM,gCAAuB,mDAAvB,C;O;KAZV,C;iFAeA,yB;MA AA,0D;MAAA,+C;MAAA,oC;MAAA,iE;MAAA,uC;QAQkB,Q;QAAA,OAAa,SAAR,YAAL,SAAK,CAAQ,CAA b,W;QAAd,OAAc,cAAAd,C;UAAc,uB;UACV,cAAc,UAAK,KAAL,C;UACd,IAAI,UAAU,oBAAV,CAAJ,C;YAA wB,OAAO,O;;QAEEnC,MAAM,gCAAuB,mDAAvB,C;O;KAZV,C;IAeA,yC;MAKsB,UAMA,M;MAPIB,IAAI,eA AJ,C;QACKB,OAAQ,WAAR,sBAAQ,CAAR,W;QAAd,OAAc,cAAAd,C;UAAc,uB;UACV,IAAI,UAAK,KAAL,SA AJ,C;YACI,OAAO,K;;QAID,SAAQ,WAAR,sBAAQ,CAAR,W;QAAd,OAAc,gBAAd,C;UAAc,2B;UACV,IAAI,g BAAW,UAAK,OAAL,CAAX,CAAJ,C;YACI,OAAO,O;;MAInB,OAAO,E;K;IAGX,2C;MAIkB,Q;MAAA,OAAQ ,WAAR,wBAAQ,CAAR,W;MAAd,OAAc,cAAAd,C;QAAC,uB;QACV,IAAI,YAAW,UAAK,KAAL,CAAf,C;UACI, OAAO,K;;MAGf,OAAO,E;K;IAGX,2C;MAIkB,Q;MAAA,OAAQ,WAAR,wBAAQ,CAAR,W;MAAd,OAAc,cAA d,C;QAAC,uB;QACV,IAAI,YAAW,UAAK,KAAL,CAAf,C;UACI,OAAO,K;;MAGf,OAAO,E;K;IAGX,2C;MAIk B,Q;MAAA,OAAQ,WAAR,wBAAQ,CAAR,W;MAAd,OAAc,cAAAd,C;QAAC,uB;QACV,IAAI,YAAW,UAAK,K AAL,CAAf,C;UACI,OAAO,K;;MAGf,OAAO,E;K;IAGX,2C;MAIkB,Q;MAAA,OAAQ,WAAR,wBAAQ,CAAR, W;MAAd,OAAc,cAAAd,C;QAAC,uB;QACV,IAAI,gBAAW,UAAK,KAAL,CAAX,CAAJ,C;UACI,OAAO,K;;MAG f,OAAO,E;K;IAGX,2C;MAMkB,Q;MAAA,OAAQ,WAAR,wBAAQ,CAAR,W;MAAd,OAAc,cAAAd,C;QAAC,uB; QACV,IAAI,YAAW,UAAK,KAAL,CAAf,C;UACI,OAAO,K;;MAGf,OAAO,E;K;IAGX,2C;MAMkB,Q;MAAA,O AAQ,WAAR,wBAAQ,CAAR,W;MAAd,OAAc,cAAAd,C;QAAC,uB;QACV,IAAI,YAAW,UAAK,KAAL,CAAf,C; UACI,OAAO,K;;MAGf,OAAO,E;K;IAGX,2C;MAIkB,Q;MAAA,OAAQ,WAAR,wBAAQ,CAAR,W;MAAd,OAA c,cAAAd,C;QAAC,uB;QACV,IAAI,YAAW,UAAK,KAAL,CAAf,C;UACI,OAAO,K;;MAGf,OAAO,E;K;IAGX,2C; MAIkB,Q;MAAA,OAAQ,WAAR,wBAAQ,CAAR,W;MAAd,OAAc,cAAAd,C;QAAC,uB;QACV,IAAI,YAAW,UA AK,KAAL,CAAf,C;UACI,OAAO,K;;MAGf,OAAO,E;K;IAGX,+B;MAMI,OA8jLO,qBAAQ,CA9jLR,GAAe,IAA f,GAAyB,UAAK,mBAAO,CAAP,IAAL,C;K;IAGpC,iC;MAMI,OA6jLO,qBAAQ,CA7jLR,GAAe,IAAf,GAAyB,U AAK,mBAAO,CAAP,IAAL,C;K;IAGpC,iC;MAMI,OA4jLO,qBAAQ,CA5jLR,GAAe,IAAf,GAAyB,UAAK,mBA AO,CAAP,IAAL,C;K;IAGpC,iC;MAMI,OA2jLO,qBAAQ,CA3jLR,GAAe,IAAf,GAAyB,UAAK,mBAAO,CAAP, IAAL,C;K;IAGpC,iC;MAMI,OA0jLO,qBAAQ,CA1jLR,GAAe,IAAf,GAAyB,UAAK,mBAAO,CAAP,IAAL,C;K; IAGpC,iC;MAMI,OAyjLO,qBAAQ,CAzjLR,GAAe,IAAf,GAAyB,UAAK,mBAAO,CAAP,IAAL,C;K;IAGpC,iC; MAMI,OAwjLO,qBAAQ,CAxjLR,GAAe,IAAf,GAAyB,UAAK,mBAAO,CAAP,IAAL,C;K;IAGpC,iC;MAMI,OA ujLO,qBAAQ,CAvjLR,GAAe,IAAf,GAAyB,UAAK,mBAAO,CAAP,IAAL,C;K;IAGpC,iC;MAMI,OAsjLO,qBAA

Q,CAtjLR,GAAe,IAAf,GAAYB,UAAK,mBAAO,CAAP,IAAL,C;K;4FAGpC,yB;MAAA,0D;MAAA,+C;MAAA,u  
C;QAMkB,Q;QAAA,OAAa,SAAR,YAAL,SAAK,CAAQ,CAAb,W;QAAd,OAAc,cAAd,C;UAAc,uB;UACV,cAA  
c,UAAK,KAAL,C;UACd,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QAEEnC,OAAO,I;O;KAVX,C;4FAaA,  
yB;MAAA,0D;MAAA,+C;MAAA,uC;QAMkB,Q;QAAA,OAAa,SAAR,YAAL,SAAK,CAAQ,CAAb,W;QAAd,O  
AAc,cAAd,C;UAAc,uB;UACV,cAAc,UAAK,KAAL,C;UACd,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;  
QAEEnC,OAAO,I;O;KAVX,C;6FAaA,yB;MAAA,0D;MAAA,+C;MAAA,uC;QAMkB,Q;QAAA,OAAa,SAAR,YA  
AL,SAAK,CAAQ,CAAb,W;QAAd,OAAc,cAAd,C;UAAc,uB;UACV,cAAc,UAAK,KAAL,C;UACd,IAAI,UAAU,  
OAAV,CAAJ,C;YAAwB,OAAO,O;;QAEEnC,OAAO,I;O;KAVX,C;6FAaA,yB;MAAA,0D;MAAA,+C;MAAA,uC;  
QAMkB,Q;QAAA,OAAa,SAAR,YAAL,SAAK,CAAQ,CAAb,W;QAAd,OAAc,cAAd,C;UAAc,uB;UACV,cAAc,  
UAAK,KAAL,C;UACd,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QAEEnC,OAAO,I;O;KAVX,C;6FAaA,y  
B;MAAA,0D;MAAA,+C;MAAA,uC;QAMkB,Q;QAAA,OAAa,SAAR,YAAL,SAAK,CAAQ,CAAb,W;QAAd,OA  
Ac,cAAd,C;UAAc,uB;UACV,cAAc,UAAK,KAAL,C;UACd,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;Q  
AEEnC,OAAO,I;O;KAVX,C;6FAaA,yB;MAAA,0D;MAAA,+C;MAAA,uC;QAMkB,Q;QAAA,OAAa,SAAR,YAA  
L,SAAK,CAAQ,CAAb,W;QAAd,OAAc,cAAd,C;UAAc,uB;UACV,cAAc,UAAK,KAAL,C;UACd,IAAI,UAAU,O  
AAV,CAAJ,C;YAAwB,OAAO,O;;QAEEnC,OAAO,I;O;KAVX,C;6FAaA,yB;MAAA,0D;MAAA,+C;MAAA,uC;Q  
AMkB,Q;QAAA,OAAa,SAAR,YAAL,SAAK,CAAQ,CAAb,W;QAAd,OAAc,cAAd,C;UAAc,uB;UACV,cAAc,U  
AAK,KAAL,C;UACd,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QAEEnC,OAAO,I;O;KAVX,C;6FAaA,yB;  
MAAA,0D;MAAA,+C;MAAA,uC;QAMkB,Q;QAAA,OAAa,SAAR,YAAL,SAAK,CAAQ,CAAb,W;QAAd,OAAc  
cAAd,C;UAAc,uB;UACV,cAAc,UAAK,KAAL,C;UACd,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QAE  
nC,OAAO,I;O;KAVX,C;6FAaA,yB;MAAA,0D;MAAA,+C;MAAA,oC;MAAA,uC;QAMkB,Q;QAAA,OAAa,SA  
AR,YAAL,SAAK,CAAQ,CAAb,W;QAAd,OAAc,cAAd,C;UAAc,uB;UACV,cAAc,UAAK,KAAL,C;UACd,IAAI,U  
AAU,oBAAV,CAAJ,C;YAAwB,OAAO,O;;QAEEnC,OAAO,I;O;KAVX,C;kFAaA,yB;MAAA,mC;MAAA,gD;MA  
AA,4B;QAQI,OAAO,kBAAO,cAAP,C;O;KARX,C;oFAWA,yB;MAAA,mC;MAAA,gD;MAAA,4B;QAQI,OAAO  
kBAAO,cAAP,C;O;KARX,C;oFAWA,yB;MAAA,mC;MAAA,gD;MAAA,4B;QAQI,OAAO,kBAAO,cAAP,C;O;  
KARX,C;oFAWA,yB;MAAA,mC;MAAA,gD;MAAA,4B;QAQI,OAAO,kBAAO,cAAP,C;O;KARX,C;oFAWA,yB  
;MAAA,mC;MAAA,gD;MAAA,4B;QAQI,OAAO,kBAAO,cAAP,C;O;KARX,C;oFAWA,yB;MAAA,mC;MAAA,  
gD;MAAA,4B;QAQI,OAAO,kBAAO,cAAP,C;O;KARX,C;oFAWA,yB;MAAA,mC;MAAA,gD;MAAA,4B;QAQI  
,OAAO,kBAAO,cAAP,C;O;KARX,C;oFAWA,yB;MAAA,mC;MAAA,gD;MAAA,4B;QAQI,OAAO,kBAAO,cAA  
P,C;O;KARX,C;oFAWA,yB;MAAA,mC;MAAA,gD;MAAA,4B;QAQI,OAAO,kBAAO,cAAP,C;O;KARX,C;IAW  
A,qC;MAOI,IAoxKO,qBAAQ,CAPxKf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAI,MAAO,iBA  
AQ,gBAAR,CAAX,C;K;IAGX,qC;MAOI,IAgxKO,qBAAQ,CAhxKf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MAC  
V,OAAO,UAAI,MAAO,iBAAQ,gBAAR,CAAX,C;K;IAGX,sC;MAOI,IA4wKO,qBAAQ,CA5wKf,C;QACI,MAA  
M,2BAAuB,iBAAvB,C;MACV,OAAO,UAAI,MAAO,iBAAQ,gBAAR,CAAX,C;K;IAGX,sC;MAOI,IAwwKO,qB  
AAQ,CAXwKf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAI,MAAO,iBAAQ,gBAAR,CAAX,C;K;  
IAGX,sC;MAOI,IAowKO,qBAAQ,CAPwKf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAI,MAAO  
,iBAAQ,gBAAR,CAAX,C;K;IAGX,sC;MAOI,IAgwKO,qBAAQ,CAhwKf,C;QACI,MAAM,2BAAuB,iBAAvB,C;  
MACV,OAAO,UAAI,MAAO,iBAAQ,gBAAR,CAAX,C;K;IAGX,sC;MAOI,IA4vKO,qBAAQ,CA5vKf,C;QACI,  
MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAI,MAAO,iBAAQ,gBAAR,CAAX,C;K;IAGX,sC;MAOI,IAwvK  
O,qBAAQ,CAXvKf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAI,MAAO,iBAAQ,gBAAR,CAAX,  
C;K;IAGX,sC;MAOI,IAovKO,qBAAQ,CAPvKf,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,UAAI,MA  
AO,iBAAQ,gBAAR,CAAX,C;K;8FAGX,yB;MAAA,mC;MAAA,4D;MAAA,4B;QAOI,OAAO,wBAAa,cAAb,C;  
O;KAPX,C;gGAUA,yB;MAAA,mC;MAAA,4D;MAAA,4B;QAOI,OAAO,wBAAa,cAAb,C;O;KAPX,C;gGAUA,y  
B;MAAA,mC;MAAA,4D;MAAA,4B;QAOI,OAAO,wBAAa,cAAb,C;O;KAPX,C;gGAUA,yB;MAAA,mC;MAAA  
,4D;MAAA,4B;QAOI,OAAO,wBAAa,cAAb,C;O;KAPX,C;gGAUA,yB;MAAA,mC;MAAA,4D;MAAA,4B;QAOI  
,OAAO,wBAAa,cAAb,C;O;KAPX,C;gGAUA,yB;MAAA,mC;MAAA,4D;MAAA,4B;QAOI,OAAO,wBAAa,cAA  
b,C;O;KAPX,C;gGAUA,yB;MAAA,mC;MAAA,4D;MAAA,4B;QAOI,OAAO,wBAAa,cAAb,C;O;KAPX,C;gGA  
UA,yB;MAAA,mC;MAAA,4D;MAAA,4B;QAOI,OAAO,wBAAa,cAAb,C;O;KAPX,C;gGAUA,yB;MAAA,mC;M  
AAA,4D;MAAA,4B;QAOI,OAAO,wBAAa,cAAb,C;O;KAPX,C;IAUA,2C;MAMI,IA+kKO,qBAAQ,CA/kKf,C;Q

ACI,OAAO,I;MACX,OAAO,UAAI,MAAO,iBAAQ,gBAAR,CAAX,C;K;IAGX,2C;MAMI,IA4kKO,qBAAQ,CA5  
kKf,C;QACI,OAAO,I;MACX,OAAO,UAAI,MAAO,iBAAQ,gBAAR,CAAX,C;K;IAGX,4C;MAMI,IAykKO,qBA  
AQ,CAzkKf,C;QACI,OAAO,I;MACX,OAAO,UAAI,MAAO,iBAAQ,gBAAR,CAAX,C;K;IAGX,4C;MAMI,IAsk  
KO,qBAAQ,CAtkKf,C;QACI,OAAO,I;MACX,OAAO,UAAI,MAAO,iBAAQ,gBAAR,CAAX,C;K;IAGX,4C;MA  
MI,IAmkKO,qBAAQ,CAnkKf,C;QACI,OAAO,I;MACX,OAAO,UAAI,MAAO,iBAAQ,gBAAR,CAAX,C;K;IAG  
X,4C;MAMI,IAgkKO,qBAAQ,CAhkKf,C;QACI,OAAO,I;MACX,OAAO,UAAI,MAAO,iBAAQ,gBAAR,CAAX,  
C;K;IAGX,4C;MAMI,IA6jKO,qBAAQ,CA7jKf,C;QACI,OAAO,I;MACX,OAAO,UAAI,MAAO,iBAAQ,gBAAR,  
CAAX,C;K;IAGX,4C;MAMI,IA0jKO,qBAAQ,CA1jKf,C;QACI,OAAO,I;MACX,OAAO,UAAI,MAAO,iBAAQ,g  
BAAR,CAAX,C;K;IAGX,4C;MAMI,IAujKO,qBAAQ,CAvjKf,C;QACI,OAAO,I;MACX,OAAO,UAAI,MAAO,iB  
AAQ,gBAAR,CAAX,C;K;IAGX,2B;MAIiB,IAAN,I;MAAA,QAAM,gBAAN,C;aACH,C;UAAK,MAAM,2BAAu  
B,iBAAvB,C;aACX,C;UAAK,iBAAK,CAAL,C;UAAL,K;gBACQ,MAAM,gCAAyB,kCAAzB,C;;MAHIB,W;K;I  
AOJ,6B;MAIiB,IAAN,I;MAAA,QAAM,gBAAN,C;aACH,C;UAAK,MAAM,2BAAuB,iBAAvB,C;aACX,C;UAA  
K,iBAAK,CAAL,C;UAAL,K;gBACQ,MAAM,gCAAyB,kCAAzB,C;;MAHIB,W;K;IAOJ,6B;MAIiB,IAAN,I;MA  
AA,QAAM,gBAAN,C;aACH,C;UAAK,MAAM,2BAAuB,iBAAvB,C;aACX,C;UAAK,iBAAK,CAAL,C;UAAL,K  
;gBACQ,MAAM,gCAAyB,kCAAzB,C;;MAHIB,W;K;IAOJ,6B;MAIiB,IAAN,I;MAAA,QAAM,gBAAN,C;aACH,  
C;UAAK,MAAM,2BAAuB,iBAAvB,C;aACX,C;UAAK,iBAAK,CAAL,C;UAAL,K;gBACQ,MAAM,gCAAyB,kC  
AAzB,C;;MAHIB,W;K;IAOJ,6B;MAIiB,IAAN,I;MAAA,QAAM,gBAAN,C;aACH,C;UAAK,MAAM,2BAAuB,iB  
AAvB,C;aACX,C;UAAK,iBAAK,CAAL,C;UAAL,K;gBACQ,MAAM,gCAAyB,kCAAzB,C;;MAHIB,W;K;IAOJ,  
6B;MAIiB,IAAN,I;MAAA,QAAM,gBAAN,C;aACH,C;UAAK,MAAM,2BAAuB,iBAAvB,C;aACX,C;UAAK,iBA  
AK,CAAL,C;UAAL,K;gBACQ,MAAM,gCAAyB,kCAAzB,C;;MAHIB,W;K;IAOJ,6B;MAIiB,IAAN,I;MAAA,QA  
AM,gBAAN,C;aACH,C;UAAK,MAAM,2BAAuB,iBAAvB,C;aACX,C;UAAK,iBAAK,CAAL,C;UAAL,K;gBAC  
Q,MAAM,gCAAyB,kCAAzB,C;;MAHIB,W;K;IAOJ,6B;MAIiB,IAAN,I;MAAA,QAAM,gBAAN,C;aACH,C;UA  
AK,MAAM,2BAAuB,iBAAvB,C;aACX,C;UAAK,iBAAK,CAAL,C;UAAL,K;gBACQ,MAAM,gCAAyB,kCAAz  
B,C;;MAHIB,W;K;IAOJ,6B;MAIiB,IAAN,I;MAAA,QAAM,gBAAN,C;aACH,C;UAAK,MAAM,2BAAuB,iBAAv  
B,C;aACX,C;UAAK,iBAAK,CAAL,C;UAAL,K;gBACQ,MAAM,gCAAyB,kCAAzB,C;;MAHIB,W;K;oFAOJ,yB;  
MAAA,kF;MAAA,iE;MAAA,gB;MAAA,8B;MAAA,uC;QAMoB,UAST,M;QAXP,aAAiB,I;QACjB,YAAY,K;QA  
CZ,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,IAAI,UAAU,OAAV,CAAJ,C;YACI,IAAI,KAJ,C;cA  
AW,MAAM,8BAAyB,gDAAzB,C;YACjB,SAAS,O;YACT,QAAQ,I;;QAGhB,IAAI,CAAC,KAAL,C;UAAy,MA  
AM,gCAAuB,mDAAvB,C;QAEIB,OAAO,6E;O;KafX,C;oFakBA,yB;MAAA,kF;MAAA,iE;MAAA,8B;MAAA,u  
C;QAMoB,UAST,M;QAXP,aAAoB,I;QACpB,YAAY,K;QACZ,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;  
UACI,IAAI,UAAU,OAAV,CAAJ,C;YACI,IAAI,KAJ,C;cAAW,MAAM,8BAAyB,gDAAzB,C;YACjB,SAAS,O;  
YACT,QAAQ,I;;QAGhB,IAAI,CAAC,KAAL,C;UAAy,MAAM,gCAAuB,mDAAvB,C;QAEIB,OAAO,2D;O;Kaf  
X,C;qFakBA,yB;MAAA,kF;MAAA,iE;MAAA,8B;MAAA,uC;QAMoB,UAST,M;QAXP,aAAqB,I;QACrB,YAA  
Y,K;QACZ,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,IAAI,UAAU,OAAV,CAAJ,C;YACI,IAAI,KA  
AJ,C;cAAW,MAAM,8BAAyB,gDAAzB,C;YACjB,SAAS,O;YACT,QAAQ,I;;QAGhB,IAAI,CAAC,KAAL,C;UA  
AY,MAAM,gCAAuB,mDAAvB,C;QAEIB,OAAO,2D;O;KafX,C;qFakBA,yB;MAAA,kF;MAAA,iE;MAAA,8B;  
MAAA,uC;QAMoB,UAST,M;QAXP,aAAmB,I;QACnB,YAAY,K;QACZ,wBAAgB,SAAhB,gB;UAAgB,cAAA,S  
AAhB,M;UACI,IAAI,UAAU,OAAV,CAAJ,C;YACI,IAAI,KAJ,C;cAAW,MAAM,8BAAyB,gDAAzB,C;YACjB,  
SAAS,O;YACT,QAAQ,I;;QAGhB,IAAI,CAAC,KAAL,C;UAAy,MAAM,gCAAuB,mDAAvB,C;QAEIB,OAAO,2  
D;O;KafX,C;qFakBA,yB;MAAA,kF;MAAA,iE;MAAA,8B;MAAA,uC;QAMoB,UAST,M;QAXP,aAAoB,I;QAC  
pB,YAAY,K;QACZ,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,IAAI,UAAU,OAAV,CAAJ,C;YACI,I  
AAI,KAJ,C;cAAW,MAAM,8BAAyB,gDAAzB,C;YACjB,SAAS,O;YACT,QAAQ,I;;QAGhB,IAAI,CAAC,KA  
AL,C;UAAy,MAAM,gCAAuB,mDAAvB,C;QAEIB,OAAO,iE;O;KafX,C;qFakBA,yB;MAAA,kF;MAAA,iE;MA  
AA,8B;MAAA,uC;QAMoB,UAST,M;QAXP,aAAqB,I;QACrB,YAAY,K;QACZ,wBAAgB,SAAhB,gB;UAAgB,c  
AAA,SAAhB,M;UACI,IAAI,UAAU,OAAV,CAAJ,C;YACI,IAAI,KAJ,C;cAAW,MAAM,8BAAyB,gDAAzB,C;  
YACjB,SAAS,O;YACT,QAAQ,I;;QAGhB,IAAI,CAAC,KAAL,C;UAAy,MAAM,gCAAuB,mDAAvB,C;QAEIB,  
OAAO,2D;O;KafX,C;qFakBA,yB;MAAA,kF;MAAA,iE;MAAA,8B;MAAA,uC;QAMoB,UAST,M;QAXP,aAA  
sB,I;QACtB,YAAY,K;QACZ,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,IAAI,UAAU,OAAV,CAAJ,



CAAyB,OAAQ,WAAjC,C;Od8tGV,OAAO,sBA AoB,gBA AV,mBAAO,CAAP,IAAU,EA Ac,CAAd,CAApB,C;K;I  
AGX,8B;McnuGI,IAAI,Ed2uGI,KAAK,Cc3uGT,CAAJ,C;QACI,cd0uGc,sD;QczuGd,MAAM,gCAAyB,OAAQ,W  
AAjC,C;Od0uGV,OAAO,sBA AoB,gBA AV,mBAAO,CAAP,IAAU,EA Ac,CAAd,CAApB,C;K;IAGX,8B;Mc/uGI,I  
AAI,EduvGI,KAAK,CcvvGT,CAAJ,C;QACI,cdsvGc,sD;QcervGd,MAAM,gCAAyB,OAAQ,WAAjC,C;OdsVGV,O  
AAO,sBA AoB,gBA AV,mBAAO,CAAP,IAAU,EA Ac,CAAd,CAApB,C;K;IAGX,8B;Mc3vGI,IAAI,EdmwGI,KAA  
K,CcnwGT,CAAJ,C;QACI,cdkwGc,sD;QcjjwGd,MAAM,gCAAyB,OAAQ,WAAjC,C;OdkwGV,OAAO,sBA AoB,g  
BA AV,mBAAO,CAAP,IAAU,EA Ac,CAAd,CAApB,C;K;IAGX,8B;McvwGI,IAAI,Ed+wGI,KAAK,Cc/wGT,CAA  
J,C;QACI,cd8wGc,sD;Qc7wGd,MAAM,gCAAyB,OAAQ,WAAjC,C;Od8wGV,OAAO,sBA AoB,gBA AV,mBAAO  
,CAAP,IAAU,EA Ac,CAAd,CAApB,C;K;IAGX,gC;McnxGI,IAAI,Ed2xGI,KAAK,Cc3xGT,CAAJ,C;QACI,cd0xG  
c,sD;QczxGd,MAAM,gCAAyB,OAAQ,WAAjC,C;Od0xGV,OAAO,gBA AgB,gBA AV,mBAAO,CAAP,IAAU,EA  
Ac,CAAd,CAAhB,C;K;IAGX,kC;Mc/xGI,IAAI,EduyGI,KAAK,CcvyGT,CAAJ,C;QACI,cdsyGc,sD;QcryGd,MAA  
M,gCAAyB,OAAQ,WAAjC,C;OdsyGV,OAAO,kBA AgB,gBA AV,mBAAO,CAAP,IAAU,EA Ac,CAAd,CAAhB,C  
;K;IAGX,kC;Mc3yGI,IAAI,EdmzGI,KAAK,CcnzGT,CAAJ,C;QACI,cdkzGc,sD;QcjjzGd,MAAM,gCAAyB,OAAQ  
,WAAjC,C;OdkzGV,OAAO,kBA AgB,gBA AV,mBAAO,CAAP,IAAU,EA Ac,CAAd,CAAhB,C;K;IAGX,kC;Mcvz  
GI,IAAI,Ed+zGI,KAAK,Cc/zGT,CAAJ,C;QACI,cd8zGc,sD;Qc7zGd,MAAM,gCAAyB,OAAQ,WAAjC,C;Od8zG  
V,OAAO,kBA AgB,gBA AV,mBAAO,CAAP,IAAU,EA Ac,CAAd,CAAhB,C;K;IAGX,kC;Mcn0GI,IAAI,Ed20GI,K  
AAK,Cc30GT,CAAJ,C;QACI,cd00Gc,sD;Qcz0Gd,MAAM,gCAAyB,OAAQ,WAAjC,C;Od00GV,OAAO,kBA Ag  
B,gBA AV,mBAAO,CAAP,IAAU,EA Ac,CAAd,CAAhB,C;K;IAGX,kC;Mc/0GI,IAAI,Edu1GI,KAAK,Ccv1GT,CA  
AJ,C;QACI,cds1Gc,sD;Qcr1Gd,MAAM,gCAAyB,OAAQ,WAAjC,C;Ods1GV,OAAO,kBA AgB,gBA AV,mBAAO,  
CAAP,IAAU,EA Ac,CAAd,CAAhB,C;K;IAGX,kC;Mc31GI,IAAI,Edm2GI,KAAK,Ccn2GT,CAAJ,C;QACI,cdk2G  
c,sD;Qcj2Gd,MAAM,gCAAyB,OAAQ,WAAjC,C;Odk2GV,OAAO,kBA AgB,gBA AV,mBAAO,CAAP,IAAU,EA  
Ac,CAAd,CAAhB,C;K;IAGX,kC;Mcv2GI,IAAI,Ed+2GI,KAAK,Cc/2GT,CAAJ,C;QACI,cd82Gc,sD;Qc72Gd,MA  
AM,gCAAyB,OAAQ,WAAjC,C;Od82GV,OAAO,kBA AgB,gBA AV,mBAAO,CAAP,IAAU,EA Ac,CAAd,CAAhB  
,C;K;IAGX,kC;Mcn3GI,IAAI,Ed23GI,KAAK,Cc33GT,CAAJ,C;QACI,cd03Gc,sD;Qcz3Gd,MAAM,gCAAyB,OA  
AQ,WAAjC,C;Od03GV,OAAO,kBA AgB,gBA AV,mBAAO,CAAP,IAAU,EA Ac,CAAd,CAAhB,C;K;gGAGX,yB;  
MAAA,8D;MAAA,4C;MAAA,qD;MAAA,uC;QAMI,iBA Ac,wBAAd,WAA+B,CAA/B,U;UACI,IAAI,CAAC,UA  
AU,UAAK,KAAL,CAAV,CAAL,C;YACI,OAAO,gBA AK,QAAQ,CAAR,IAAL,C;;QAGf,OAAO,W;O;KAXX,C;  
kGAcA,yB;MAAA,8D;MAAA,2C;MAAA,qD;MAAA,uC;QAMI,iBA Ac,wBAAd,WAA+B,CAA/B,U;UACI,IAAI,  
CAAC,UAAU,UAAK,KAAL,CAAV,CAAL,C;YACI,OAAO,gBA AK,QAAQ,CAAR,IAAL,C;;QAGf,OAAO,W;O  
;KAXX,C;kGAcA,yB;MAAA,8D;MAAA,4C;MAAA,qD;MAAA,uC;QAMI,iBA Ac,wBAAd,WAA+B,CAA/B,U;  
UACI,IAAI,CAAC,UAAU,UAAK,KAAL,CAAV,CAAL,C;YACI,OAAO,gBA AK,QAAQ,CAAR,IAAL,C;;QAGf,  
OAAO,W;O;KAXX,C;kGAcA,yB;MAAA,8D;MAAA,4C;MAAA,qD;MAAA,uC;QAMI,iBA Ac,wBAAd,WAA+B,C  
AA/B,U;UACI,IAAI,CAAC,UAAU,UAAK,KAAL,CAAV,CAAL,C;YACI,OAAO,gBA AK,QAAQ,CAAR,IAAL,  
C;;QAGf,OAAO,W;O;KAXX,C;kGAcA,yB;MAAA,8D;MAAA,4C;MAAA,qD;MAAA,uC;QAMI,iBA Ac,wBAAd  
,WAA+B,CAA/B,U;UACI,IAAI,CAAC,UAAU,UAAK,KAAL,CAAV,CAAL,C;YACI,OAAO,gBA AK,QAAQ,CA  
AR,IAAL,C;;QAGf,OAAO,W;O;KAXX,C;kGAcA,yB;MAAA,8D;MAAA,4C;MAAA,qD;MAAA,uC;  
QAMI,iBA Ac,wBAAd,WAA+B,CAA/B,U;UACI,IAAI,CAAC,UAAU,UAAK,KAAL,CAAV,CAAL,C;YACI,OA  
AO,gBA AK,QAAQ,CAAR,IAAL,C;;QAGf,OAAO,W;O;KAXX,C;kGAcA,yB;MAAA,8D;MAAA,4C;MAAA,qD;  
MAAA,uC;QAMI,iBA Ac,wBAAd,WAA+B,CAA/B,U;UACI,IAAI,CAAC,UAAU,UAAK,KAAL,CAAV,CAAL,C  
;YACI,OAAO,gBA AK,QAAQ,CAAR,IAAL,C;;QAGf,OAAO,W;O;KAXX,C;kGAcA,yB;MAAA,8D;MAAA,oC;  
MAAA,4C;MAAA,qD;MAAA,uC;QAMI,iBA Ac,wBAAd,WAA+B,CAA/B,U;UACI,IAAI,CAAC,UAAU,sBA AK,  
KAAL,EA AV,CAAL,C;YACI,OAAO,gBA AK,QAAQ,CAAR,IAAL,C;;QAGf,OAAO,W;O;KAXX,C;wFAcA,yB;  
MAAA,+D;MAAA,uC;QAQiB,Q;QAFb,eAAe,K;QACf,WAAW,gB;QACX,wBA Aa,SAAb,gB;UAAa,WAAA,SA  
Ab,M;UACI,IAAI,QAAJ,C;YACI,IAAK,WAAI,IAAJ,C;eACJ,IAAI,CAAC,UAAU,IAAV,CAAL,C;YACD,IAAK,  
WAAI,IAAJ,C;YACL,WAAW,I;;QAE nB,OAAO,I;O;KAFx,C;0FAkBA,yB;MAAA,+D;MAAA,uC;QAQiB,Q;QA  
Fb,eAAe,K;QACf,WAAW,gB;QACX,wBA Aa,SAAb,gB;UAAa,WAAA,SAAb,M;UACI,IAAI,QAAJ,C;YACI,IA

AK, WAAI, IAAJ, C; eACJ, IAAI, CAAC, UAAU, IAAV, CAAL, C; YACD, IAAK, WAAI, IAAJ, C; YACL, WAAW, I; QA  
EnB, OAAO, I; O; KAFx, C; 0FakBA, yB; MAAA, +D; MAAA, uC; QAQiB, Q; QAFb, eAAe, K; QACf, WAAW, gB; QACX  
, wBAAa, SAAb, gB; UAAa, WAAA, SAAb, M; UACI, IAAI, QAAJ, C; YACI, IAAK, WAAI, IAAJ, C; eACJ, IAAI, CAAC,  
UAAU, IAAV, CAAL, C; YACD, IAAK, WAAI, IAAJ, C; YACL, WAAW, I; QAEnB, OAAO, I; O; KAFx, C; 0FakBA, yB;  
MAAA, +D; MAAA, uC; QAQiB, Q; QAFb, eAAe, K; QACf, WAAW, gB; QACX, wBAAa, SAAb, gB; UAAa, WAAA, SA  
Ab, M; UACI, IAAI, QAAJ, C; YACI, IAAK, WAAI, IAAJ, C; eACJ, IAAI, CAAC, UAAU, IAAV, CAAL, C; YACD, IAAK,  
WAAI, IAAJ, C; YACL, WAAW, I; QAEnB, OAAO, I; O; KAFx, C; 0FakBA, yB; MAAA, +D; MAAA, uC; QAQiB, Q; QA  
Fb, eAAe, K; QACf, WAAW, gB; QACX, wBAAa, SAAb, gB; UAAa, WAAA, SAAb, M; UACI, IAAI, QAAJ, C; YACI, IA  
AK, WAAI, IAAJ, C; eACJ, IAAI, CAAC, UAAU, IAAV, CAAL, C; YACD, IAAK, WAAI, IAAJ, C; YACL, WAAW, I; QA  
EnB, OAAO, I; O; KAFx, C; 0FakBA, yB; MAAA, +D; MAAA, uC; QAQiB, Q; QAFb, eAAe, K; QACf, WAAW, gB; QACX  
, wBAAa, SAAb, gB; UAAa, WAAA, SAAb, M; UACI, IAAI, QAAJ, C; YACI, IAAK, WAAI, IAAJ, C; eACJ, IAAI, CAAC,  
UAAU, IAAV, CAAL, C; YACD, IAAK, WAAI, IAAJ, C; YACL, WAAW, I; QAEnB, OAAO, I; O; KAFx, C; 0FakBA, yB;  
MAAA, +D; MAAA, uC; QAQiB, Q; QAFb, eAAe, K; QACf, WAAW, gB; QACX, wBAAa, SAAb, gB; UAAa, WAAA, SA  
Ab, M; UACI, IAAI, QAAJ, C; YACI, IAAK, WAAI, IAAJ, C; eACJ, IAAI, CAAC, UAAU, IAAV, CAAL, C; YACD, IAAK,  
WAAI, IAAJ, C; YACL, WAAW, I; QAEnB, OAAO, I; O; KAFx, C; 0FakBA, yB; MAAA, +D; MAAA, uC; QAQiB, Q; QA  
Fb, eAAe, K; QACf, WAAW, gB; QACX, wBAAa, SAAb, gB; UAAa, WAAA, SAAb, M; UACI, IAAI, QAAJ, C; YACI, IA  
AK, WAAI, IAAJ, C; eACJ, IAAI, CAAC, UAAU, IAAV, CAAL, C; YACD, IAAK, WAAI, IAAJ, C; YACL, WAAW, I; QA  
EnB, OAAO, I; O; KAFx, C; 0FakBA, yB; MAAA, +D; MAAA, oC; MAAA, gC; MAAA, uC; QAQiB, Q; QAFb, eAAe, K; Q  
ACf, WAAW, gB; QACX, wBAAa, SAAb, gB; UAAa, WAAb, UAAa, SAAb, O; UACI, IAAI, QAAJ, C; YACI, IAAK, WA  
AI, iBAAJ, C; eACJ, IAAI, CAAC, UAAU, iBAAV, CAAL, C; YACD, IAAK, WAAI, iBAAJ, C; YACL, WAAW, I; QAEn  
B, OAAO, I; O; KAFx, C; kFakBA, yB; MAAA, +D; MAAA, uC; QAMW, kBAAS, gB; QAmgBA, Q; QAAhB, iD; UAAgB,  
cAAhB, e; UAAsB, IAngBU, SAmgBN, CAAU, OAAV, CAAJ, C; YAAwB, WAAY, WAAI, OAAJ, C; QAngB1D, OAog  
BO, W; O; KA1gBX, C; oFASA, yB; MAAA, +D; MAAA, uC; QAMW, kBAAS, gB; QAogBA, Q; QAAhB, iD; UAAgB, cA  
AhB, e; UAAsB, IArgBc, SAqgBV, CAAU, OAAV, CAAJ, C; YAAwB, WAAY, WAAI, OAAJ, C; QArgB1D, OAsgBO, W; O;  
KA5gBX, C; oFASA, yB; MAAA, +D; MAAA, uC; QAMW, kBAAS, gB; QAsgBA, Q; QAAhB, iD; UAAgB, cAAhB, e; UA  
AsB, IAAtgBY, SAsgBR, CAAU, OAAV, CAAJ, C; YAAwB, WAAY, WAAI, OAAJ, C; QAtgB1D, OAugBO, W; O; KA7g  
BX, C; oFASA, yB; MAAA, +D; MAAA, uC; QAMW, kBAAS, gB; QAugBA, Q; QAAhB, iD; UAAgB, cAAhB, e; UAAsB, I  
AvgBa, SAugBT, CAAU, OAAV, CAAJ, C; YAAwB, WAAY, WAAI, OAAJ, C; QAvgB1D, OAwgBO, W; O; KA9gBX,  
C; oFASA, yB; MAAA, +D; MAAA, uC; QAMW, kBAAS, gB; QAwgBA, Q; QAAhB, iD; UAAgB, cAAhB, e; UAAsB, IA  
xgBc, SAwgBV, CAAU, OAAV, CAAJ, C; YAAwB, WAAY, WAAI, OAAJ, C; QAxgB1D, OAYgBO, W; O; KA/gBX, C; o  
FASA, yB; MAAA, +D; MAAA, uC; QAMW, kBAAS, gB; QAYgBA, Q; QAAhB, iD; UAAgB, cAAhB, e; UAAsB, IA  
zgBe, SAygBX, CAAU, OAAV, CAAJ, C; YAAwB, WAAY, WAAI, OAAJ, C; QAzgB1D, OA0gBO, W; O; KAhhBX, C; oFAS  
A, yB; MAAA, +D; MAAA, uC; QAMW, kBAAS, gB; QA0gBA, Q; QAAhB, iD; UAAgB, cAAhB, e; UAAsB, IA1gBgB, S  
A0gBZ, CAAU, OAAV, CAAJ, C; YAAwB, WAAY, WAAI, OAAJ, C; QA1gB1D, OA2gBO, W; O; KAjhBX, C; oFASA,  
yB; MAAA, +D; MA2gBA, oC; MAAA, gC; MA3gBA, uC; QAMW, kBAAS, gB; QA2gBA, Q; QAAhB, iD; UAAgB, cAAh  
B, 0B; UAAsB, IA3gBa, SA2gBT, CAAU, oBAAV, CAAJ, C; YAAwB, WAAY, WAAI, oBAAJ, C; QA3gB1D, OA4gBO,  
W; O; KAlhBX, C; gGASA, yB; MAAA, +D; MAAA, uC; QAQW, kBAAGb, gB; QAsgTV, gB; QADb, YAAY, C; QACZ, iD  
; UAAa, WAAb, e; UA16SI, IApGmC, SAoG/B, EAk6SkB, cAl6SIB, EAk6SkB, sBA16SIB, WAk6S2B, IA16S3B, CAAJ, C;  
YAA2C, sBAk6SZ, IA16SY, C; QApG/C, OAsGO, W; O; KA9GX, C; kGAWA, yB; MAAA, +D; MAAA, uC; QAQW, kBA  
AgB, gB; QAqgTV, gB; QADb, YAAY, C; QACZ, iD; UAAa, WAAb, e; UA95SI, IA vGsC, SAuGIC, EA85SkB, cA95SIB, E  
A85SkB, sBA95SIB, WA85S2B, IA95S3B, CAAJ, C; YAA2C, sBA85SZ, IA95SY, C; QAvG/C, OAYGO, W; O; KA jHX,  
C; kGAWA, yB; MAAA, +D; MAAA, uC; QAQW, kBAAGb, gB; QAogTV, gB; QADb, YAAY, C; QACZ, iD; UAAa, WAA  
b, e; UA15SI, IA1GuC, SA0GnC, EA05SkB, cA15SIB, EA05SkB, sBA15SIB, WA05S2B, IA15S3B, CAAJ, C; YAA2C, sB  
A05SZ, IA15SY, C; QA1G/C, OA4GO, W; O; KApHX, C; kGAWA, yB; MAAA, +D; MAAA, uC; QAQW, kBAAGb, gB; Q  
AmgTV, gB; QADb, YAAY, C; QACZ, iD; UAAa, WAAb, e; UA5SI, IA7GqC, SA6GjC, EA5SkB, cAt5SIB, EA5SkB, s  
BA5SIB, WA5S2B, IA5S3B, CAAJ, C; YAA2C, sBA5SZ, IA5SY, C; QA7G/C, OA+GO, W; O; KA vHX, C; kGAWA,

yB;MAAA,+D;MAAA,uC;QAQW,kBAAGB,gB;QAkgTV,gB;QADb,YAAAY,C;QACZ,iD;UAAa,WAAb,e;UA15SI,IAhHsC,SAgHIC,Eak5SkB,cAl5SIB,Eak5SkB,sBA15SIB,Wak5S2B,IA15S3B,CAAJ,C;YAA2C,sBAk5SZ,IA15SY,C;;QAhH/C,OAKHO,W;O;KA1HX,C;kGAWA,yB;MAAA,+D;MAAA,uC;QAQW,kBAAGB,gB;QAigTV,gB;QADb,YAAAY,C;QACZ,iD;UAAa,WAAb,e;UA94SI,IANuHC,SAmHnC,EA84SkB,cA94SIB,EA84SkB,sBA94SIB,WA84S2B,IA94S3B,CAAJ,C;YAA2C,sBA84SZ,IA94SY,C;;QAnH/C,OAqHO,W;O;KA7HX,C;kGAWA,yB;MAAA,+D;MAAA,uC;QAQW,kBAAGB,gB;QAaggTV,gB;QADb,YAAAY,C;QACZ,iD;UAAa,WAAb,e;UA14SI,IAtHwC,SAsHpC,EA04SkB,cA14SIB,EA04SkB,sBA14SIB,WA04S2B,IA14S3B,CAAJ,C;YAA2C,sBA04SZ,IA14SY,C;;QAtH/C,OAwhO,W;O;KAhIX,C;kGAWA,yB;MAAA,+D;MAAA,uC;QAQW,kBAAGB,gB;QA+/SV,gB;QADb,YAAAY,C;QACZ,iD;UAAa,WAAb,e;UAt4SI,IAzHyC,SAyHrC,EAs4SkB,cAt4SIB,EAs4SkB,sBA4SIB,WAs4S2B,IAt4S3B,CAAJ,C;YAA2C,sBA4S4SZ,IAt4SY,C;;QAZH/C,OA2HO,W;O;KANIX,C;kGAWA,yB;MAAA,+D;MA2HA,gC;MAo4SA,oC;MA//SA,uC;QAQW,kBAAGB,gB;QA8/SV,gB;QADb,YAAAY,C;QACZ,iD;UAAa,WAAb,0B;UAAmB,eAAO,cAAP,EAAO,sBAAP,S;UAAA,cAAGB,iB;UA14S/B,IA5HsC,SA4HIC,CAAU,OAAV,EAAiB,OAAjB,CAAJ,C;YAA2C,sBAAI,OAAJ,C;;QA5H/C,OA8HO,W;O;KAtIX,C;oGAWA,6C;MA26SiB,gB;MADb,YAAAY,C;MACZ,iD;QAAa,WAAb,e;QA16SI,IAAI,Wak6SkB,cAl6SIB,Eak6SkB,sBA16SIB,Wak6S2B,IA16S3B,CAAJ,C;UAA2C,sBAk6SZ,IA16SY,C;;MAE/C,OAAO,W;K;qGAGX,6C;MAu6SiB,gB;MADb,YAAAY,C;MACZ,iD;QAAa,WAAb,e;QA95SI,IAAI,WA85SkB,cA95SIB,EA85SkB,sBA95SIB,WA85S2B,IA95S3B,CAAJ,C;UAA2C,sBA85SZ,IA95SY,C;;MAE/C,OAAO,W;K;sGAGX,6C;MAm6SiB,gB;MADb,YAAAY,C;MACZ,iD;QAAa,WAAb,e;QA15SI,IAAI,WA05SkB,cA15SIB,EA05SkB,sBA15SIB,WA05S2B,IA15S3B,CAAJ,C;UAA2C,sBA05SZ,IA15SY,C;;MAE/C,OAAO,W;K;qGAGX,6C;MA+5SiB,gB;MADb,YAAAY,C;MACZ,iD;QAAa,WAAb,e;QA15SI,IAAI,WA05SkB,cA15SIB,EA05SkB,sBA15SIB,WA05S2B,IA15S3B,CAAJ,C;UAA2C,sBA05SZ,IA15SY,C;;MAE/C,OAAO,W;K;qGAGX,6C;MA+5SiB,gB;MADb,YAAAY,C;MACZ,iD;QAAa,WAAb,e;QA15SI,IAAI,Wak5SkB,cAl5SIB,Eak5SkB,sBA15SIB,Wak5S2B,IA15S3B,CAAJ,C;UAA2C,sBAk5SZ,IA15SY,C;;MAE/C,OAAO,W;K;sGAGX,6C;MAu5SiB,gB;MADb,YAAAY,C;MACZ,iD;QAAa,WAAb,e;QA94SI,IAAI,WA84SkB,cA94SIB,EA84SkB,sBA94SIB,WA84S2B,IA94S3B,CAAJ,C;UAA2C,sBA84SZ,IA94SY,C;;MAE/C,OAAO,W;K;sGAGX,6C;MAm5SiB,gB;MADb,YAAAY,C;MACZ,iD;QAAa,WAAb,e;QA14SI,IAAI,WA04SkB,cA14SIB,EA04SkB,sBA14SIB,WA04S2B,IA14S3B,CAAJ,C;UAA2C,sBA04SZ,IA14SY,C;;MAE/C,OAAO,W;K;sGAGX,6C;MA+4SiB,gB;MADb,YAAAY,C;MACZ,iD;QAAa,WAAb,e;QA14SI,IAAI,WAs4SkB,cAt4SIB,EAs4SkB,sBA4SIB,WAs4S2B,IAt4S3B,CAAJ,C;UAA2C,sBA4S4SZ,IAt4SY,C;;MAE/C,OAAO,W;K;sGAGX,yB;MAAA,gC;MAo4SA,oC;MAP4SA,oD;QA24SiB,gB;QADb,YAAAY,C;QACZ,iD;UAAa,WAAb,0B;UAAmB,eAAO,cAAP,EAAO,sBAAP,S;UAAA,cAAGB,iB;UA14S/B,IAAI,UA AU,OAAV,EAAiB,OAAjB,CAAJ,C;YAA2C,sBAAI,OAAJ,C;;QAE/C,OAAO,W;O;KAXX,C;sGAcA,yB;MAAA,+D;MAAA,sC;QAMW,kBAAmB,gB;QASV,Q;QAaHb,iD;UAAgB,cAAhB,e;UAAsB,IAAI,YAAJ,C;YAAkB,WAAY,WAAI,OAAJ,C;;QATpD,OAuO,W;O;KAhBX,C;0GASA,4C;MAMoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,IAAI,YAAJ,C;UAAkB,WAAY,WAAI,OAAJ,C;;MACpD,OAAO,W;K;wFAGX,yB;MAAA,+D;MAAA,uC;QAMW,kBAAY,gB;QAsGH,Q;QAaHb,iD;UAAgB,cAAhB,e;UAAsB,IAAI,CAPGS,SAoGR,CAAU,OAAV,CAAL,C;YAAyB,WAAY,WAAI,OAAJ,C;;QApG3D,OAqGO,W;O;KA3GX,C;0FASA,yB;MAAA,+D;MAAA,uC;QAMW,kBAAY,gB;QAqGH,Q;QAaHb,iD;UAAgB,cAAhB,e;UAAsB,IAAI,CARGY,SAqGX,CAAU,OAAV,CAAL,C;YAAyB,WAAY,WAAI,OAAJ,C;;QArG3D,OAsGO,W;O;KA5GX,C;0FASA,yB;MAAA,+D;MAAA,uC;QAMW,kBAAY,gB;QAwGH,Q;QAaHb,iD;UAAgB,cAAhB,e;UAAsB,IAAI,CAzGa,SAyGZ,CAAU,OAAV,CAAL,C;YAAyB,WAAY,WAAI,OAAJ,C;;QAzG3D,OA0GO,W;O;KAhHX,C;0FASA,yB;MAAA,+D;MAAA,uC;QAMW,kBAAY,gB;QA0GH,Q;QAaHb,iD;UAAgB,cAAhB,e;UAAsB,IAAI,CA1Gc,SA0Gb,CAAU,OAAV,CAAL,C;YAAyB,WAAY,WAAI,OAAJ,C;;QA1G3D,OA2GO,W;O;KAjHX,C;0FASA,yB;MAAA,+D;MAAA,uC;QAMW,kBAAY,gB;QA2GH,Q;QAaHb,iD;UAAgB,cAAhB,e;UAAsB,IAAI,CA3Ge,SA2Gd,CAAU,OAAV,CAAL,C;

YAAyB,WAAY,WAAl,OAAJ,C;;QA3G3D,OA4GO,W;O;KAIHX,C;0FASA,yB;MAAA,+D;MA4GA,oC;MAAA,gC;MA5GA,uC;QAMW,kBAAY,gB;QA4GH,Q;QAaHb,iD;UAAgB,cAAhB,OB;UAAsB,IAAI,CA5GY,SA4GX,CAAU,oBAAV,CAAL,C;YAAyB,WAAY,WAAl,oBAAJ,C;;QA5G3D,OA6GO,W;O;KAnHX,C;IASA,kC;MAMI,OA AO,2BAAgB,gBAAhB,C;K;IAGX,iD;MAMoB,Q;MAAhB,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QA AsB,IAAI,eAAJ,C;UAAqB,WAAY,WAAl,OAAJ,C;;MACvD,OAAO,W;K;4FAGX,6C;MAMoB,Q;MAAhB,wBA AgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,IAAI,CAAC,UAAU,OAAV,CAAL,C;UAAyB,WAAY,WAAl ,OAAJ,C;;MAC3D,OAAO,W;K;8FAGX,6C;MAMoB,Q;MAAhB,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB, M;QAAsB,IAAI,CAAC,UAAU,OAAV,CAAL,C;UAAyB,WAAY,WAAl,OAAJ,C;;MAC3D,OAAO,W;K;8FAGX, 6C;MAMoB,Q;MAAhB,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,IAAI,CAAC,UAAU,OAAV,CA AL,C;UAAyB,WAAY,WAAl,OAAJ,C;;MAC3D,OAAO,W;K;8FAGX,6C;MAMoB,Q;MAAhB,wBAAgB,SAAhB ,gB;QAAGB,cAAA,SAAhB,M;QAAsB,IAAI,CAAC,UAAU,OAAV,CAAL,C;UAAyB,WAAY,WAAl,OAAJ,C;;M AC3D,OAAO,W;K;8FAGX,6C;MAMoB,Q;MAAhB,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,IA AI,CAAC,UAAU,OAAV,CAAL,C;UAAyB,WAAY,WAAl,OAAJ,C;;MAC3D,OAAO,W;K;8FAGX,6C;MAMoB, Q;MAAhB,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,IAAI,CAAC,UAAU,OAAV,CAAL,C;UAAy B,WAAY,WAAl,OAAJ,C;;MAC3D,OAAO,W;K;8FAGX,6C;MAMoB,Q;MAAhB,wBAAgB,SAAhB,gB;QAAGB, cAAA,SAAhB,M;QAAsB,IAAI,CAAC,UAAU,OAAV,CAAL,C;UAAyB,WAAY,WAAl,OAAJ,C;;MAC3D,OAA O,W;K;8FAGX,6C;MAMoB,Q;MAAhB,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,IAAI,CAAC,U AAU,OAAV,CAAL,C;UAAyB,WAAY,WAAl,OAAJ,C;;MAC3D,OAAO,W;K;8FAGX,yB;MAAA,oC;MAAA,gC ;MAAA,oD;QAMoB,Q;QAaHb,wBAAgB,SAAhB,gB;UAAgB,cAAhB,UAAgB,SAAhB,O;UAAsB,IAAI,CAAC, UAAU,oBAAV,CAAL,C;YAAyB,WAAY,WAAl,oBAAJ,C;;QAC3D,OAAO,W;O;KAPX,C;sFAUA,6C;MAMoB, Q;MAAhB,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,WA AY,WAAl,OAAJ,C;;MAC1D,OAAO,W;K;wFAGX,6C;MAMoB,Q;MAAhB,wBAAgB,SAAhB,gB;QAAGB,cAA A,SAAhB,M;QAAsB,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,WAAY,WAAl,OAAJ,C;;MAC1D,OAAO,W;K;wFA GX,6C;MAMoB,Q;MAAhB,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OAAV,CAAJ ,C;UAAwB,WAAY,WAAl,OAAJ,C;;MAC1D,OAAO,W;K;wFAGX,6C;MAMoB,Q;MAAhB,wBAAgB,SAAhB,g B;QAAGB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,WAAY,WAAl,OAAJ,C;;MAC1D,O AAO,W;K;wFAGX,6C;MAMoB,Q;MAAhB,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,IAAI,UA AU,OAAV,CAAJ,C;UAAwB,WAAY,WAAl,OAAJ,C;;MAC1D,OAAO,W;K;wFAGX,6C;MAMoB,Q;MAAhB,wB AAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,WAAY,WAAl,OA AJ,C;;MAC1D,OAAO,W;K;wFAGX,6C;MAMoB,Q;MAAhB,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;Q AAsB,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,WAAY,WAAl,OAAJ,C;;MAC1D,OAAO,W;K;wFAGX,6C;MAMo B,Q;MAAhB,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OAAV,CAAJ,C;UAAwB, W AAY,WAAl,OAAJ,C;;MAC1D,OAAO,W;K;wFAGX,yB;MAAA,oC;MAAA,gC;MAAA,oD;QAMoB,Q;QAaHb, wBAAgB,SAAhB,gB;UAAgB,cAAhB,UAAgB,SAAhB,O;UAAsB,IAAI,UAAU,oBAAV,CAAJ,C;YAAwB,WAA Y,WAAl,oBAAJ,C;;QAC1D,OAAO,W;O;KAPX,C;IAUA,mC;MAII,IAAI,OAAQ,UAAZ,C;QAAuB,OMhtle,W;O NitItC,OAA4D,OAArD,yBAAY,OAAQ,MAApB,EAA2B,OAAQ,aAAR,GAAuB,CAAvB,IAA3B,CAAqD,C;K;IA GhE,qC;MAII,IAAI,OAAQ,UAAZ,C;QAAuB,OMxtle,W;ONyItC,Oe7rIsC,Of6rI/B,yBAAY,OAAQ,MAApB,EA A2B,OAAQ,aAAR,GAAuB,CAAvB,IAA3B,Ce7rI+B,C;K;IfgsI1C,qC;MAII,IAAI,OAAQ,UAAZ,C;QAAuB,OMh uIe,W;ONiutC,Oe7rIuC,Of6rIhC,yBAAY,OAAQ,MAApB,EAA2B,OAAQ,aAAR,GAAuB,CAAvB,IAA3B,Ce7rI gC,C;K;IfgsI3C,qC;MAII,IAAI,OAAQ,UAAZ,C;QAAuB,OMxuIe,W;ONyuItC,Oe7rIqC,Of6rI9B,yBAAY,OAAQ, MAApB,EAA2B,OAAQ,aAAR,GAAuB,CAAvB,IAA3B,Ce7rI8B,C;K;IfgsIzC,qC;MAII,IAAI,OAAQ,UAAZ,C;Q AAuB,OMhvIe,W;ONivItC,Oe7rIsC,Of6rI/B,yBAAY,OAAQ,MAApB,EAA2B,OAAQ,aAAR,GAAuB,CAAvB,IA A3B,Ce7rI+B,C;K;IfgsI1C,qC;MAII,IAAI,OAAQ,UAAZ,C;QAAuB,OMxvIe,W;ONyvItC,Oe7rIuC,Of6rIhC,yBA AY,OAAQ,MAApB,EAA2B,OAAQ,aAAR,GAAuB,CAAvB,IAA3B,Ce7rIgC,C;K;IfgsI3C,qC;MAII,IAAI,OAAQ, UAAZ,C;QAAuB,OMhwIe,W;ONiwItC,Oe7rIwC,Of6rIjC,yBAAY,OAAQ,MAApB,EAA2B,OAAQ,aAAR,GAAu B,CAAvB,IAA3B,Ce7rIfiC,C;K;IfgsI5C,qC;MAII,IAAI,OAAQ,UAAZ,C;QAAuB,OMxwIe,W;ONywItC,Oe7rIyC, Of6rIiC,0BAAY,OAAQ,MAApB,EAA2B,OAAQ,aAAR,GAAuB,CAAvB,IAA3B,Ce7rIkC,C;K;IfgsI7C,qC;MAII, IAAI,OAAQ,UAAZ,C;QAAuB,OMhxIe,W;ONixItC,OAA4D,SAArD,0BAAY,OAAQ,MAApB,EAA2B,OAAQ,a



AAR,GAAuB,CAA vB,IAA3B,CAAqD,C;K;IAGhE,qC;MAOkB,Q;MAHd,WAAmB,wBAAR,OAAQ,EAAwB,EA  
AxB,C;MACnB,IAAI,SAAQ,CAAZ,C;QAAe,OAAO,W;MACTb,WAAW,iBAaA,IAAb,C;MACG,yB;MAAd,OA  
Ac,cAAAd,C;QAAc,uB;QACV,IAAK,WAAI,UAAI,KAAJ,CAAJ,C;;MAET,OAAO,I;K;IAGX,qC;MAOkB,Q;MAH  
d,WAAmB,wBAAR,OAAQ,EAAwB,EAAxB,C;MACnB,IAAI,SAAQ,CAAZ,C;QAAe,OAAO,W;MACTb,WAA  
W,iBAAgB,IAAhB,C;MACG,yB;MAAd,OAAc,cAAAd,C;QAAc,uB;QACV,IAAK,WAAI,UAAI,KAAJ,CAAJ,C;;  
MAET,OAAO,I;K;IAGX,sC;MAOkB,Q;MAHd,WAAmB,wBAAR,OAAQ,EAAwB,EAAxB,C;MACnB,IAAI,SA  
AQ,CAAZ,C;QAAe,OAAO,W;MACTb,WAAW,iBAAiB,IAAjB,C;MACG,yB;MAAd,OAAc,cAAAd,C;QAAc,uB;Q  
ACV,IAAK,WAAI,UAAI,KAAJ,CAAJ,C;;MAET,OAAO,I;K;IAGX,sC;MAOkB,Q;MAHd,WAAmB,wBAAR,OA  
AQ,EAAwB,EAAxB,C;MACnB,IAAI,SAAQ,CAAZ,C;QAAe,OAAO,W;MACTb,WAAW,iBAaE,IAAf,C;MACG,  
yB;MAAd,OAAc,cAAAd,C;QAAc,uB;QACV,IAAK,WAAI,UAAI,KAAJ,CAAJ,C;;MAET,OAAO,I;K;IAGX,sC;M  
AOkB,Q;MAHd,WAAmB,wBAAR,OAAQ,EAAwB,EAAxB,C;MACnB,IAAI,SAAQ,CAAZ,C;QAAe,OAAO,W;  
MACTb,WAAW,iBAAgB,IAAhB,C;MACG,yB;MAAd,OAAc,cAAAd,C;QAAc,uB;QACV,IAAK,WAAI,UAAI,KA  
AJ,CAAJ,C;;MAET,OAAO,I;K;IAGX,sC;MAOkB,Q;MAHd,WAAmB,wBAAR,OAAQ,EAAwB,EAAxB,C;MAC  
nB,IAAI,SAAQ,CAAZ,C;QAAe,OAAO,W;MACTb,WAAW,iBAAiB,IAAjB,C;MACG,yB;MAAd,OAAc,cAAAd,C;  
QAAc,uB;QACV,IAAK,WAAI,UAAI,KAAJ,CAAJ,C;;MAET,OAAO,I;K;IAGX,sC;MAOkB,Q;MAHd,WAAmB,  
wBAAR,OAAQ,EAAwB,EAAxB,C;MACnB,IAAI,SAAQ,CAAZ,C;QAAe,OAAO,W;MACTb,WAAW,iBAaKB,I  
AAIB,C;MACG,yB;MAAd,OAAc,cAAAd,C;QAAc,uB;QACV,IAAK,WAAI,UAAI,KAAJ,CAAJ,C;;MAET,OAAO,  
I;K;IAGX,sC;MAOkB,Q;MAHd,WAAmB,wBAAR,OAAQ,EAAwB,EAAxB,C;MACnB,IAAI,SAAQ,CAAZ,C;Q  
AAe,OAAO,W;MACTb,WAAW,iBAAmB,IAAnB,C;MACG,yB;MAAd,OAAc,cAAAd,C;QAAc,uB;QACV,IAAK,  
WAAI,UAAI,KAAJ,CAAJ,C;;MAET,OAAO,I;K;IAGX,sC;MAOkB,Q;MAHd,WAAmB,wBAAR,OAAQ,EAAwB  
,EAAxB,C;MACnB,IAAI,SAAQ,CAAZ,C;QAAe,OAAO,W;MACTb,WAAW,iBAAgB,IAAhB,C;MACG,yB;MA  
Ad,OAAc,cAAAd,C;QAAc,uB;QACV,IAAK,WAAI,sBAI,KAAJ,EAJ,C;;MAET,OAAO,I;K;IAGX,wC;MAMw  
B,UACT,M;MAHX,aAAa,aAAa,SAAb,EAAmB,OAAQ,KAA3B,C;MACb,kBAaKB,C;MACE,yB;MAApB,OAAO  
B,cAApB,C;QAAoB,6B;QChB,OAAO,oBAAP,EAAO,4BAAP,YAAwB,UAAK,WAAL,C;;MAE5B,OAAO,M;  
K;IAGX,0C;MAMwB,UACT,M;MAHX,aAAa,cAAU,OAAQ,KAAIB,C;MACb,kBAaKB,C;MACE,yB;MAApB,O  
AAoB,cAApB,C;QAAoB,6B;QChB,OAAO,oBAAP,EAAO,4BAAP,YAAwB,UAAK,WAAL,C;;MAE5B,OAAO  
,M;K;IAGX,0C;MAMwB,UACT,M;MAHX,aAAa,eAAW,OAAQ,KAAIB,C;MACb,kBAaKB,C;MACE,yB;MAA  
pB,OAAoB,cAApB,C;QAAoB,6B;QChB,OAAO,oBAAP,EAAO,4BAAP,YAAwB,UAAK,WAAL,C;;MAE5B,O  
AAO,M;K;IAGX,0C;MAMwB,UACT,M;MAHX,aAAa,eAAS,OAAQ,KAAjB,C;MACb,kBAaKB,C;MACE,yB;M  
AApB,OAAoB,cAApB,C;QAAoB,6B;QChB,OAAO,oBAAP,EAAO,4BAAP,YAAwB,UAAK,WAAL,C;;MAE5  
B,OAAO,M;K;IAGX,0C;MAMwB,UACT,M;MAHX,aAAa,iBAAU,OAAQ,KAAIB,C;MACb,kBAaKB,C;MACE,  
yB;MAApB,OAAoB,cAApB,C;QAAoB,6B;QChB,OAAO,oBAAP,EAAO,4BAAP,YAAwB,UAAK,WAAL,C;;  
MAE5B,OAAO,M;K;IAGX,0C;MAMwB,UACT,M;MAHX,aAAa,iBAAW,OAAQ,KAAIB,C;MACb,kBAaKB,C;  
MACE,yB;MAApB,OAAoB,cAApB,C;QAAoB,6B;QChB,OAAO,oBAAP,EAAO,4BAAP,YAAwB,UAAK,WA  
AL,C;;MAE5B,OAAO,M;K;IAGX,0C;MAMwB,UACT,M;MAHX,aAAa,iBAAY,OAAQ,KAApB,C;MACb,kBAA  
KB,C;MACE,yB;MAApB,OAAoB,cAApB,C;QAAoB,6B;QChB,OAAO,oBAAP,EAAO,4BAAP,YAAwB,UAAK  
,WAAL,C;;MAE5B,OAAO,M;K;IAGX,0C;MAMwB,UACT,M;MAHX,aAAa,oBAaA,OAAQ,KAArB,C;MACb,k  
BAaKB,C;MACE,yB;MAApB,OAAoB,cAApB,C;QAAoB,6B;QChB,OAAO,oBAAP,EAAO,4BAAP,YAAwB,U  
AAK,WAAL,C;;MAE5B,OAAO,M;K;IAGX,0C;MAMwB,UACT,M;MAHX,aAAa,iBAAU,OAAQ,KAAIB,C;MA  
Cb,kBAaKB,C;MACE,yB;MAApB,OAAoB,cAApB,C;QAAoB,6B;QChB,OAAO,oBAAP,EAAO,4BAAP,YAA  
wB,UAAK,WAAL,C;;MAE5B,OAAO,M;K;IAGX,0C;MAII,IAAI,OAAQ,UAAZ,C;QAAuB,OAAO,yBAAY,CAA  
Z,EAAe,CAAf,C;MAC9B,OAAO,yBAAY,OAAQ,MAApB,EAA2B,OAAQ,aAAR,GAAuB,CAA vB,IAA3B,C;K;I  
AGX,0C;MAII,IAAI,OAAQ,UAAZ,C;QAAuB,OAAO,cAAU,CAAV,C;MAC9B,OAAO,yBAAY,OAAQ,MAApB,  
EAA2B,OAAQ,aAAR,GAAuB,CAA vB,IAA3B,C;K;IAGX,2C;MAII,IAAI,OAAQ,UAAZ,C;QAAuB,OAAO,eAA  
W,CAAX,C;MAC9B,OAAO,yBAAY,OAAQ,MAApB,EAA2B,OAAQ,aAAR,GAAuB,CAA vB,IAA3B,C;K;IAGX  
,2C;MAII,IAAI,OAAQ,UAAZ,C;QAAuB,OAAO,eAAS,CAAT,C;MAC9B,OAAO,yBAAY,OAAQ,MAApB,EAA  
2B,OAAQ,aAAR,GAAuB,CAA vB,IAA3B,C;K;IAGX,2C;MAII,IAAI,OAAQ,UAAZ,C;QAAuB,OAAO,iBAAU,C  
AAV,C;MAC9B,OAAO,yBAAY,OAAQ,MAApB,EAA2B,OAAQ,aAAR,GAAuB,CAA vB,IAA3B,C;K;IAGX,2C;

MAII,IAAI,OAAQ,UAAZ,C;QAAuB,OAAO,iBAAW,CAAX,C;MAC9B,OAAO,yBAAY,OAAQ,MAApB,EAA2  
B,OAAQ,aAAR,GAAuB,CAAvB,IAA3B,C;K;IAGX,2C;MAII,IAAI,OAAQ,UAAZ,C;QAAuB,OAAO,iBAAY,CA  
AZ,C;MAC9B,OAAO,yBAAY,OAAQ,MAApB,EAA2B,OAAQ,aAAR,GAAuB,CAAvB,IAA3B,C;K;IAGX,2C;M  
AII,IAAI,OAAQ,UAAZ,C;QAAuB,OAAO,oBAAa,CAAb,C;MAC9B,OAAO,0BAAY,OAAQ,MAApB,EAA2B,O  
AAQ,aAAR,GAAuB,CAAvB,IAA3B,C;K;IAGX,2C;MAII,IAAI,OAAQ,UAAZ,C;QAAuB,OAAO,iBAAU,CAAV  
,C;MAC9B,OAAO,0BAAY,OAAQ,MAApB,EAA2B,OAAQ,aAAR,GAAuB,CAAvB,IAA3B,C;K;IAGX,4B;MAci  
B,Q;Mc3nJb,IAAI,EdqnJI,KAAK,CcrnJT,CAAJ,C;QACI,cdonJc,sD;QcnnJd,MAAM,gCAAYB,OAAQ,WAAjC,C;  
OdonJV,IAAI,MAAK,CAAT,C;QAAY,OAAO,W;MACnB,IAAI,KAAK,gBAAT,C;QAAe,OAAO,iB;MAcTB,IAA  
I,MAAK,CAAT,C;QAAY,OAAO,OAAO,UAAK,CAAL,CAAP,C;MACnB,YAAY,C;MACZ,WAAW,iBAAa,CA  
Ab,C;MACX,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QACI,IAAK,WAAI,IAAJ,C;QACL,IAAI,mCAAW,CA  
Af,C;UACI,K;;MAER,OAAO,I;K;IAGX,8B;MAciB,Q;McjpJb,IAAI,Ed2oJI,KAAK,Cc3oJT,CAAJ,C;QACI,cd0oJ  
c,sD;QczoJd,MAAM,gCAAYB,OAAQ,WAAjC,C;Od0oJV,IAAI,MAAK,CAAT,C;QAAY,OAAO,W;MACnB,IAA  
I,KAAK,gBAAT,C;QAAe,OAAO,mB;MAcTB,IAAI,MAAK,CAAT,C;QAAY,OAAO,OAAO,UAAK,CAAL,CAA  
P,C;MACnB,YAAY,C;MACZ,WAAW,iBAAgB,CAAhB,C;MACX,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;Q  
ACI,IAAK,WAAI,IAAJ,C;QACL,IAAI,mCAAW,CAAf,C;UACI,K;;MAER,OAAO,I;K;IAGX,8B;MAciB,Q;Mcvq  
Jb,IAAI,EdiqJI,KAAK,CcjqtJT,CAAJ,C;QACI,cdgqJc,sD;Qc/pJd,MAAM,gCAAYB,OAAQ,WAAjC,C;OdgqJV,IA  
AI,MAAK,CAAT,C;QAAY,OAAO,W;MACnB,IAAI,KAAK,gBAAT,C;QAAe,OAAO,mB;MAcTB,IAAI,MAAK,  
CAAT,C;QAAY,OAAO,OAAO,UAAK,CAAL,CAAP,C;MACnB,YAAY,C;MACZ,WAAW,iBAAiB,CAAjB,C;M  
ACX,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QACI,IAAK,WAAI,IAAJ,C;QACL,IAAI,mCAAW,CAAf,C;UA  
CI,K;;MAER,OAAO,I;K;IAGX,8B;MAciB,Q;Mc7rJb,IAAI,EdurJI,KAAK,CcvtJT,CAAJ,C;QACI,cdsrJc,sD;QcrrJ  
d,MAAM,gCAAYB,OAAQ,WAAjC,C;OdsrJV,IAAI,MAAK,CAAT,C;QAAY,OAAO,W;MACnB,IAAI,KAAK,gB  
AAT,C;QAAe,OAAO,mB;MAcTB,IAAI,MAAK,CAAT,C;QAAY,OAAO,OAAO,UAAK,CAAL,CAAP,C;MACn  
B,YAAY,C;MACZ,WAAW,iBAAe,CAAf,C;MACX,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QACI,IAAK,WA  
AI,IAAJ,C;QACL,IAAI,mCAAW,CAAf,C;UACI,K;;MAER,OAAO,I;K;IAGX,8B;MAciB,Q;MentJb,IAAI,Ed6sJI,  
KAAK,Cc7sJT,CAAJ,C;QACI,cd4sJc,sD;Qc3sJd,MAAM,gCAAYB,OAAQ,WAAjC,C;Od4sJV,IAAI,MAAK,CAA  
T,C;QAAY,OAAO,W;MACnB,IAAI,KAAK,gBAAT,C;QAAe,OAAO,mB;MAcTB,IAAI,MAAK,CAAT,C;QAAY  
,OAAO,OAAO,UAAK,CAAL,CAAP,C;MACnB,YAAY,C;MACZ,WAAW,iBAAgB,CAAhB,C;MACX,wBAAa,S  
AAb,gB;QAAa,WAAA,SAAb,M;QACI,IAAK,WAAI,IAAJ,C;QACL,IAAI,mCAAW,CAAf,C;UACI,K;;MAER,O  
AAO,I;K;IAGX,8B;MAciB,Q;MczuJb,IAAI,EdmuJI,KAAK,CcnuJT,CAAJ,C;QACI,cdkuJc,sD;QcjuJd,MAAM,gC  
AAyB,OAAQ,WAAjC,C;OdkuJV,IAAI,MAAK,CAAT,C;QAAY,OAAO,W;MACnB,IAAI,KAAK,gBAAT,C;QA  
Ae,OAAO,mB;MAcTB,IAAI,MAAK,CAAT,C;QAAY,OAAO,OAAO,UAAK,CAAL,CAAP,C;MACnB,YAAY,C;  
MACZ,WAAW,iBAAiB,CAAjB,C;MACX,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QACI,IAAK,WAAI,IAAJ,  
C;QACL,IAAI,mCAAW,CAAf,C;UACI,K;;MAER,OAAO,I;K;IAGX,8B;MAciB,Q;Mc/vJb,IAAI,EdyvJI,KAAK,  
CczvJT,CAAJ,C;QACI,cdwvJc,sD;QcqvJd,MAAM,gCAAYB,OAAQ,WAAjC,C;OdwwJV,IAAI,MAAK,CAAT,C;  
QAAY,OAAO,W;MACnB,IAAI,KAAK,gBAAT,C;QAAe,OAAO,mB;MAcTB,IAAI,MAAK,CAAT,C;QAAY,OA  
AO,OAAO,UAAK,CAAL,CAAP,C;MACnB,YAAY,C;MACZ,WAAW,iBAAkB,CAAlB,C;MACX,wBAAa,SAAb  
,gB;QAAa,WAAA,SAAb,M;QACI,IAAK,WAAI,IAAJ,C;QACL,IAAI,mCAAW,CAAf,C;UACI,K;;MAER,OAAO  
,I;K;IAGX,8B;MAciB,Q;McrxJb,IAAI,Ed+wJI,KAAK,Cc/wJT,CAAJ,C;QACI,cd8wJc,sD;Qc7wJd,MAAM,gCAA  
yB,OAAQ,WAAjC,C;Od8wJV,IAAI,MAAK,CAAT,C;QAAY,OAAO,W;MACnB,IAAI,KAAK,gBAAT,C;QAAe,  
OAAO,mB;MAcTB,IAAI,MAAK,CAAT,C;QAAY,OAAO,OAAO,UAAK,CAAL,CAAP,C;MACnB,YAAY,C;MA  
CZ,WAAW,iBAAmB,CAAnB,C;MACX,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QACI,IAAK,WAAI,IAAJ,C;  
QACL,IAAI,mCAAW,CAAf,C;UACI,K;;MAER,OAAO,I;K;IAGX,8B;MAciB,Q;Mc3yJb,IAAI,EdqyJI,KAAK,Cc  
ryJT,CAAJ,C;QACI,cdoyJc,sD;QcnyJd,MAAM,gCAAYB,OAAQ,WAAjC,C;OdoyJV,IAAI,MAAK,CAAT,C;QAA  
Y,OAAO,W;MACnB,IAAI,KAAK,gBAAT,C;QAAe,OAAO,mB;MAcTB,IAAI,MAAK,CAAT,C;QAAY,OAAO,O  
AAO,sBAAK,CAAL,EAAP,C;MACnB,YAAY,C;MACZ,WAAW,iBAAgB,CAAhB,C;MACX,wBAAa,SAAb,gB;  
QAAa,WAAb,UAAa,SAAb,O;QACI,IAAK,WAAI,iBAAJ,C;QACL,IAAI,mCAAW,CAAf,C;UACI,K;;MAER,OA  
AO,I;K;IAGX,gC;McnzJI,IAAI,Ed2zJI,KAAK,Cc3zJT,CAAJ,C;QACI,cd0zJc,sD;QczJd,MAAM,gCAAYB,OAA  
Q,WAAjC,C;Od0zJV,IAAI,MAAK,CAAT,C;QAAY,OAAO,W;MACnB,WAAW,gB;MACX,IAAI,KAAK,IAAT,

C;QAAe,OAAO,iB;MACTB,IAAI,MAAK,CAAT,C;QAAY,OAAO,OAAO,UAAK,OAAO,CAAP,IAAL,CAAP,C;  
MACnB,WAAW,iBAaA,CAAb,C;MACX,iBAAc,OAAO,CAAP,IAAd,UAA6B,IAA7B,U;QACI,IAAK,WAAI,UA  
AK,KAAL,CAAJ,C;MACT,OAAO,I;K;IAGX,kC;Mct0JI,IAAI,Ed80JI,KAAK,Cc90JT,CAAJ,C;QACI,cd60Jc,sD;  
Qc50Jd,MAAM,gCAAyB,OAAQ,WAAjC,C;Od60JV,IAAI,MAAK,CAAT,C;QAAY,OAAO,W;MACnB,WAAW,  
gB;MACX,IAAI,KAAK,IAAT,C;QAAe,OAAO,mB;MACTB,IAAI,MAAK,CAAT,C;QAAY,OAAO,OAAO,UAA  
K,OAAO,CAAP,IAAL,CAAP,C;MACnB,WAAW,iBAAgB,CAAhB,C;MACX,iBAAc,OAAO,CAAP,IAAd,UAA6  
B,IAA7B,U;QACI,IAAK,WAAI,UAAK,KAAL,CAAJ,C;MACT,OAAO,I;K;IAGX,kC;Mcz1JI,IAAI,Edi2JI,KAA  
K,Ccj2JT,CAAJ,C;QACI,cdg2Jc,sD;Qc/1Jd,MAAM,gCAAyB,OAAQ,WAAjC,C;Odg2JV,IAAI,MAAK,CAAT,C;  
QAAY,OAAO,W;MACnB,WAAW,gB;MACX,IAAI,KAAK,IAAT,C;QAAe,OAAO,mB;MACTB,IAAI,MAAK,CA  
AT,C;QAAY,OAAO,OAAO,UAAK,OAAO,CAAP,IAAL,CAAP,C;MACnB,WAAW,iBAaIB,CAAjB,C;MACX,i  
BAAc,OAAO,CAAP,IAAd,UAA6B,IAA7B,U;QACI,IAAK,WAAI,UAAK,KAAL,CAAJ,C;MACT,OAAO,I;K;IA  
GX,kC;Mc52JI,IAAI,Edo3JI,KAAK,Ccp3JT,CAAJ,C;QACI,cdm3Jc,sD;Qcl3Jd,MAAM,gCAAyB,OAAQ,WAAjC,  
C;Odm3JV,IAAI,MAAK,CAAT,C;QAAY,OAAO,W;MACnB,WAAW,gB;MACX,IAAI,KAAK,IAAT,C;QAAe,O  
AAO,mB;MACTB,IAAI,MAAK,CAAT,C;QAAY,OAAO,OAAO,UAAK,OAAO,CAAP,IAAL,CAAP,C;MACnB,  
WAAW,iBAaE,CAAF,C;MACX,iBAAc,OAAO,CAAP,IAAd,UAA6B,IAA7B,U;QACI,IAAK,WAAI,UAAK,KAA  
L,CAAJ,C;MACT,OAAO,I;K;IAGX,kC;Mc/3JI,IAAI,Edu4JI,KAAK,Ccv4JT,CAAJ,C;QACI,cds4Jc,sD;Qcr4Jd,M  
AAM,gCAAyB,OAAQ,WAAjC,C;Ods4JV,IAAI,MAAK,CAAT,C;QAAY,OAAO,W;MACnB,WAAW,gB;MACX  
,IAAI,KAAK,IAAT,C;QAAe,OAAO,mB;MACTB,IAAI,MAAK,CAAT,C;QAAY,OAAO,OAAO,UAAK,OAAO,C  
AAP,IAAL,CAAP,C;MACnB,WAAW,iBAAgB,CAAhB,C;MACX,iBAAc,OAAO,CAAP,IAAd,UAA6B,IAA7B,U  
;QACI,IAAK,WAAI,UAAK,KAAL,CAAJ,C;MACT,OAAO,I;K;IAGX,kC;Mcl5JI,IAAI,Ed05JI,KAAK,Cc15JT,C  
AAJ,C;QACI,cdy5Jc,sD;Qcx5Jd,MAAM,gCAAyB,OAAQ,WAAjC,C;Ody5JV,IAAI,MAAK,CAAT,C;QAAY,OA  
AO,W;MACnB,WAAW,gB;MACX,IAAI,KAAK,IAAT,C;QAAe,OAAO,mB;MACTB,IAAI,MAAK,CAAT,C;QA  
AY,OAAO,OAAO,UAAK,OAAO,CAAP,IAAL,CAAP,C;MACnB,WAAW,iBAaIB,CAAjB,C;MACX,iBAAc,OA  
AO,CAAP,IAAd,UAA6B,IAA7B,U;QACI,IAAK,WAAI,UAAK,KAAL,CAAJ,C;MACT,OAAO,I;K;IAGX,kC;Mc  
r6JI,IAAI,Ed66JI,KAAK,Cc76JT,CAAJ,C;QACI,cd46Jc,sD;Qc36Jd,MAAM,gCAAyB,OAAQ,WAAjC,C;Od46JV,  
IAAI,MAAK,CAAT,C;QAAY,OAAO,W;MACnB,WAAW,gB;MACX,IAAI,KAAK,IAAT,C;QAAe,OAAO,mB;M  
ACTB,IAAI,MAAK,CAAT,C;QAAY,OAAO,OAAO,UAAK,OAAO,CAAP,IAAL,CAAP,C;MACnB,WAAW,iBA  
AkB,CAaIB,C;MACX,iBAAc,OAAO,CAAP,IAAd,UAA6B,IAA7B,U;QACI,IAAK,WAAI,UAAK,KAAL,CAAJ,  
C;MACT,OAAO,I;K;IAGX,kC;Mcx7JI,IAAI,Edg8JI,KAAK,Cch8JT,CAAJ,C;QACI,cd+7Jc,sD;Qc97Jd,MAAM,g  
CAAyB,OAAQ,WAAjC,C;Od+7JV,IAAI,MAAK,CAAT,C;QAAY,OAAO,W;MACnB,WAAW,gB;MACX,IAAI,  
KAAK,IAAT,C;QAAe,OAAO,mB;MACTB,IAAI,MAAK,CAAT,C;QAAY,OAAO,OAAO,UAAK,OAAO,CAAP,I  
AAL,CAAP,C;MACnB,WAAW,iBAAmB,CAAnB,C;MACX,iBAAc,OAAO,CAAP,IAAd,UAA6B,IAA7B,U;QA  
CI,IAAK,WAAI,UAAK,KAAL,CAAJ,C;MACT,OAAO,I;K;IAGX,kC;Mc38JI,IAAI,Edm9JI,KAAK,Ccn9JT,CAA  
J,C;QACI,cdk9Jc,sD;Qcj9Jd,MAAM,gCAAyB,OAAQ,WAAjC,C;Odk9JV,IAAI,MAAK,CAAT,C;QAAY,OAAO,  
W;MACnB,WAAW,gB;MACX,IAAI,KAAK,IAAT,C;QAAe,OAAO,mB;MACTB,IAAI,MAAK,CAAT,C;QAAY,  
OAAO,OAAO,sBAAK,OAAO,CAAP,IAAL,EAAP,C;MACnB,WAAW,iBAAgB,CAAhB,C;MACX,iBAAc,OAA  
O,CAAP,IAAd,UAA6B,IAA7B,U;QACI,IAAK,WAAI,sBAAK,KAAL,EAJ,C;MACT,OAAO,I;K;gGAGX,yB;M  
AAA,8D;MAAA,4C;MAAA,gD;MAAA,uC;QAMI,iBAAc,wBAAd,WAA+B,CAA/B,U;UACI,IAAI,CAAC,UAA  
U,UAAK,KAAL,CAAV,CAAL,C;YACI,OAAO,gBAAK,QAAQ,CAAR,IAAL,C;;QAGf,OAAO,iB;O;KAXX,C;k  
GAcA,yB;MAAA,8D;MAAA,2C;MAAA,gD;MAAA,uC;QAMI,iBAAc,wBAAd,WAA+B,CAA/B,U;UACI,IAAI,  
CAAC,UAAU,UAAK,KAAL,CAAV,CAAL,C;YACI,OAAO,gBAAK,QAAQ,CAAR,IAAL,C;;QAGf,OAAO,iB;O  
;KAXX,C;kGAcA,yB;MAAA,8D;MAAA,4C;MAAA,gD;MAAA,uC;QAMI,iBAAc,wBAAd,WAA+B,CAA/B,U;U  
ACI,IAAI,CAAC,UAAU,UAAK,KAAL,CAAV,CAAL,C;YACI,OAAO,gBAAK,QAAQ,CAAR,IAAL,C;;QAGf,O  
AAO,iB;O;KAXX,C;kGAcA,yB;MAAA,8D;MAAA,4C;MAAA,gD;MAAA,uC;QAMI,iBAAc,wBAAd,WAA+B,C  
AA/B,U;UACI,IAAI,CAAC,UAAU,UAAK,KAAL,CAAV,CAAL,C;YACI,OAAO,gBAAK,QAAQ,CAAR,IAAL,  
C;;QAGf,OAAO,iB;O;KAXX,C;kGAcA,yB;MAAA,8D;MAAA,4C;MAAA,gD;MAAA,uC;QAMI,iBAAc,wBAAd  
,WAA+B,CAA/B,U;UACI,IAAI,CAAC,UAAU,UAAK,KAAL,CAAV,CAAL,C;YACI,OAAO,gBAAK,QAAQ,CA  
AR,IAAL,C;;QAGf,OAAO,iB;O;KAXX,C;kGAcA,yB;MAAA,8D;MAAA,4C;MAAA,gD;MAAA,uC;QAMI,iBA

Ac,wBAAd,WAA+B,CAA/B,U;UACI,IAAI,CAAC,UAAU,UAAK,KAAL,CAAV,CAAL,C;YACI,OAAO,gBAAK ,QAAQ,CAAR,IAAL,C;;QAGf,OAAO,iB;O;KAXX,C;kGAcA,yB;MAAA,8D;MAAA,4C;MAAA,gD;MAAA,uC; QAMI,iBAAc,wBAAd,WAA+B,CAA/B,U;UACI,IAAI,CAAC,UAAU,UAAK,KAAL,CAAV,CAAL,C;YACI,OA AO,gBAAK,QAAQ,CAAR,IAAL,C;;QAGf,OAAO,iB;O;KAXX,C;kGAcA,yB;MAAA,8D;MAAA,4C;MAAA,gD; MAAA,uC;QAMI,iBAAc,wBAAd,WAA+B,CAA/B,U;UACI,IAAI,CAAC,UAAU,UAAK,KAAL,CAAV,CAAL,C ;YACI,OAAO,gBAAK,QAAQ,CAAR,IAAL,C;;QAGf,OAAO,iB;O;KAXX,C;kGAcA,yB;MAAA,8D;MAAA,oC; MAAA,4C;MAAA,gD;MAAA,uC;QAMI,iBAAc,wBAAd,WAA+B,CAA/B,U;UACI,IAAI,CAAC,UAAU,sBAAK, KAAL,EA AV,CAAL,C;YACI,OAAO,gBAAK,QAAQ,CAAR,IAAL,C;;QAGf,OAAO,iB;O;KAXX,C;wFAcA,yB; MAAA,+D;MAAA,uC;QAOiB,Q;QADb,WAAW,gB;QACX,wBAAa,SAAb,gB;UAAa,WAAA,SAAb,M;UACI,IA AI,CAAC,UAAU,IAAV,CAAL,C;YACI,K;UACJ,IAAK,WAAL,IAAJ,C;;QAET,OAAO,I;O;KAZX,C;0FAeA,yB; MAAA,+D;MAAA,uC;QAOiB,Q;QADb,WAAW,gB;QACX,wBAAa,SAAb,gB;UAAa,WAAA,SAAb,M;UACI,IA AI,CAAC,UAAU,IAAV,CAAL,C;YACI,K;UACJ,IAAK,WAAL,IAAJ,C;;QAET,OAAO,I;O;KAZX,C;0FAeA,yB; MAAA,+D;MAAA,uC;QAOiB,Q;QADb,WAAW,gB;QACX,wBAAa,SAAb,gB;UAAa,WAAA,SAAb,M;UACI,IA AI,CAAC,UAAU,IAAV,CAAL,C;YACI,K;UACJ,IAAK,WAAL,IAAJ,C;;QAET,OAAO,I;O;KAZX,C;0FAeA,yB; MAAA,+D;MAAA,uC;QAOiB,Q;QADb,WAAW,gB;QACX,wBAAa,SAAb,gB;UAAa,WAAA,SAAb,M;UACI,IA AI,CAAC,UAAU,IAAV,CAAL,C;YACI,K;UACJ,IAAK,WAAL,IAAJ,C;;QAET,OAAO,I;O;KAZX,C;0FAeA,yB; MAAA,+D;MAAA,uC;QAOiB,Q;QADb,WAAW,gB;QACX,wBAAa,SAAb,gB;UAAa,WAAA,SAAb,M;UACI,IA AI,CAAC,UAAU,IAAV,CAAL,C;YACI,K;UACJ,IAAK,WAAL,IAAJ,C;;QAET,OAAO,I;O;KAZX,C;0FAeA,yB; MAAA,+D;MAAA,uC;QAOiB,Q;QADb,WAAW,gB;QACX,wBAAa,SAAb,gB;UAAa,WAAA,SAAb,M;UACI,IA AI,CAAC,UAAU,IAAV,CAAL,C;YACI,K;UACJ,IAAK,WAAL,IAAJ,C;;QAET,OAAO,I;O;KAZX,C;0FAeA,yB; MAAA,+D;MAAA,oC;MAAA,gC;MAAA,uC;QAOiB,Q;QADb,WAAW,gB;QACX,wBAAa,SAAb,gB;UAAa,WA Ab,UAAa,SAAb,O;UACI,IAAI,CAAC,UAAU,iBAAV,CAAL,C;YACI,K;UACJ,IAAK,WAAL,iBAAJ,C;;QAET,O AAO,I;O;KAZX,C;IAeA,4B;MAII,eAAe,CAAC,mBAAO,CAAP,IAAD,IAAa,CAAb,I;MACf,IAAI,WAAW,CAAf ,C;QAAkB,M;MACIB,mBAAmB,wB;MACnB,iBAAc,CAAd,WAAiB,QAAjB,U;QACI,UAAU,UAAK,KAAL,C; QACV,UAAK,KAAL,IAAc,UAAK,YAAL,C;QACd,UAAK,YAAL,IAAqB,G;QACrB,mC;;K;IAIR,8B;MAII,eAA e,CAAC,mBAAO,CAAP,IAAD,IAAa,CAAb,I;MACf,IAAI,WAAW,CAAf,C;QAAkB,M;MACIB,mBAAmB,0B;M ACnB,iBAAc,CAAd,WAAiB,QAAjB,U;QACI,UAAU,UAAK,KAAL,C;QACV,UAAK,KAAL,IAAc,UAAK,YAA L,C;QACd,UAAK,YAAL,IAAqB,G;QACrB,mC;;K;IAIR,8B;MAII,eAAe,CAAC,mBAAO,CAAP,IAAD,IAAa,CA Ab,I;MACf,IAAI,WAAW,CAAf,C;QAAkB,M;MACIB,mBAAmB,0B;MACnB,iBAAc,CAAd,WAAiB,QAAjB,U; QACI,UAAU,UAAK,KAAL,C;QACV,UAAK,KAAL,IAAc,UAAK,YAAL,C;QACd,UAAK,YAAL,IAAqB,G;QA CrB,mC;;K;IAIR,8B;MAII,eAAe,CAAC,mBAAO,CAAP,IAAD,IAAa,CAAb,I;MACf,IAAI,WAAW,CAAf,C;QA AkB,M;MACIB,mBAAmB,0B;MACnB,iBAAc,CAAd,WAAiB,QAAjB,U;QACI,UAAU,UAAK,KAAL,C;QACV, UAAK,KAAL,IAAc,UAAK,YAAL,C;QACd,UAAK,YAAL,IAAqB,G;QACrB,mC;;K;IAIR,8B;MAII,eAAe,CAA C,mBAAO,CAAP,IAAD,IAAa,CAAb,I;MACf,IAAI,WAAW,CAAf,C;QAAkB,M;MACIB,mBAAmB,0B;MACnB, iBAAc,CAAd,WAAiB,QAAjB,U;QACI,UAAU,UAAK,KAAL,C;QACV,UAAK,KAAL,IAAc,UAAK,YAAL,C;Q ACd,UAAK,YAAL,IAAqB,G;QACrB,mC;;K;IAIR,8B;MAII,eAAe,CAAC,mBAAO,CAAP,IAAD,IAAa,CAAb,I; MACf,IAAI,WAAW,CAAf,C;QAAkB,M;MACIB,mBAAmB,0B;MACnB,iBAAc,CAAd,WAAiB,QAAjB,U;QACI ,UAAU,UAAK,KAAL,C;QACV,UAAK,KAAL,IAAc,UAAK,YAAL,C;QACd,UAAK,YAAL,IAAqB,G;QACrB,m C;;K;IAIR,8B;MAII,eAAe,CAAC,mBAAO,CAAP,IAAD,IAAa,CAAb,I;MACf,IAAI,WAAW,CAAf,C;QAAkB,M; MACIB,mBAAmB,0B;MACnB,iBAAc,CAAd,WAAiB,QAAjB,U;QACI,UAAU,UAAK,KAAL,C;QACV,UAAK, KAAL,IAAc,UAAK,YAAL,C;QACd,UAAK,YAAL,IAAqB,G;QACrB,mC;;K;IAIR,8B;MAII,eAAe,CAAC,mBA AO,CAAP,IAAD,IAAa,CAAb,I;MACf,IAAI,WAAW,CAAf,C;QAAkB,M;MACIB,mBAAmB,0B;MACnB,iBAAc, CAAd,WAAiB,QAAjB,U;QACI,UAAU,UAAK,KAAL,C;QACV,UAAK,KAAL,IAAc,UAAK,YAAL,C;QACd,U AAK,YAAL,IAAqB,G;QACrB,mC;;K;IAIR,8B;MAII,eAAe,CAAC,mBAAO,CAAP,IAAD,IAAa,CAAb,I;MACf,I

AAI,WAAW,CAAf,C;QAAkB,M;MACiB,mBAAmB,0B;MACnB,iBAAc,CAAd,WAAiB,QAAjB,U;QACI,UAAU ,UAAK,KAAL,C;QACV,UAAK,KAAL,IAAc,UAAK,YAAL,C;QACd,UAAK,YAAL,IAAqB,G;QACrB,mC;;K;I AIR,kD;MAWI,oCAAA,2BAAkB,SAAlB,EAA6B,OAA7B,EAAcS,gBAAtC,C;MACb,eAAe,CAAC,YAAy,OAA Z,IAAD,IAAwB,CAAxB,I;MACf,IAAI,cAAa,QAAjB,C;QAA2B,M;MAC3B,mBAAmB,UAAU,CAAV,I;MACnB ,iBAAc,SAAd,UAA8B,QAA9B,U;QACI,UAAU,UAAK,KAAL,C;QACV,UAAK,KAAL,IAAc,UAAK,YAAL,C;Q ACd,UAAK,YAAL,IAAqB,G;QACrB,mC;;K;IAIR,kD;MAWI,oCAAA,2BAAkB,SAAlB,EAA6B,OAA7B,EAAcS, gBAAtC,C;MACb,eAAe,CAAC,YAAy,OAAZ,IAAD,IAAwB,CAAxB,I;MACf,IAAI,cAAa,QAAjB,C;QAA2B,M; MAC3B,mBAAmB,UAAU,CAAV,I;MACnB,iBAAc,SAAd,UAA8B,QAA9B,U;QACI,UAAU,UAAK,KAAL,C;Q ACV,UAAK,KAAL,IAAc,UAAK,YAAL,C;QACd,UAAK,YAAL,IAAqB,G;QACrB,mC;;K;IAIR,mD;MAWI,oCA Aa,2BAAkB,SAAlB,EAA6B,OAA7B,EAAcS,gBAAtC,C;MACb,eAAe,CAAC,YAAy,OAAZ,IAAD,IAAwB,CA AxB,I;MACf,IAAI,cAAa,QAAjB,C;QAA2B,M;MAC3B,mBAAmB,UAAU,CAAV,I;MACnB,iBAAc,SAAd,UAA 8B,QAA9B,U;QACI,UAAU,UAAK,KAAL,C;QACV,UAAK,KAAL,IAAc,UAAK,YAAL,C;QACd,UAAK,YAAL, IAAqB,G;QACrB,mC;;K;IAIR,mD;MAWI,oCAAA,2BAAkB,SAAlB,EAA6B,OAA7B,EAAcS,gBAAtC,C;MACb, eAAe,CAAC,YAAy,OAAZ,IAAD,IAAwB,CAAxB,I;MACf,IAAI,cAAa,QAAjB,C;QAA2B,M;MAC3B,mBAAm B,UAAU,CAAV,I;MACnB,iBAAc,SAAd,UAA8B,QAA9B,U;QACI,UAAU,UAAK,KAAL,C;QACV,UAAK,KAA L,IAAc,UAAK,YAAL,C;QACd,UAAK,YAAL,IAAqB,G;QACrB,mC;;K;IAIR,mD;MAWI,oCAAA,2BAAkB,SAAlB,EAA6B,OAA7B,EAAcS,gBAAtC,C;MACb,eAAe,CAAC,YAAy,OAAZ,IAAD,IAAwB,CAAxB,I;MACf,IAAI, cAAa,QAAjB,C;QAA2B,M;MAC3B,mBAAmB,UAAU,CAAV,I;MACnB,iBAAc,SAAd,UAA8B,QAA9B,U;QAC I,UAAU,UAAK,KAAL,C;QACV,UAAK,KAAL,IAAc,UAAK,YAAL,C;QACd,UAAK,YAAL,IAAqB,G;QACrB, mC;;K;IAIR,mD;MAWI,oCAAA,2BAAkB,SAAlB,EAA6B,OAA7B,EAAcS,gBAAtC,C;MACb,eAAe,CAAC,YAA Y,OAAZ,IAAD,IAAwB,CAAxB,I;MACf,IAAI,cAAa,QAAjB,C;QAA2B,M;MAC3B,mBAAmB,UAAU,CAAV,I; MACnB,iBAAc,SAAd,UAA8B,QAA9B,U;QACI,UAAU,UAAK,KAAL,C;QACV,UAAK,KAAL,IAAc,UAAK,Y AAL,C;QACd,UAAK,YAAL,IAAqB,G;QACrB,mC;;K;IAIR,mD;MAWI,oCAAA,2BAAkB,SAAlB,EAA6B,OAA7 B,EAAcS,gBAAtC,C;MACb,eAAe,CAAC,YAAy,OAAZ,IAAD,IAAwB,CAAxB,I;MACf,IAAI,cAAa,QAAjB,C; QAA2B,M;MAC3B,mBAAmB,UAAU,CAAV,I;MACnB,iBAAc,SAAd,UAA8B,QAA9B,U;QACI,UAAU,UAAK, KAAL,C;QACV,UAAK,KAAL,IAAc,UAAK,YAAL,C;QACd,UAAK,YAAL,IAAqB,G;QACrB,mC;;K;IAIR,mD; MAWI,oCAAA,2BAAkB,SAAlB,EAA6B,OAA7B,EAAcS,gBAAtC,C;MACb,eAAe,CAAC,YAAy,OAAZ,IAAD,I AAwB,CAAxB,I;MACf,IAAI,cAAa,QAAjB,C;QAA2B,M;MAC3B,mBAAmB,UAAU,CAAV,I;MACnB,iBAAc,S AAd,UAA8B,QAA9B,U;QACI,UAAU,UAAK,KAAL,C;QACV,UAAK,KAAL,IAAc,UAAK,YAAL,C;QACd,UA AK,YAAL,IAAqB,G;QACrB,mC;;K;IAIR,mD;MAWI,oCAAA,2BAAkB,SAAlB,EAA6B,OAA7B,EAAcS,gBAAt C,C;MACb,eAAe,CAAC,YAAy,OAAZ,IAAD,IAAwB,CAAxB,I;MACf,IAAI,cAAa,QAAjB,C;QAA2B,M;MAC3 B,mBAAmB,UAAU,CAAV,I;MACnB,iBAAc,SAAd,UAA8B,QAA9B,U;QACI,UAAU,UAAK,KAAL,C;QACV,U AAK,KAAL,IAAc,UAAK,YAAL,C;QACd,UAAK,YAAL,IAAqB,G;QACrB,mC;;K;IAIR,6B;MAII,IA+nEO,qBA AQ,CA/nEf,C;QAAe,OAAO,W;MACtB,WAAW,wB;MACN,WAAL,IAAK,C;MACL,OAAO,I;K;IAGX,+B;MAII ,IA6nEO,qBAAQ,CA7nEf,C;QAAe,OAAO,W;MACtB,WAAW,0B;MACN,WAAL,IAAK,C;MACL,OAAO,I;K;I AGX,+B;MAII,IA2nEO,qBAAQ,CA3nEf,C;QAAe,OAAO,W;MACtB,WAAW,0B;MACN,WAAL,IAAK,C;MAC L,OAAO,I;K;IAGX,+B;MAII,IAynEO,qBAAQ,CAznEf,C;QAAe,OAAO,W;MACtB,WAAW,0B;MACN,WAAL,I AAK,C;MACL,OAAO,I;K;IAGX,+B;MAII,IAunEO,qBAAQ,CAvnEf,C;QAAe,OAAO,W;MACtB,WAAW,0B;M ACN,WAAL,IAAK,C;MACL,OAAO,I;K;IAGX,+B;MAII,IAqnEO,qBAAQ,CAnEf,C;QAAe,OAAO,W;MACtB, WAAW,0B;MACN,WAAL,IAAK,C;MACL,OAAO,I;K;IAGX,+B;MAII,IAmnEO,qBAAQ,CAnnEf,C;QAAe,OA AO,W;MACtB,WAAW,0B;MACN,WAAL,IAAK,C;MACL,OAAO,I;K;IAGX,+B;MAII,IAinEO,qBAAQ,CAjnEf, C;QAAe,OAAO,W;MACtB,WAAW,0B;MACN,WAAL,IAAK,C;MACL,OAAO,I;K;IAGX,+B;MAII,IA+mEO,qB AAQ,CA/mEf,C;QAAe,OAAO,W;MACtB,WAAW,0B;MACN,WAAL,IAAK,C;MACL,OAAO,I;K;IAGX,kC;MA II,IAqiEO,qBAAQ,CAriEf,C;QAAe,OAAO,S;MACtB,aAAa,aAAa,SAAb,EAAmB,gBAAnB,C;MACb,gBAAGB,w B;MACHb,aAAU,CAAV,OAAa,SAAb,M;QACI,OAAO,YAAy,CAAZ,IAAP,IAAwB,UAAK,CAAL,C;MAC5B,O AAO,M;K;IAGX,oC;MAII,IAiiEO,qBAAQ,CAjiEf,C;QAAe,OAAO,S;MACtB,aAAa,cAAU,gBAAV,C;MACb,gB AAgB,0B;MACHb,aAAU,CAAV,OAAa,SAAb,M;QACI,OAAO,YAAy,CAAZ,IAAP,IAAwB,UAAK,CAAL,C;M AC5B,OAAO,M;K;IAGX,oC;MAII,IA6hEO,qBAAQ,CA7hEf,C;QAAe,OAAO,S;MACtB,aAAa,eAAW,gBAAX,

C;MACb,gBAAgB,0B;MACHb,AAAU,CAAV,OAAa,SAAb,M;QACI,OAAO,YAAAY,CAAZ,IAAP,IAAwB,UAAK,CAAL,C;MAC5B,OAAO,M;K;IAGX,oC;MAIL,IAyhEO,qBAAQ,CAzhEf,C;QAAe,OAAO,S;MACtB,aAAa,eAA S,gBAAT,C;MACb,gBAAgB,0B;MACHb,AAAU,CAAV,OAAa,SAAb,M;QACI,OAAO,YAAAY,CAAZ,IAAP,IAAwB,UAAK,CAAL,C;MAC5B,OAAO,M;K;IAGX,oC;MAIL,IAqhEO,qBAAQ,CArhEf,C;QAAe,OAAO,S;MACtB,a AAa,iBAAU,gBAAV,C;MACb,gBAAgB,0B;MACHb,AAAU,CAAV,OAAa,SAAb,M;QACI,OAAO,YAAAY,CAAZ,IAAP,IAAwB,UAAK,CAAL,C;MAC5B,OAAO,M;K;IAGX,oC;MAIL,IAihEO,qBAAQ,CAjhEf,C;QAAe,OAAO,S;MACtB,aAAa,iBAAW,gBAAX,C;MACb,gBAAgB,0B;MACHb,AAAU,CAAV,OAAa,SAAb,M;QACI,OAAO,Y AAAY,CAAZ,IAAP,IAAwB,UAAK,CAAL,C;MAC5B,OAAO,M;K;IAGX,oC;MAIL,IA6gEO,qBAAQ,CA7gEf,C;Q AAe,OAAO,S;MACtB,aAAa,iBAAy,gBAAZ,C;MACb,gBAAgB,0B;MACHb,AAAU,CAAV,OAAa,SAAb,M;QA CI,OAAO,YAAAY,CAAZ,IAAP,IAAwB,UAAK,CAAL,C;MAC5B,OAAO,M;K;IAGX,oC;MAIL,IAygEO,qBAAQ, CAzgEf,C;QAAe,OAAO,S;MACtB,aAAa,oBAAa,gBAAb,C;MACb,gBAAgB,0B;MACHb,AAAU,CAAV,OAAa,SA Ab,M;QACI,OAAO,YAAAY,CAAZ,IAAP,IAAwB,UAAK,CAAL,C;MAC5B,OAAO,M;K;IAGX,oC;MAIL,IAqgE O,qBAAQ,CArgEf,C;QAAe,OAAO,S;MACtB,aAAa,iBAAU,gBAAV,C;MACb,gBAAgB,0B;MACHb,AAAU,CA AV,OAAa,SAAb,M;QACI,OAAO,YAAAY,CAAZ,IAAP,IAAwB,UAAK,CAAL,C;MAC5B,OAAO,M;K;IAGX,4B; MAKI,qBAAQ,4BAAR,C;K;IAGJ,8B;MAKI,qBAAQ,4BAAR,C;K;IAGJ,8B;MAKI,sBAAQ,4BAAR,C;K;IAGJ,8 B;MAKI,sBAAQ,4BAAR,C;K;IAGJ,8B;MAKI,sBAAQ,4BAAR,C;K;IAGJ,8B;MAKI,sBAAQ,4BAAR,C;K;IAGJ, 8B;MAKI,sBAAQ,4BAAR,C;K;IAGJ,8B;MAKI,sBAAQ,4BAAR,C;K;IAGJ,8B;MAKI,sBAAQ,4BAAR,C;K;IAG J,sC;MAOI,aAAU,wBAAV,OAA2B,CAA3B,M;QACI,QAAQ,MAAO,iBAAQ,IAAI,CAAJ,IAAR,C;QACf,WAA W,UAAK,CAAL,C;QACX,UAAK,CAAL,IAAU,UAAK,CAAL,C;QACV,UAAK,CAAL,IAAU,I;;K;IAIIB,sC;MA OI,aAAU,0BAAV,OAA2B,CAA3B,M;QACI,QAAQ,MAAO,iBAAQ,IAAI,CAAJ,IAAR,C;QACf,WAAW,UAAK, CAAL,C;QACX,UAAK,CAAL,IAAU,UAAK,CAAL,C;QACV,UAAK,CAAL,IAAU,I;;K;IAIIB,uC;MAOI,aAAU, 0BAAV,OAA2B,CAA3B,M;QACI,QAAQ,MAAO,iBAAQ,IAAI,CAAJ,IAAR,C;QACf,WAAW,UAAK,CAAL,C; QACX,UAAK,CAAL,IAAU,UAAK,CAAL,C;QACV,UAAK,CAAL,IAAU,I;;K;IAIIB,uC;MAOI,aAAU,0BAAV, OAA2B,CAA3B,M;QACI,QAAQ,MAAO,iBAAQ,IAAI,CAAJ,IAAR,C;QACf,WAAW,UAAK,CAAL,C;QACX,U AAK,CAAL,IAAU,UAAK,CAAL,C;QACV,UAAK,CAAL,IAAU,I;;K;IAIIB,uC;MAOI,aAAU,0BAAV,OAA2B,C AA3B,M;QACI,QAAQ,MAAO,iBAAQ,IAAI,CAAJ,IAAR,C;QACf,WAAW,UAAK,CAAL,C;QACX,UAAK,CA AL,IAAU,UAAK,CAAL,C;QACV,UAAK,CAAL,IAAU,I;;K;IAIIB,uC;MAOI,aAAU,0BAAV,OAA2B,CAA3B,M ;QACI,QAAQ,MAAO,iBAAQ,IAAI,CAAJ,IAAR,C;QACf,WAAW,UAAK,CAAL,C;QACX,UAAK,CAAL,IAAU, UAAK,CAAL,C;QACV,UAAK,CAAL,IAAU,I;;K;IAIIB,uC;MAOI,aAAU,0BAAV,OAA2B,CAA3B,M;QACI,QA AQ,MAAO,iBAAQ,IAAI,CAAJ,IAAR,C;QACf,WAAW,UAAK,CAAL,C;QACX,UAAK,CAAL,IAAU,UAAK,C AAL,C;QACV,UAAK,CAAL,IAAU,I;;K;IAIIB,uC;MAOI,aAAU,0BAAV,OAA2B,CAA3B,M;QACI,QAAQ,MA AO,iBAAQ,IAAI,CAAJ,IAAR,C;QACf,WAAW,UAAK,CAAL,C;QACX,UAAK,CAAL,IAAU,UAAK,CAAL,C; QACV,UAAK,CAAL,IAAU,I;;K;IAIIB,uC;MAOI,aAAU,0BAAV,OAA2B,CAA3B,M;QACI,QAAQ,MAAO,iBA AQ,IAAI,CAAJ,IAAR,C;QACf,WAAW,UAAK,CAAL,C;QACX,UAAK,CAAL,IAAU,UAAK,CAAL,C;QACV,U AAK,CAAL,IAAU,I;;K;kFAIIB,yB;MAAA,oD;MgBn5LA,sC;MAAA,oC;MAAA,uBAOe,yB;QArEf,8D;eAqEe,4 B;UAAA,uB;YAAU,eAAsB,gB;YAAtB,OA5Dd,cAAc,SA4DgB,CA5DhB,CAAd,EAA2B,SA4DM,CA5DN,CAA3 B,C;W;S;OA4DI,C;MhB44Lf,sC;QAMI,IAAI,mBAAO,CAAX,C;UAAc,oBgB15Ld,eAAW,iBhBk5LsB,QgB15LtB, CAAX,ChBk5Lc,C;U;KANIB,C;sGASA,yB;MAAA,oD;MgBz4LA,sC;MAAA,oC;MAAA,iCAOe,yB;QAxFf,8D;e AwFe,4B;UAAA,uB;YAAU,eAAsB,gB;YAAtB,OA/Ed,cAAc,SA+EgB,CA/EhB,CAAd,EAA2B,SA+EM,CA/EN, CAA3B,C;W;S;OA+EI,C;MhBk4Lf,sC;QAMI,IAAI,mBAAO,CAAX,C;UAAc,oBgBx4Ld,eAAW,2BhBw4LgC,Q gBx4LhC,CAAX,ChBw4Lc,C;U;KANIB,C;IASA,mC;MAMI,oBAAS,cAAT,C;K;IAGJ,qC;MAIL,IAAI,mBAAO,C AAX,C;QACI,e;QACA,oB;Q;IAIR,qC;MAIL,IAAI,mBAAO,CAAX,C;QACI,e;QACA,oB;Q;IAIR,qC;MAIL,IAAI, mBAAO,CAAX,C;QACI,e;QACA,oB;Q;IAIR,qC;MAIL,IAAI,mBAAO,CAAX,C;QACI,e;QACA,oB;Q;IAIR,qC; MAIL,IAAI,mBAAO,CAAX,C;QACI,e;QACA,oB;Q;IAIR,qC;MAIL,IAAI,mBAAO,CAAX,C;QACI,e;QACA,oB; Q;IAIR,qC;MAIL,IAAI,mBAAO,CAAX,C;QACI,e;QACA,oB;Q;IAIR,2B;MAMI,OAAqB,OAAd,sBAAC,C;K;IAG zb,6B;MAI0B,kBAAf,yB;MAAuB,mB;MAA9B,OAAuC,OiB5gMhC,WjB4gMgC,C;K;IAG3C,6B;MAI0B,kBAAf ,yB;MAAuB,mB;MAA9B,OAAuC,OiBnhMhC,WjBmhMgC,C;K;IAG3C,6B;MAI0B,kBAAf,yB;MAAuB,mB;MA A9B,OAAuC,OiB1hMhC,WjB0hMgC,C;K;IAG3C,6B;MAI0B,kBAAf,yB;MAAuB,mB;MAA9B,OAAuC,OiBjiM

hC,WjBiiMgC,C;K;IAG3C,6B;MAI0B,kBAAf,yB;MAAuB,mB;MAA9B,OAAuC,OiBxiMhC,WjBwiMgC,C;K;IA  
G3C,6B;MAI0B,kBAAf,yB;MAAuB,mB;MAA9B,OAAuC,OiB/iMhC,WjB+iMgC,C;K;IAG3C,6B;MAI0B,kBAA  
f,0B;MAAuB,mB;MAA9B,OAAuC,OiBtjMhC,WjBsjMgC,C;K;IAG3C,gC;MAMI,IA6kDO,qBAAQ,CA7kDf,C;Q  
AAe,OAAO,S;MACD,kBAAd,SejKiB,Q;MfojKK,mB;MAA7B,OiBhkMO,W;K;IjBmkMX,kC;MAII,IA6kDO,qB  
AAQ,CA7kDf,C;QAAe,OAAO,S;MACD,kBAAd,SeljKiB,Q;MfkjKK,iB;MAA7B,OiBxkMO,W;K;IjB2kMX,kC;  
MAII,IA6kDO,qBAAQ,CA7kDf,C;QAAe,OAAO,S;MACD,kBAAd,SehjKiB,Q;MfgjKK,iB;MAA7B,OiBhlMO,W  
;K;IjBmlMX,kC;MAII,IA6kDO,qBAAQ,CA7kDf,C;QAAe,OAAO,S;MACD,kBAAd,Se9iKiB,Q;Mf8iKK,iB;MA  
A7B,OiBxlMO,W;K;IjB2IMX,kC;MAII,IA6kDO,qBAAQ,CA7kDf,C;QAAe,OAAO,S;MACD,kBAAT,UAAAL,SA  
AK,C;MAAiB,mB;MAA7B,OiBhmMO,W;K;IjBmmMX,kC;MAII,IA6kDO,qBAAQ,CA7kDf,C;QAAe,OAAO,S;  
MACD,kBAAd,Se3iKiB,Q;Mf2iKK,iB;MAA7B,OiBxmMO,W;K;IjB2mMX,kC;MAII,IA6kDO,qBAAQ,CA7kDf,  
C;QAAe,OAAO,S;MACD,kBAAd,SeziKiB,Q;MfyiKK,iB;MAA7B,OiBhnMO,W;K;IjBmnMX,kC;MAII,IAqlDO,  
qBAAQ,CArldf,C;QAAe,OAAO,S;MACD,kBAAT,UAAAL,SAAK,C;MAAiB,iB;MAA7B,OiBxnMO,W;K;IjB2nM  
X,0C;MAMI,IA2gDO,qBAAQ,CA3gDf,C;QAAe,OAAO,S;MACD,kBAAd,SetnKiB,Q;MfsnKK,sBAAS,cAAT,C;  
MAA7B,OiBloMO,W;K;IjBqoMX,4C;MAII,IA2gDO,qBAAQ,CA3gDf,C;QAAe,OAAO,S;MACD,kBAAd,SejnK  
iB,Q;MfonKK,6B;MAA7B,OiB1oMO,W;K;IjB6oMX,4C;MAII,IA2gDO,qBAAQ,CA3gDf,C;QAAe,OAAO,S;MA  
CD,kBAAd,SelnKiB,Q;MfknKK,6B;MAA7B,OiBlpMO,W;K;IjBqpMX,4C;MAII,IA2gDO,qBAAQ,CA3gDf,C;Q  
AAe,OAAO,S;MACD,kBAAd,SehnKiB,Q;MfgnKK,6B;MAA7B,OiB1pMO,W;K;IjB6pMX,4C;MAII,IA2gDO,qB  
AAQ,CA3gDf,C;QAAe,OAAO,S;MACD,kBAAT,UAAAL,SAAK,C;MAAiB,6B;MAA7B,OiBlqMO,W;K;IjBqqMX  
,4C;MAII,IA2gDO,qBAAQ,CA3gDf,C;QAAe,OAAO,S;MACD,kBAAd,Se7mKiB,Q;Mf6mKK,6B;MAA7B,OiB1  
qMO,W;K;IjB6qMX,4C;MAII,IA2gDO,qBAAQ,CA3gDf,C;QAAe,OAAO,S;MACD,kBAAd,Se3mKiB,Q;Mf2mK  
K,6B;MAA7B,OiBlrMO,W;K;IjBqrMX,4C;MAII,IAmhDO,qBAAQ,CAnhDf,C;QAAe,OAAO,S;MACD,kBAAT,  
UAAAL,SAAK,C;MAAiB,6B;MAA7B,OiB1rMO,W;K;IjB6rMX,gD;MAMI,IAy8CO,qBAAQ,CAz8Cf,C;QAAe,O  
AAO,S;MACD,kBAAd,SexrKiB,Q;MfwrKK,iC;MAA7B,OiBpsMO,W;K;sfjBusMX,yB;MAAA,wD;MgB5rMA,s  
C;MAAA,oC;MAAA,uBAOe,yB;QArEf,8D;eAqEe,4B;UAAA,uB;YAAU,eAAsB,gB;YAAAtB,OA5Dd,cAAc,SA4  
DgB,CA5DhB,CAAd,EAA2B,SA4DM,CA5DN,CAA3B,C;W;S;OA4DI,C;MhBqrMf,sC;QAQI,OAAO,sBgB7rMP,  
eAAW,iBhB6rMiB,QgB7rMjB,CAAX,ChB6rMO,C;O;KANX,C;wFAWA,yB;MAAA,wD;MgBvsMA,sC;MAAA,  
oC;MAAA,uBAOe,yB;QArEf,8D;eAqEe,4B;UAAA,uB;YAAU,eAAsB,gB;YAAAtB,OA5Dd,cAAc,SA4DgB,CA5D  
hB,CAAd,EAA2B,SA4DM,CA5DN,CAA3B,C;W;S;OA4DI,C;MhBgsMf,sC;QAMI,OAAO,sBgBtsMP,eAAW,iBh  
BssMiB,QgBtsMjB,CAAX,ChBssMO,C;O;KANX,C;wFASA,yB;MAAA,wD;MgBhtMA,sC;MAAA,oC;MAAA,u  
BAOe,yB;QArEf,8D;eAqEe,4B;UAAA,uB;YAAU,eAAsB,gB;YAAAtB,OA5Dd,cAAc,SA4DgB,CA5DhB,CAAd,E  
AA2B,SA4DM,CA5DN,CAA3B,C;W;S;OA4DI,C;MhBysMf,sC;QAMI,OAAO,sBgB/sMP,eAAW,iBhB+sMiB,Qg  
B/sMjB,CAAX,ChB+sMO,C;O;KANX,C;wFASA,yB;MAAA,wD;MgBztMA,sC;MAAA,oC;MAAA,uBAOe,yB;Q  
ArEf,8D;eAqEe,4B;UAAA,uB;YAAU,eAAsB,gB;YAAAtB,OA5Dd,cAAc,SA4DgB,CA5DhB,CAAd,EAA2B,SA4D  
M,CA5DN,CAA3B,C;W;S;OA4DI,C;MhBktMf,sC;QAMI,OAAO,sBgBxtMP,eAAW,iBhBwtMiB,QgBxtMjB,CA  
AX,ChBwtMO,C;O;KANX,C;wFASA,yB;MAAA,wD;MgBluMA,sC;MAAA,oC;MAAA,uBAOe,yB;QArEf,8D;e  
AqEe,4B;UAAA,uB;YAAU,eAAsB,gB;YAAAtB,OA5Dd,cAAc,SA4DgB,CA5DhB,CAAd,EAA2B,SA4DM,CA5D  
N,CAA3B,C;W;S;OA4DI,C;MhB2tMf,sC;QAMI,OAAO,sBgBjuMP,eAAW,iBhBiuMiB,QgBjuMjB,CAAX,ChBiu  
MO,C;O;KANX,C;wFASA,yB;MAAA,wD;MgB3uMA,sC;MAAA,oC;MAAA,uBAOe,yB;QArEf,8D;eAqEe,4B;U  
AAA,uB;YAAU,eAAsB,gB;YAAAtB,OA5Dd,cAAc,SA4DgB,CA5DhB,CAAd,EAA2B,SA4DM,CA5DN,CAA3B,C  
;W;S;OA4DI,C;MhBouMf,sC;QAMI,OAAO,sBgB1uMP,eAAW,iBhB0uMiB,QgB1uMjB,CAAX,ChB0uMO,C;O;  
KANX,C;wFASA,yB;MAAA,wD;MgBpvMA,sC;MAAA,oC;MAAA,uBAOe,yB;QArEf,8D;eAqEe,4B;UAAA,uB;  
YAAU,eAAsB,gB;YAAAtB,OA5Dd,cAAc,SA4DgB,CA5DhB,CAAd,EAA2B,SA4DM,CA5DN,CAA3B,C;W;S;OA  
4DI,C;MhB6uMf,sC;QAMI,OAAO,sBgBnvMP,eAAW,iBhBmvMiB,QgBnvMjB,CAAX,ChBmvMO,C;O;KANX,  
C;wFASA,yB;MAAA,wD;MgB7vMA,sC;MAAA,oC;MAAA,uBAOe,yB;QArEf,8D;eAqEe,4B;UAAA,uB;YAAU,  
eAAsB,gB;YAAAtB,OA5Dd,cAAc,SA4DgB,CA5DhB,CAAd,EAA2B,SA4DM,CA5DN,CAA3B,C;W;S;OA4DI,C;  
MhBsvMf,sC;QAMI,OAAO,sBgB5vMP,eAAW,iBhB4vMiB,QgB5vMjB,CAAX,ChB4vMO,C;O;KANX,C;wFAS  
A,yB;MAAA,wD;MgBtwMA,sC;MAAA,oC;MAAA,uBAOe,yB;QArEf,8D;eAqEe,4B;UAAA,uB;YAAU,eAAsB,  
gB;YAAAtB,OA5Dd,cAAc,SA4DgB,CA5DhB,CAAd,EAA2B,SA4DM,CA5DN,CAA3B,C;W;S;OA4DI,C;MhB+v





A,qBAAQ,CAwER,C;K;4FAGX,qB;MAKI,OAAO,EAxEA,qBAAQ,CAwER,C;K;4FAGX,qB;MAKI,OAAO,EAx  
EA,qBAAQ,CAwER,C;K;4FAGX,qB;MAKI,OAAO,EAxEA,qBAAQ,CAwER,C;K;4FAGX,qB;MAKI,OAAO,E  
AxEA,qBAAQ,CAwER,C;K;4FAGX,qB;MAKI,OAAO,EAxEA,qBAAQ,CAwER,C;K;4FAGX,qB;MAKI,OAAO,E  
AxEA,qBAAQ,CAwER,C;K;4FAGX,qB;MAKI,OAAO,EAxEA,qBAAQ,CAwER,C;K;4FAGX,qB;MAKI,OAAO,  
EAxEA,qBAAQ,CAwER,C;K;IAOP,kC;MAAQ,0BAAO,CAAP,I;K;IAMR,oC;MAAQ,0BAAO,CAAP,I;K;IAMR,  
oC;MAAQ,0BAAO,CAAP,I;K;IAMR,oC;MAAQ,0BAAO,CAAP,I;K;IAMR,oC;MAAQ,0BAAO,CAAP,I;K;IAM  
R,oC;MAAQ,0BAAO,CAAP,I;K;IAMR,oC;MAAQ,0BAAO,CAAP,I;K;IAMR,oC;MAAQ,0BAAO,CAAP,I;K;IA  
MR,oC;MAAQ,0BAAO,CAAP,I;K;IA8TZ,yD;MAcI,sBAAS,cAAT,EAAYB,SAAZB,EAAoC,OAApC,C;K;IAGJ,y  
D;MAYI,mBAAK,SAAL,EAAGB,OAAhB,C;MACA,qBAAQ,SAAR,EAAMB,OAAhB,C;K;IAGJ,yD;MAYI,mBA  
AK,SAAL,EAAGB,OAAhB,C;MACA,sBAAQ,SAAR,EAAMB,OAAhB,C;K;IAGJ,0D;MAYI,mBAAK,SAAL,EA  
AGB,OAAhB,C;MACA,sBAAQ,SAAR,EAAMB,OAAhB,C;K;IAGJ,0D;MAYI,mBAAK,SAAL,EAAGB,OAAhB,  
C;MACA,sBAAQ,SAAR,EAAMB,OAAhB,C;K;IAGJ,0D;MAYI,mBAAK,SAAL,EAAGB,OAAhB,C;MACA,sBA  
AQ,SAAR,EAAMB,OAAhB,C;K;IAGJ,0D;MAYI,mBAAK,SAAL,EAAGB,OAAhB,C;MACA,sBAAQ,SAAR,EA  
AMB,OAAhB,C;K;IAGJ,0D;MAYI,mBAAK,SAAL,EAAGB,OAAhB,C;MACA,sBAAQ,SAAR,EAAMB,OAAhB,  
C;K;IA2B0B,oD;MAAA,wB;QAAW,2BAAK,KAAL,C;O;K;IAJzC,mC;MAII,OAAO,qBAAa,gBAAb,EAAMB,gC  
AAhB,C;K;IAOgB,8C;MAAA,wB;QAAW,wBAAK,KAAL,C;O;K;IAJtC,gC;MAII,OAAO,+BAAU,gBAAV,GAA  
gB,6BAAhB,C;K;IAOgB,8C;MAAA,wB;QAAW,wBAAK,KAAL,C;O;K;IAJtC,gC;MAII,OAAO,kBAAU,gBAA  
V,EAAGB,6BAAhB,C;K;IAOkB,kD;MAAA,wB;QAAW,0BAAK,KAAL,C;O;K;IAJxC,kC;MAII,OAAO,kCAAY,  
gBAAZ,GAAkB,+BAAIB,C;K;IAOiB,gD;MAAA,wB;QAAW,yBAAK,KAAL,C;O;K;IAJvC,iC;MAII,OAAO,kC  
AAW,gBAAX,GAAiB,8BAAjB,C;K;IAOe,4C;MAAA,wB;QAAW,uBAAK,KAAL,C;O;K;IAJrC,+B;MAII,OAAO  
,gCAAS,gBAAT,GAAe,4BAAf,C;K;IAOgB,8C;MAAA,wB;QAAW,wBAAK,KAAL,C;O;K;IAJtC,gC;MAII,OAA  
O,kBAAU,gBAAV,EAAGB,6BAAhB,C;K;IAOiB,gD;MAAA,wB;QAAW,yBAAK,KAAL,C;O;K;IAJvC,iC;MAII,  
OAAO,gCAAW,gBAAX,GAAiB,8BAAjB,C;K;wFA2CX,yB;MAAA,0D;MAAA,yD;MAAA,uE;MAAA,uC;QAW  
I,eAAiC,cAAIB,YAAY,gBAAZ,CAAkB,EAAC,EAAD,C;QAC1B,kBAAY,mBAAoB,QAApB,C;QAYqBH,Q;QAA  
hB,iD;UAAgB,cAAhB,e;UACI,WA1qB8C,SA0qB/B,CAAU,OAAV,C;UOx+QnB,wBAAI,IAAK,MAAT,EAAGB,  
IAAK,OAArB,C;;QP8zPA,OA4qBO,W;O;KAXrBX,C;0FAeA,yB;MAAA,0D;MAAA,yD;MAAA,uE;MAAA,uC;Q  
AWI,eAAiC,cAAIB,YAAY,gBAAZ,CAAkB,EAAC,EAAD,C;QAC1B,kBAAY,mBAAoB,QAApB,C;QAYqBH,Q;  
QAAhB,iD;UAAgB,cAAhB,e;UACI,WA1qB8C,SA0qB/B,CAAU,OAAV,C;UOv/QnB,wBAAI,IAAK,MAAT,EA  
AGB,IAAK,OAArB,C;;QP60PA,OA4qBO,W;O;KAXrBX,C;0FAeA,yB;MAAA,0D;MAAA,yD;MAAA,uE;MAAA,  
uC;QAWI,eAAiC,cAAIB,YAAY,gBAAZ,CAAkB,EAAC,EAAD,C;QAC1B,kBAAY,mBAAoB,QAApB,C;QAYqB  
H,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,WA1qB8C,SA0qB/B,CAAU,OAAV,C;UOrhRnB,wBAAI,IAAK,MA  
AAT,EAAGB,IAAK,OAArB,C;;QP22PA,OA4qBO,W;O;KAXrBX,C;0FAeA,yB;MAAA,0D;MAAA,yD;MAAA,u  
E;MAAA,uC;QAWI,eAAiC,cAAIB,YAAY,gBAAZ,CAAkB,EAAC,EAAD,C;QAC1B,kBAAY,mBAAoB,QAApB,  
C;QAYqBH,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,WA1qB8C,SA0qB/B,CAAU,OAAV,C;UOpIRnB,wBAAI,IA  
AK,MAAT,EAAGB,IAAK,OAArB,C;;QP03PA,OA4qBO,W;O;KAXrBX,C;0FAeA,yB;MAAA,0D;MAAA,yD;MAA  
A,uE;MAAA,uC;QAWI,eAAiC,cAAIB,YAAY,gBAAZ,CAAkB,EAAC,EAAD,C;QAC1B,kBAAY,mBAAoB,QAA  
pB,C;QAYqBH,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,WA1qB8C,SA0qB/B,CAAU,OAAV,C;UOnjRnB,wBAAI,I  
AAK,MAAT,EAAGB,IAAK,OAArB,C;;QP41PA,OA4qBO,W;O;KAXrBX,C;0FAeA,yB;MAAA,0D;MAAA,yD;MA  
AA,uE;MAAA,uC;QAWI,eAAiC,cAAIB,YAAY,gBAAZ,CAAkB,EAAC,EAAD,C;QAC1B,kBAAY,mBAAoB,Q  
AApB,C;QAYqBH,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,WA1qB8C,SA0qB/B,CAAU,OAAV,C;UOlRnB,wB  
AAI,IAAK,MAAT,EAAGB,IAAK,OAArB,C;;QP55PA,OA4qBO,W;O;KAXrBX,C;0FAeA,yB;MAAA,0D;MAAA,y  
D;MAAA,uE;MAAA,uC;QAWI,eAAiC,cAAIB,YAAY,gBAAZ,CAAkB,EAAC,EAAD,C;QAC1B,kBAAY,mBAAo  
B,QAApB,C;QAYqBH,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,WA1qB8C,SA0qB/B,CAAU,OAAV,C;UOjIRnB,w  
BAAI,IAAK,MAAT,EAAGB,IAAK,OAArB,C;;QPu6PA,OA4qBO,W;O;KAXrBX,C;0FAeA,yB;MAAA,0D;MAA  
A,yD;MAAA,uE;MAA4qBA,oC;MAAA,gC;MA5qBA,uC;QAWI,eAAiC,cAAIB,YAAY,gBAAZ,CAAkB,EAAC,EA

Ad,C;QAC1B,kBAAY,mBAAoB,QAAPB,C;QAyqBH,Q;QAAhB,iD;UAAgB,cAAhB,0B;UACI,WA1qB8C,SA0q  
B/B,CAAU,oBAAV,C;UOhmRnB,wBAAI,IAAK,MAAT,EAAgB,IAAK,OAArB,C;;QP57PA,OA4qBO,W;O;KAXr  
BX,C;4FAeA,yB;MAAA,0D;MAAA,yD;MAAA,uE;MAAA,yC;QAWI,eAAiC,cAAIB,YAAY,gBAAZ,CAAkB,E  
AAc,EAAd,C;QAC1B,kBAAc,mBAAoB,QAAPB,C;QAmQL,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,WAAY,aAp  
QoC,WAoQhC,CAAY,OAAZ,CAAJ,EAA0B,OAA1B,C;;QApQhB,OAsQO,W;O;KAIRX,C;8FAeA,yB;MAAA,0  
D;MAAA,yD;MAAA,uE;MAAA,yC;QAWI,eAAiC,cAAIB,YAAY,gBAAZ,CAAkB,EAAC,EAAd,C;QAC1B,kBA  
Ac,mBAAuB,QAAvB,C;QAoQL,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,WAAY,aArQuC,WAqQnC,CAAY,OAA  
Z,CAAJ,EAA0B,OAA1B,C;;QArQhB,OAuQO,W;O;KANRX,C;8FAeA,yB;MAAA,0D;MAAA,yD;MAAA,uE;MA  
AA,yC;QAWI,eAAiC,cAAIB,YAAY,gBAAZ,CAAkB,EAAC,EAAd,C;QAC1B,kBAAc,mBAAwB,QAAxB,C;QAq  
QL,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,WAAY,aAtQwC,WAsQpC,CAAY,OAAZ,CAAJ,EAA0B,OAA1B,C;;  
QAtQhB,OAwQO,W;O;KApRX,C;8FAeA,yB;MAAA,0D;MAAA,yD;MAAA,uE;MAAA,yC;QAWI,eAAiC,cAAI  
B,YAAY,gBAAZ,CAAkB,EAAC,EAAd,C;QAC1B,kBAAc,mBAAzB,QAAtB,C;QAsQL,Q;QAAhB,iD;UAAgB,c  
AAhB,e;UACI,WAAY,aAvQsC,WAuQIC,CAAY,OAAZ,CAAJ,EAA0B,OAA1B,C;;QAvQhB,OAyQO,W;O;KAr  
RX,C;8FAeA,yB;MAAA,0D;MAAA,yD;MAAA,uE;MAAA,yC;QAWI,eAAiC,cAAIB,YAAY,gBAAZ,CAAkB,E  
AAc,EAAd,C;QAC1B,kBAAc,mBAAuB,QAAvB,C;QAuQL,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,WAAY,aAx  
QuC,WAwQnC,CAAY,OAAZ,CAAJ,EAA0B,OAA1B,C;;QAxQhB,OA0QO,W;O;KATRX,C;8FAeA,yB;MAAA,0  
D;MAAA,yD;MAAA,uE;MAAA,yC;QAWI,eAAiC,cAAIB,YAAY,gBAAZ,CAAkB,EAAC,EAAd,C;QAC1B,kBA  
Ac,mBAAwB,QAAxB,C;QAwQL,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,WAAY,aAzQwC,WAYqPc,CAAY,OA  
AZ,CAAJ,EAA0B,OAA1B,C;;QAZQhB,OA2QO,W;O;KAvRX,C;8FAeA,yB;MAAA,0D;MAAA,yD;MAAA,uE;  
MAAA,yC;QAWI,eAAiC,cAAIB,YAAY,gBAAZ,CAAkB,EAAC,EAAd,C;QAC1B,kBAAc,mBAAyB,QAAzB,C;  
QAYQL,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,WAAY,aA1QyC,WA0QrC,CAAY,OAAZ,CAAJ,EAA0B,OAA1B  
,C;;QA1QhB,OA4QO,W;O;KAXRX,C;8FAeA,yB;MAAA,0D;MAAA,yD;MAAA,uE;MAAA,yC;QAWI,eAAiC,c  
AAIB,YAAY,gBAAZ,CAAkB,EAAC,EAAd,C;QAC1B,kBAAc,mBAA0B,QAA1B,C;QA0QL,Q;QAAhB,iD;UAA  
gB,cAAhB,e;UACI,WAAY,aA3Q0C,WA2QtC,CAAY,OAAZ,CAAJ,EAA0B,OAA1B,C;;QA3QhB,OA6QO,W;O;  
KAZRX,C;8FAeA,yB;MAAA,0D;MAAA,yD;MAAA,uE;MAA6QA,oC;MAAA,gC;MA7QA,yC;QAWI,eAAiC,cAA  
IB,YAAY,gBAAZ,CAAkB,EAAC,EAAd,C;QAC1B,kBAAc,mBAAuB,QAAvB,C;QA2QL,Q;QAAhB,iD;UAAgB,  
cAAhB,0B;UACI,WAAY,aA5QuC,WA4QnC,CAAY,oBAAZ,CAAJ,EAA0B,oBAA1B,C;;QA5QhB,OA8QO,W;O  
;KA1RX,C;8FAeA,yB;MAAA,0D;MAAA,yD;MAAA,uE;MAAA,yD;QAUI,eAAiC,cAAIB,YAAY,gBAAZ,CAAk  
B,EAAC,EAAd,C;QAC1B,kBAAc,mBAAoB,QAAPB,C;QA6QL,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,WAAY,a  
A9QoC,WA8QhC,CAAY,OAAZ,CAAJ,EA9QiD,cA8QvB,CAAe,OAaf,CAA1B,C;;QA9QhB,OAgrO,W;O;KA3  
RX,C;8FAcA,yB;MAAA,0D;MAAA,yD;MAAA,uE;MAAA,yD;QAUI,eAAiC,cAAIB,YAAY,gBAAZ,CAAkB,EA  
Ac,EAAd,C;QAC1B,kBAAc,mBAAoB,QAAPB,C;QA+QL,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,WAAY,aAhRo  
C,WAgRhC,CAAY,OAAZ,CAAJ,EAhRiD,cAgRvB,CAAe,OAaf,CAA1B,C;;QAhRhB,OAkRO,W;O;KA7RX,C;+  
FACa,yB;MAAA,0D;MAAA,yD;MAAA,uE;MAAA,yD;QAUI,eAAiC,cAAIB,YAAY,gBAAZ,CAAkB,EAAC,EA  
Ad,C;QAC1B,kBAAc,mBAAoB,QAAPB,C;QAiRL,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,WAAY,aAiRoC,Wak  
RhC,CAAY,OAAZ,CAAJ,EAiRiD,cAkRvB,CAAe,OAaf,CAA1B,C;;QAIRhB,OAoRO,W;O;KA/RX,C;+FACa,y  
B;MAAA,0D;MAAA,yD;MAAA,uE;MAAA,yD;QAUI,eAAiC,cAAIB,YAAY,gBAAZ,CAAkB,EAAC,EAAd,C;Q  
AC1B,kBAAc,mBAAoB,QAAPB,C;QAmRL,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,WAAY,aApRoC,WAoRhC,  
CAAY,OAAZ,CAAJ,EApRiD,cAoRvB,CAAe,OAaf,CAA1B,C;;QApRhB,OAsRO,W;O;KAjSX,C;+FACa,yB;M  
AAA,0D;MAAA,yD;MAAA,uE;MAAA,yD;QAUI,eAAiC,cAAIB,YAAY,gBAAZ,CAAkB,EAAC,EAAd,C;QAC1  
B,kBAAc,mBAAoB,QAAPB,C;QAqRL,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,WAAY,aAtRoC,WAsRhC,CAAY  
,OAAZ,CAAJ,EAtRiD,cAsRvB,CAAe,OAaf,CAA1B,C;;QAtRhB,OAwRO,W;O;KANsX,C;+FACa,yB;MAAA,0  
D;MAAA,yD;MAAA,uE;MAAA,yD;QAUI,eAAiC,cAAIB,YAAY,gBAAZ,CAAkB,EAAC,EAAd,C;QAC1B,kBA  
Ac,mBAAoB,QAAPB,C;QAuRL,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,WAAY,aAxRoC,WAwRhC,CAAY,OAA  
Z,CAAJ,EAxRiD,cAwRvB,CAAe,OAaf,CAA1B,C;;QAxRhB,OA0RO,W;O;KArSX,C;+FACa,yB;MAAA,0D;M  
AAA,yD;MAAA,uE;MAAA,yD;QAUI,eAAiC,cAAIB,YAAY,gBAAZ,CAAkB,EAAC,EAAd,C;QAC1B,kBAAc,m  
BAAoB,QAAPB,C;QAyRL,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,WAAY,aA1RoC,WA0RhC,CAAY,OAAZ,CA  
AJ,EA1RiD,cA0RvB,CAAe,OAaf,CAA1B,C;;QA1RhB,OA4RO,W;O;KAvSX,C;+FACa,yB;MAAA,0D;MAAA,y

D;MAAA,uE;MAAA,yD;QAUl,eAAiC,cAAIB,YAAAY,gBAAZ,CAAkB,EAAc,EAAc,C;QAC1B,kBAAC,mBAAoB,QAAPB,C;QA2RL,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,WAAAY,aA5RoC,WA4RhC,CAAY,OAAZ,CAAJ,EA5RiD,cA4RvB,CAAe,OAAf,CAA1B,C;;QA5RhB,OA8RO,W;O;KAZSX,C;+FACa,yB;MAAA,0D;MAAA,yD;MAAA,uE;MA8RA,oC;MAAA,gC;MA9RA,yD;QAUl,eAAiC,cAAIB,YAAAY,gBAAZ,CAAkB,EAAc,EAAc,C;QAC1B,kBAAC,mBAAoB,QAAPB,C;QA6RL,Q;QAAhB,iD;UAAgB,cAAhB,0B;UACI,WAAAY,aA9RoC,WA8RhC,CAAY,oBAAZ,CAAJ,EA9RiD,cA8RvB,CAAe,oBAAf,CAA1B,C;;QA9RhB,OA9SO,W;O;KA3SX,C;gGAcA,+C;MAUoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAAY,aAAI,YAAAY,OAAZ,CAAJ,EAA0B,OAA1B,C;;MAEhB,OAAO,W;K;kGAGX,+C;MAUoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAAY,aAAI,YAAAY,OAAZ,CAAJ,EAA0B,OAA1B,C;;MAEhB,OAAO,W;K;kGAGX,+C;MAUoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAAY,aAAI,YAAAY,OAAZ,CAAJ,EAA0B,OAA1B,C;;MAEhB,OAAO,W;K;iGAGX,+C;MAUoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAAY,aAAI,YAAAY,OAAZ,CAAJ,EAA0B,OAA1B,C;;MAEhB,OAAO,W;K;kGAGX,+C;MAUoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAAY,aAAI,YAAAY,OAAZ,CAAJ,EAA0B,OAA1B,C;;MAEhB,OAAO,W;K;kGAGX,+C;MAUoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAAY,aAAI,YAAAY,OAAZ,CAAJ,EAA0B,OAA1B,C;;MAEhB,OAAO,W;K;iGAGX,+C;MAUoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAAY,aAAI,YAAAY,OAAZ,CAAJ,EAA0B,OAA1B,C;;MAEhB,OAAO,W;K;kGAGX,+C;MAUoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAAY,aAAI,YAAAY,OAAZ,CAAJ,EAA0B,OAA1B,C;;MAEhB,OAAO,W;K;iGAGX,yB;MAAA,oC;MAAA,gC;MAAA,sD;QAUoB,Q;QAAhB,wBAAGB,SAAhB,gB;UAAgB,cAAhB,UAAgB,SAAhB,O;UACI,WAAAY,aAAI,YAAAY,oBAAZ,CAAJ,EAA0B,oBAA1B,C;;QAEhB,OAAO,W;O;KAbX,C;kGAgBA,+D;MAUoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAAY,aAAI,YAAAY,OAAZ,CAAJ,EAA0B,eAAe,OAAf,CAA1B,C;;MAEhB,OAAO,W;K;kGAGX,+D;MAUoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAAY,aAAI,YAAAY,OAAZ,CAAJ,EAA0B,eAAe,OAAf,CAA1B,C;;MAEhB,OAAO,W;K;mGAGX,+D;MAUoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAAY,aAAI,YAAAY,OAAZ,CAAJ,EAA0B,eAAe,OAAf,CAA1B,C;;MAEhB,OAAO,W;K;mGAGX,+D;MAUoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAAY,aAAI,YAAAY,OAAZ,CAAJ,EAA0B,eAAe,OAAf,CAA1B,C;;MAEhB,OAAO,W;K;mGAGX,+D;MAUoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAAY,aAAI,YAAAY,OAAZ,CAAJ,EAA0B,eAAe,OAAf,CAA1B,C;;MAEhB,OAAO,W;K;mGAGX,yB;MAAA,oC;MAAA,gC;MAAA,sE;QAUoB,Q;QAAhB,wBAAGB,SAAhB,gB;UAAgB,cAAhB,UAAgB,SAAhB,O;UACI,WAAAY,aAAI,YAAAY,oBAAZ,CAAJ,EAA0B,eAAe,oBAAf,CAA1B,C;;QAEhB,OAAO,W;O;KAbX,C;2FAGBA,6C;MASoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAe,UAAU,OAAV,C;QOx+QnB,wBAAI,IAAK,MAAT,EAAGB,IAAK,OArB,C;;MP0+QA,OAAO,W;K;8FAGX,6C;MASoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAe,UAAU,OAAV,C;QOv/QnB,wBAAI,IAAK,MAAT,EAAGB,IAAK,OArB,C;;MPy/QA,OAAO,W;K;8FAGX,6C;MASoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAe,UAAU,OAAV,C;QOtgRnB,wBAAI,IAAK,MAAT,EAAGB,IAAK,OArB,C;;MPwgRA,OAAO,W;K;8FAGX,6C;MASoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAe,UAAU,OAAV,C;QOrhRnB,wBAAI,IAAK,MAAT,EAAGB,IAAK,OArB,C;;MPuhRA,OAAO,W;K;8FAGX,6C;MASoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAe,UAAU,OAAV,C;QOpiRnB,wBAAI,IAAK,MAAT,EAAGB,IAAK,OArB,C;;MPsiRA,OAAO,W;K;8FAGX,6C;MASoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAe,UAAU,OAAV,C;QOnjRnB,wBAAI,IAAK,MAAT,EAAGB,IAAK,OArB,C;;MPqjRA,OAAO,W;K;8FAGX,6C;MASoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAe,UAAU,OAAV,C;QOlRnB,wBAAI,IAAK,MAAT,EAAGB,IAAK,OArB,C;;MPokRA,OAAO,W;K;8FAGX,6C;MASoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAe,UAAU,OAAV,C;QOjlRnB,wBAAI,IAAK,MAAT,EAAGB,IAAK,OArB,

C;;MPmlRA,OAAO,W;K;8FAGX,yB;MAAA,oC;MAAA,gC;MAAA,oD;QASoB,Q;QAAhB,wBAAGB,SAAhB,gB  
;UAAgB,cAAhB,UAAgB,SAAhB,O;UACI,WAAE,UAAU,oBAAV,C;UOhmRnB,wBAAI,IAAK,MAAT,EAAgB,I  
AAK,OAAR,C;;QPkmRA,OAAO,W;O;KAZX,C;gGAeA,yB;MAAA,0D;MAAA,yD;MAAA,uE;MAAA,2C;QAY  
I,aAAa,mBAAsC,cAAIB,YAAY,gBAAZ,CAAkB,EAAc,EAAd,CAAtC,C;QAsJG,Q;QAAhB,iD;UAAgB,cAAhB,e  
;UARJuB,MAsJP,aAAI,OAAJ,EATJe,aAsJF,CAAc,OAAc,CAAb,C;;QAtJhB,OAAuB,M;O;KA3B,C;kGAgBA,yB;  
MAAA,0D;MAAA,yD;MAAA,uE;MAAA,2C;QAaI,aAAa,mBAAYC,cAAIB,YAAY,gBAAZ,CAAkB,EAAc,EAAd,  
CAAzC,C;QAsJG,Q;QAAhB,iD;UAAgB,cAAhB,e;UARJuB,MAsJP,aAAI,OAAJ,EATJe,aAsJF,CAAc,OAAc,  
CAAb,C;;QAtJhB,OAAuB,M;O;KA3B,C;kGAIa,yB;MAAA,0D;MAAA,yD;MAAA,uE;MAAA,2C;QAaI,aAAa,m  
BAA0C,cAAIB,YAAY,gBAAZ,CAAkB,EAAc,EAAd,CAA1C,C;QAsJG,Q;QAAhB,iD;UAAgB,cAAhB,e;UARJuB  
,MAsJP,aAAI,OAAJ,EATJe,aAsJF,CAAc,OAAc,CAAb,C;;QAtJhB,OAAuB,M;O;KA3B,C;kGAIa,yB;MAAA,0  
D;MAAA,yD;MAAA,uE;MAAA,2C;QAaI,aAAa,mBAAWC,cAAIB,YAAY,gBAAZ,CAAkB,EAAc,EAAd,CAAx  
C,C;QAsJG,Q;QAAhB,iD;UAAgB,cAAhB,e;UARJuB,MAsJP,aAAI,OAAJ,EATJe,aAsJF,CAAc,OAAc,CAAb,C;;Q  
AtJhB,OAAuB,M;O;KA3B,C;kGAIa,yB;MAAA,0D;MAAA,yD;MAAA,uE;MAAA,2C;QAaI,aAAa,mBAAYC,  
cAAIB,YAAY,gBAAZ,CAAkB,EAAc,EAAd,CAAzC,C;QAsJG,Q;QAAhB,iD;UAAgB,cAAhB,e;UARJuB,MAsJP,  
aAAI,OAAJ,EATJe,aAsJF,CAAc,OAAc,CAAb,C;;QAtJhB,OAAuB,M;O;KA3B,C;kGAIa,yB;MAAA,0D;MAA  
A,yD;MAAA,uE;MAAA,2C;QAaI,aAAa,mBAA0C,cAAIB,YAAY,gBAAZ,CAAkB,EAAc,EAAd,CAA1C,C;QAsJ  
G,Q;QAAhB,iD;UAAgB,cAAhB,e;UARJuB,MAsJP,aAAI,OAAJ,EATJe,aAsJF,CAAc,OAAc,CAAb,C;;QAtJhB,OA  
AuB,M;O;KA3B,C;kGAIa,yB;MAAA,0D;MAAA,yD;MAAA,uE;MAAA,2C;QAaI,aAAa,mBAA2C,cAAIB,Y  
AAY,gBAAZ,CAAkB,EAAc,EAAd,CAA3C,C;QAsJG,Q;QAAhB,iD;UAAgB,cAAhB,e;UARJuB,MAsJP,aAAI,O  
AAJ,EATJe,aAsJF,CAAc,OAAc,CAAb,C;;QAtJhB,OAAuB,M;O;KA3B,C;kGAIa,yB;MAAA,0D;MAAA,yD;M  
AAA,uE;MAAA,2C;QAaI,aAAa,mBAA4C,cAAIB,YAAY,gBAAZ,CAAkB,EAAc,EAAd,CAA5C,C;QAsJG,Q;Q  
AAhB,iD;UAAgB,cAAhB,e;UARJuB,MAsJP,aAAI,OAAJ,EATJe,aAsJF,CAAc,OAAc,CAAb,C;;QAtJhB,OA  
AuB,M;O;KA3B,C;kGAIa,yB;MAAA,uD;MAAA,0D;MAAA,yD;MAAA,uE;MAwJA,oC;MAAA,gC;MAxJA,2C;Q  
AaI,aAAa,mBAA2D,cAApC,YAAiB,aAAL,gBAAK,EAAa,GAAb,CAAjB,CAAoC,EAAc,EAAd,CAA3D,C;QAsJ  
G,Q;QAAhB,iD;UAAgB,cAAhB,0B;UARJuB,MAsJP,aAAI,oBAAJ,EATJe,aAsJF,CAAc,oBAAd,CAAb,C;;QAtJhB  
,OAAuB,M;O;KA3B,C;oGAIa,iD;MAUoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,  
WAAy,aAAI,OAAJ,EAAa,cAAc,OAAc,CAAb,C;;MAEhB,OAAO,W;K;sGAGX,iD;MAWob,Q;MAAhB,wBAA  
gB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAy,aAAI,OAAJ,EAAa,cAAc,OAAc,CAAb,C;;MAEhB,OAAO,  
W;K;sGAGX,iD;MAWob,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAy,aAAI,O  
AAJ,EAAa,cAAc,OAAc,CAAb,C;;MAEhB,OAAO,W;K;sGAGX,iD;MAWob,Q;MAAhB,wBAAGB,SAAhB,gB;Q  
AAgB,cAAA,SAAhB,M;QACI,WAAy,aAAI,OAAJ,EAAa,cAAc,OAAc,CAAb,C;;MAEhB,OAAO,W;K;sGAGX,i  
D;MAWob,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAy,aAAI,OAAJ,EAAa,cAAc,  
OAAc,CAAb,C;;MAEhB,OAAO,W;K;sGAGX,iD;MAWob,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SA  
AhB,M;QACI,WAAy,aAAI,OAAJ,EAAa,cAAc,OAAc,CAAb,C;;MAEhB,OAAO,W;K;sGAGX,iD;MAWob,Q;M  
AAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,WAAy,aAAI,OAAJ,EAAa,cAAc,OAAc,CAAb,C;;  
MAEhB,OAAO,W;K;sGAGX,iD;MAWob,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,W  
AAy,aAAI,OAAJ,EAAa,cAAc,OAAc,CAAb,C;;MAEhB,OAAO,W;K;sGAGX,yB;MAAA,oC;MAAA,gC;MAAA,  
wD;QAWob,Q;QAAhB,wBAAGB,SAAhB,gB;UAAgB,cAAhB,UAAgB,SAAhB,O;UACI,WAAy,aAAI,oBAAJ,E  
AAa,cAAc,oBAAd,CAAb,C;;QAEhB,OAAO,W;O;KA3X,C;IAiB,8C;MAIiB,Q;MAAb,wBAAa,SAAb,gB;QAA  
a,WAAA,SAAb,M;QACI,WAAy,WAAI,IAAJ,C;;MAEhB,OAAO,W;K;IAGX,gD;MAIiB,Q;MAAb,wBAAa,SA  
Ab,gB;QAAa,WAAA,SAAb,M;QACI,WAAy,WAAI,IAAJ,C;;MAEhB,OAAO,W;K;IAGX,gD;MAIiB,Q;MAAb,w  
BAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QACI,WAAy,WAAI,IAAJ,C;;MAEhB,OAAO,W;K;IAGX,gD;MAIiB,  
Q;MAAb,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QACI,WAAy,WAAI,IAAJ,C;;MAEhB,OAAO,W;K;IAGX,  
gD;MAIiB,Q;MAAb,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QACI,WAAy,WAAI,IAAJ,C;;MAEhB,OAAO,  
W;K;IAGX,gD;MAIiB,Q;MAAb,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QACI,WAAy,WAAI,IAAJ,C;;MAE  
hB,OAAO,W;K;IAGX,gD;MAIiB,Q;MAAb,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QACI,WAAy,WAAI,IA  
AJ,C;;MAEhB,OAAO,W;K;IAGX,gD;MAIiB,Q;MAAb,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QACI,WAAy  
,WAAI,IAAJ,C;;MAEhB,OAAO,W;K;IAGX,gD;MAIiB,Q;MAAb,wBAAa,SAAb,gB;QAAa,WAAb,UAAa,SAAb,

O;QACI,WAAY,WAAl,iBAAJ,C;;MAEhB,OAAO,W;K;IAGX,8B;MAII,OAAO,wBAAa,eAAW,YAAAY,gBAAZ,CAAX,CAAb,C;K;IAGX,gC;MAII,OAAO,0BAAa,eAAc,YAAAY,gBAAZ,CAAd,CAAb,C;K;IAGX,gC;MAII,OAAO,0BAAa,eAAe,YAAAY,gBAAZ,CAAf,CAAb,C;K;IAGX,gC;MAII,OAAO,0BAAa,eAAa,YAAAY,gBAAZ,CAAb,CAAb,C;K;IAGX,gC;MAII,OAAO,0BAAa,eAAc,YAAAY,gBAAZ,CAAd,CAAb,C;K;IAGX,gC;MAII,OAAO,0BAAa,eAAe,YAAAY,gBAAZ,CAAf,CAAb,C;K;IAGX,gC;MAII,OAAO,0BAAa,eAAgB,YAAAY,gBAAZ,CAAhB,CAAb,C;K;IAGX,gC;MAII,OAAO,0BAAa,eAAiB,YAAAY,gBAAZ,CAAjB,CAAb,C;K;IAGX,gC;MAII,OAAO,0BAAa,eAAc,YAAiB,eAAL,gBAAK,EAAa,GAAb,CAAjB,CAAd,CAAb,C;K;IAGX,2B;MAIiB,IAAN,I;MAAA,QAA M,gBAAN,C;aACH,C;UAAK,kB;UAAL,K;aACA,C;UAAK,cAAO,UAAK,CAAL,CAAP,C;UAAL,K;gBACa,qB AAL,SAAK,C;UAHV,K;;MAAP,W;K;IAOJ,6B;MAIiB,IAAN,I;MAAA,QAAM,gBAAN,C;aACH,C;UAAK,kB;U AAL,K;aACA,C;UAAK,cAAO,UAAK,CAAL,CAAP,C;UAAL,K;gBACa,uBAAL,SAAK,C;UAHV,K;;MAAP,W; K;IAOJ,6B;MAIiB,IAAN,I;MAAA,QAAM,gBAAN,C;aACH,C;UAAK,kB;UAAL,K;aACA,C;UAAK,cAAO,UAA K,CAAL,CAAP,C;UAAL,K;gBACa,uBAAL,SAAK,C;UAHV,K;;MAAP,W;K;IAOJ,6B;MAIiB,IAAN,I;MAAA,Q AAM,gBAAN,C;aACH,C;UAAK,kB;UAAL,K;aACA,C;UAAK,cAAO,UAAK,CAAL,CAAP,C;UAAL,K;gBACa, uBAAL,SAAK,C;UAHV,K;;MAAP,W;K;IAOJ,6B;MAIiB,IAAN,I;MAAA,QAAM,gBAAN,C;aACH,C;UAAK,kB ;UAAL,K;aACA,C;UAAK,cAAO,UAAK,CAAL,CAAP,C;UAAL,K;gBACa,uBAAL,SAAK,C;UAHV,K;;MAAP, W;K;IAOJ,6B;MAIiB,IAAN,I;MAAA,QAAM,gBAAN,C;aACH,C;UAAK,kB;UAAL,K;aACA,C;UAAK,cAAO,U AAK,CAAL,CAAP,C;UAAL,K;gBACa,uBAAL,SAAK,C;UAHV,K;;MAAP,W;K;IAOJ,6B;MAIiB,IAAN,I;MAA A,QAAM,gBAAN,C;aACH,C;UAAK,kB;UAAL,K;aACA,C;UAAK,cAAO,UAAK,CAAL,CAAP,C;UAAL,K;gB ACa,uBAAL,SAAK,C;UAHV,K;;MAAP,W;K;IAOJ,6B;MAIiB,IAAN,I;MAAA,QAAM,gBAAN,C;aACH,C;UAA K,kB;UAAL,K;aACA,C;UAAK,cAAO,UAAK,CAAL,CAAP,C;UAAL,K;gBACa,uBAAL,SAAK,C;UAHV,K;;M AAP,W;K;IAOJ,6B;MAIiB,IAAN,I;MAAA,QAAM,gBAAN,C;aACH,C;UAAK,kB;UAAL,K;aACA,C;UAAK,cA AO,sBAAK,CAAL,EAAP,C;UAAL,K;gBACa,uBAAL,SAAK,C;UAHV,K;;MAAP,W;K;IAOJ,kC;MAII,OAAO,i BAAe,aAAL,SAAK,CAAf,C;K;IAGX,oC;MAKiB,Q;MADb,WAAW,iBAAgB,gBAAhB,C;MACX,wBAAa,SAAb ,gB;QAAa,WAAA,SAAb,M;QAAMB,IAAK,WAAl,IAAJ,C;;MACxB,OAAO,I;K;IAGX,oC;MAKiB,Q;MADb,W AAW,iBAAiB,gBAAjB,C;MACX,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QAAMB,IAAK,WAAl,IAAJ,C;;M ACxB,OAAO,I;K;IAGX,oC;MAKiB,Q;MADb,WAAW,iBA Ae,gBAAf,C;MACX,wBAAa,SAAb,gB;QAAa,WAA A,SAAb,M;QAAMB,IAAK,WAAl,IAAJ,C;;MACxB,OAAO,I;K;IAGX,oC;MAKiB,Q;MADb,WAAW,iBAAgB,g BAAhB,C;MACX,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QAAMB,IAAK,WAAl,IAAJ,C;;MACxB,OAAO,I; K;IAGX,oC;MAKiB,Q;MADb,WAAW,iBAAiB,gBAAjB,C;MACX,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;Q AAMB,IAAK,WAAl,IAAJ,C;;MACxB,OAAO,I;K;IAGX,oC;MAKiB,Q;MADb,WAAW,iBAaKB,gBAAlB,C;MA CX,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QAAMB,IAAK,WAAl,IAAJ,C;;MACxB,OAAO,I;K;IAGX,oC;M AKiB,Q;MADb,WAAW,iBAAMB,gBAAnB,C;MACX,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QAAMB,IAA K,WAAl,IAAJ,C;;MACxB,OAAO,I;K;IAGX,oC;MAKiB,Q;MADb,WAAW,iBAAgB,gBAAhB,C;MACX,wBAAa ,SAAb,gB;QAAa,WAAb,UAAa,SAAb,O;QAAMB,IAAK,WAAl,iBAAJ,C;;MACxB,OAAO,I;K;IAGX,0B;MAMi B,IAAN,I;MAAA,QAAM,gBAAN,C;aACH,C;UAAK,iB;UAAL,K;aACA,C;UAAK,aAAM,UAAK,CAAL,CAAN, C;UAAL,K;gBACQ,+BAAa,qBAAiB,YAAAY,gBAAZ,CAApB,CAAb,C;UAHL,K;;MAAP,W;K;IAOJ,4B;MAMiB, IAAN,I;MAAA,QAAM,gBAAN,C;aACH,C;UAAK,iB;UAAL,K;aACA,C;UAAK,aAAM,UAAK,CAAL,CAAN,C; UAAL,K;gBACQ,iCAAa,qBAAoB,YAAAY,gBAAZ,CAApB,CAAb,C;UAHL,K;;MAAP,W;K;IAOJ,4B;MAMiB,IA AN,I;MAAA,QAAM,gBAAN,C;aACH,C;UAAK,iB;UAAL,K;aACA,C;UAAK,aAAM,UAAK,CAAL,CAAN,C;U AAL,K;gBACQ,iCAAa,qBAAmB,YAAAY,gBAAZ,CAAnB,CAAb,C;UAHL,K;;MAAP,W;K;IAOJ,4B;MAMiB,IA AN,I;MAAA,QAAM,gBAAN,C;aACH,C;UAAK,iB;UAAL,K;aACA,C;UAAK,aAAM,UAAK,CAAL,CAAN,C;U AAL,K;gBACQ,iCAAa,qBAAqB,YAAAY,gBAAZ,CAArB,CAAb,C;UAHL,K;;MAAP,W;K;IAOJ,4B;MAMiB,IA AN,I;MAAA,QAAM,gBAAN,C;aACH,C;UAAK,iB;UAAL,K;aACA,C;UAAK,aAAM,UAAK,CAAL,CAAN,C;UA AL,K;gBACQ,iCAAa,qBAAsB,YAAAY,gBAAZ,CAAtB,CAAb,C;UAHL,K;;MAAP,W;K;IAOJ,4B;MAMiB,IAAN

,I;MAAA,QAAM,gBAAN,C;aACH,C;UAAK,iB;UAAL,K;aACA,C;UAAK,aAAM,UAAK,CAAL,CAAN,C;UAA  
L,K;gBACQ,iCAAA,qBAAUb,YAAY,gBAAZ,CAAvB,CAAb,C;UAHL,K;;MAAP,W;K;IAOJ,4B;MAMiB,IAAN,I  
;MAAA,QAAM,gBAAN,C;aACH,C;UAAK,iB;UAAL,K;aACA,C;UAAK,aAAM,sBAAK,CAAL,EAAN,C;UAA  
,K;gBACQ,iCAAA,qBAAoB,YAAiB,eAAL,gBAAK,EAAa,GAAb,CAAjB,CAApB,CAAb,C;UAHL,K;;MAAP,W;  
K;oFAOJ,yB;MAAA,+D;MAwaA,gD;MAxaA,uC;QAMW,kBAAU,gB;QAsaD,Q;QAaHb,iD;UAAgB,cAAhB,e;U  
ACI,WaVa6B,SAualB,CAAU,OAAV,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QAxahB,OA0aO,W;O;KAhbX,C;  
sFASA,yB;MAAA,+D;MA0aA,gD;MA1aA,uC;QAMW,kBAAU,gB;QAwaD,Q;QAaHb,iD;UAAgB,cAAhB,e;UA  
CI,WaZa6B,SAyalB,CAAU,OAAV,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QA1ahB,OA4aO,W;O;KAlbX,C;sF  
ASA,yB;MAAA,+D;MA4aA,gD;MA5aA,uC;QAMW,kBAAU,gB;QA0aD,Q;QAaHb,iD;UAAgB,cAAhB,e;UACI,  
WA3a6B,SA2alB,CAAU,OAAV,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QA5ahB,OA8aO,W;O;KApbX,C;sFA  
SA,yB;MAAA,+D;MA8aA,gD;MA9aA,uC;QAMW,kBAAU,gB;QA4aD,Q;QAaHb,iD;UAAgB,cAAhB,e;UACI,  
WA7a6B,SA6alB,CAAU,OAAV,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QA9ahB,OAgbO,W;O;KAtbX,C;sFAS  
A,yB;MAAA,+D;MAGbA,gD;MAhbA,uC;QAMW,kBAAU,gB;QA8aD,Q;QAaHb,iD;UAAgB,cAAhB,e;UACI,W  
A/a6B,SA+alB,CAAU,OAAV,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QAhhbB,OakbO,W;O;KaxbX,C;sFASA  
,yB;MAAA,+D;MAkbA,gD;MAIbA,uC;QAMW,kBAAU,gB;QAgbD,Q;QAaHb,iD;UAAgB,cAAhB,e;UACI,Waj  
b6B,SAibIB,CAAU,OAAV,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QA1bhB,OAobO,W;O;KA1bX,C;sFASA,yB  
;MAAA,+D;MAobA,gD;MApbA,uC;QAMW,kBAAU,gB;QAkbD,Q;QAaHb,iD;UAAgB,cAAhB,e;UACI,WAnb6  
B,SAmbIB,CAAU,OAAV,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QApbhB,OAsbO,W;O;KA5bX,C;sFASA,yB;  
MAAA,+D;MASbA,gD;MATbA,uC;QAMW,kBAAU,gB;QAobD,Q;QAaHb,iD;UAAgB,cAAhB,e;UACI,WArb6B,  
SAqblB,CAAU,OAAV,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QAtbhB,OAwbO,W;O;KA9bX,C;sFASA,yB;M  
AAA,+D;MAwbA,oC;MAAA,gD;MAAA,gC;MAxbA,uC;QAMW,kBAAU,gB;QAsbD,Q;QAaHb,iD;UAAgB,cA  
AhB,0B;UACI,WAvb6B,SAublB,CAAU,oBAAV,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QAxbhB,OA0bO,W;  
O;KAhcX,C;sFASA,yB;MAAA,+D;MA0bA,gD;MA1bA,uC;QAUW,kBAAU,gB;QAwbD,Q;QAaHb,iD;UAAgB,  
cAAhB,e;UACI,Wazb6B,SAyblB,CAAU,OAAV,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QA1bhB,OA4bO,W;  
O;KAtcX,C;kGAaA,yB;MAAA,+D;MASJA,gD;MATJA,uC;QAYW,kBAAiB,gB;QAqJR,gB;QADhB,YAAY,C;QA  
CZ,iD;UAAgB,cAAhB,e;UACI,WAtJoC,SAsJzB,EAAU,cAAV,EAAU,sBAAV,WAAmB,OAAnB,C;UACC,OAA  
Z,WAAY,EAAO,IAAP,C;;QAvJhB,OAyJO,W;O;KArKX,C;oGAeA,yB;MAAA,+D;MAYJA,gD;MAZJA,uC;QAY  
W,kBAAiB,gB;QAwJR,gB;QADhB,YAAY,C;QACZ,iD;UAAgB,cAAhB,e;UACI,WazJoC,SAyJzB,EAAU,cAAV  
,EAAU,sBAAV,WAAmB,OAAnB,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QA1JhB,OA4JO,W;O;KAxKX,C;oG  
AeA,yB;MAAA,+D;MA4JA,gD;MA5JA,uC;QAYW,kBAAiB,gB;QA2JR,gB;QADhB,YAAY,C;QACZ,iD;UAAg  
B,cAAhB,e;UACI,WA5JoC,SA4JzB,EAAU,cAAV,EAAU,sBAAV,WAAmB,OAAnB,C;UACC,OAAZ,WAAY,E  
AAO,IAAP,C;;QA7JhB,OA+JO,W;O;KA3KX,C;oGAeA,yB;MAAA,+D;MA+JA,gD;MA/JA,uC;QAYW,kBAAiB,  
gB;QA8JR,gB;QADhB,YAAY,C;QACZ,iD;UAAgB,cAAhB,e;UACI,WA/JoC,SA+JzB,EAAU,cAAV,EAAU,sBA  
AV,WAAmB,OAAnB,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QAhKhB,OakKO,W;O;KA9KX,C;oGAeA,yB;M  
AAA,+D;MAkKA,gD;MAIKa,uC;QAYW,kBAAiB,gB;QAiKR,gB;QADhB,YAAY,C;QACZ,iD;UAAgB,cAAhB,  
e;UACI,WAIKoC,SakKzB,EAAU,cAAV,EAAU,sBAAV,WAAmB,OAAnB,C;UACC,OAAZ,WAAY,EAAO,IAA  
P,C;;QAnKhB,OAqKO,W;O;KAjLX,C;oGAeA,yB;MAAA,+D;MAqKA,gD;MArKA,uC;QAYW,kBAAiB,gB;QA  
oKR,gB;QADhB,YAAY,C;QACZ,iD;UAAgB,cAAhB,e;UACI,WArKoC,SAqKzB,EAAU,cAAV,EAAU,sBAAV,  
WAAmB,OAAnB,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QAtKhB,OAwKO,W;O;KApLX,C;oGAeA,yB;MAA  
A,+D;MAwKA,gD;MAxKA,uC;QAYW,kBAAiB,gB;QAuKR,gB;QADhB,YAAY,C;QACZ,iD;UAAgB,cAAhB,e;  
UACI,WaxKoC,SAwKzB,EAAU,cAAV,EAAU,sBAAV,WAAmB,OAAnB,C;UACC,OAAZ,WAAY,EAAO,IAA  
P,C;;QAzKhB,OA2KO,W;O;KAvLX,C;oGAeA,yB;MAAA,+D;MA2KA,gD;MA3KA,uC;QAYW,kBAAiB,gB;QA  
0KR,gB;QADhB,YAAY,C;QACZ,iD;UAAgB,cAAhB,e;UACI,WA3KoC,SA2KzB,EAAU,cAAV,EAAU,sBAAV,  
WAAmB,OAAnB,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QA5KhB,OA8KO,W;O;KA1LX,C;oGAeA,yB;MAA  
A,+D;MA8KA,oC;MAAA,gD;MAAA,gC;MA9KA,uC;QAYW,kBAAiB,gB;QA6KR,gB;QADhB,YAAY,C;QACZ  
,iD;UAAgB,cAAhB,0B;UACI,WA9KoC,SA8KzB,EAAU,cAAV,EAAU,sBAAV,WAAmB,oBAAnB,C;UACC,OA  
AZ,WAAY,EAAO,IAAP,C;;QA/KhB,OaiLO,W;O;KA7LX,C;oGAeA,yB;MAAA,+D;MAiLA,gD;MAjLA,uC;QA  
YW,kBAAiB,gB;QAgLR,gB;QADhB,YAAY,C;QACZ,iD;UAAgB,cAAhB,e;UACI,WajLoC,SAiLzB,EAAU,cAA

V,EAAU,sBAAV,WAAmB,OAAAnB,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QAILhB,OAoLO,W;O;KAhMX,C;  
sGAeA,yB;MAAA,gD;MAAA,oD;QAWoB,UACS,M;QAFzB,YAAY,C;QACZ,wBAAGB,SAAhB,gB;UAAgB,cA  
AA,SAAhB,M;UACI,WAAW,WAAU,cAAV,EAAU,sBAAV,WAAmB,OAAAnB,C;UACC,OAAZ,WAAY,EAAO,I  
AAP,C;;QAEhB,OAAO,W;O;KafX,C;uGakBA,yB;MAAA,gD;MAAA,oD;QAWoB,UACS,M;QAFzB,YAAY,C;  
QACZ,wBAAGB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,WAAW,WAAU,cAAV,EAAU,sBAAV,WAAmB,  
OAAAnB,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KafX,C;wGakBA,yB;MAAA,gD;MAA  
A,oD;QAWoB,UACS,M;QAFzB,YAAY,C;QACZ,wBAAGB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,WAA  
W,WAAU,cAAV,EAAU,sBAAV,WAAmB,OAAAnB,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QAEhB,OAAO,W;  
O;KafX,C;wGakBA,yB;MAAA,gD;MAAA,oD;QAWoB,UACS,M;QAFzB,YAAY,C;QACZ,wBAAGB,SAAhB,g  
B;UAAgB,cAAA,SAAhB,M;UACI,WAAW,WAAU,cAAV,EAAU,sBAAV,WAAmB,OAAAnB,C;UACC,OAAZ,W  
AAY,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KafX,C;wGakBA,yB;MAAA,gD;MAAA,oD;QAWoB,UACS,M;QA  
FzB,YAAY,C;QACZ,wBAAGB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,WAAW,WAAU,cAAV,EAAU,sBA  
AV,WAAmB,OAAAnB,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KafX,C;wGakBA,yB;MA  
AA,gD;MAAA,oD;QAWoB,UACS,M;QAFzB,YAAY,C;QACZ,wBAAGB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;  
UACI,WAAW,WAAU,cAAV,EAAU,sBAAV,WAAmB,OAAAnB,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QAEh  
B,OAAO,W;O;KafX,C;wGakBA,yB;MAAA,gD;MAAA,oD;QAWoB,UACS,M;QAFzB,YAAY,C;QACZ,wBAA  
gB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,WAAW,WAAU,cAAV,EAAU,sBAAV,WAAmB,OAAAnB,C;UA  
CC,OAAZ,WAAY,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KafX,C;wGakBA,yB;MAAA,gD;MAAA,oD;QAWoB,  
UACS,M;QAFzB,YAAY,C;QACZ,wBAAGB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,WAAW,WAAU,cAA  
V,EAAU,sBAAV,WAAmB,OAAAnB,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KafX,C;wG  
AkBA,yB;MAAA,oC;MAAA,gD;MAAA,gC;MAAA,oD;QAWoB,UACS,M;QAFzB,YAAY,C;QACZ,wBAAGB,S  
AAhB,gB;UAAgB,cAAhB,UAAgB,SAAhB,O;UACI,WAAW,WAAU,cAAV,EAAU,sBAAV,WAAmB,oBAAnB,  
C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KafX,C;wGakBA,yB;MAAA,gD;MAAA,oD;QA  
WoB,UACS,M;QAFzB,YAAY,C;QACZ,wBAAGB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,WAAW,WAAU,  
cAAV,EAAU,sBAAV,WAAmB,OAAAnB,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KafX,C;  
uFAkBA,yB;MAAA,gD;MAAA,oD;QAIoB,Q;QAAhB,wBAAGB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,W  
AAW,UAAU,OAAV,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KARX,C;0FAWA,yB;MAA  
A,gD;MAAA,oD;QAIoB,Q;QAAhB,wBAAGB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,WAAW,UAAU,OAA  
V,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KARX,C;0FAWA,yB;MAAA,gD;MAAA,oD;Q  
AIoB,Q;QAAhB,wBAAGB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,WAAW,UAAU,OAAV,C;UACC,OAAZ,  
WAAY,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KARX,C;0FAWA,yB;MAAA,gD;MAAA,oD;QAIoB,Q;QAAhB,w  
BAAGB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,WAAW,UAAU,OAAV,C;UACC,OAAZ,WAAY,EAAO,IA  
AP,C;;QAEhB,OAAO,W;O;KARX,C;0FAWA,yB;MAAA,gD;MAAA,oD;QAIoB,Q;QAAhB,wBAAGB,SAAhB,g  
B;UAAgB,cAAA,SAAhB,M;UACI,WAAW,UAAU,OAAV,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QAEhB,OA  
AO,W;O;KARX,C;0FAWA,yB;MAAA,gD;MAAA,oD;QAIoB,Q;QAAhB,wBAAGB,SAAhB,gB;UAAgB,cAAA,S  
AAhB,M;UACI,WAAW,UAAU,OAAV,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KARX,C;  
0FAWA,yB;MAAA,gD;MAAA,oD;QAIoB,Q;QAAhB,wBAAGB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,W  
AAW,UAAU,OAAV,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KARX,C;0FAWA,yB;MAA  
A,gD;MAAA,oD;QAIoB,Q;QAAhB,wBAAGB,SAAhB,gB;UAAgB,cAAhB,UAAgB,SAAhB,O;UACI,WAAW,  
UAAU,oBAAV,C;UACC,OAAZ,WAAY,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KARX,C;0FAWA,yB;MAAA,gD;  
MAAA,oD;QAQoB,Q;QAAhB,wBAAGB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,WAAW,UAAU,OAAV,C;  
UACC,OAAZ,WAAY,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KAZX,C;0FAeA,yB;MAAA,wE;MAiOA,+D;MAjO  
A,yC;QASW,kBAAU,oB;QAiOD,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,UAIoID,WakOvC,CAAY,OAAZ,C;UO  
p5UP,U;UADP,YPs5Ue,Wot5UH,WPs5UwB,GoT5UxB,C;UACL,IAAI,aAAJ,C;YACH,aPo5UuC,gB;YAA5B,W  
On5UX,aPm5UgC,GOnt5UhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPg5UA,iB;UACA,IAAK,WAAI,OAAJ,C;;Q  
ApOT,OAsOO,W;O;KA/OX,C;sFAYA,yB;MAAA,wE;MAsoA,+D;MAtoA,yC;QASW,kBAAU,oB;QAsOD,Q;Q

AAhB,iD;UAAgB,cAAhB,e;UACI,UAvOoD,WAuO1C,CAAY,OAAZ,C;UOr6UP,U;UADP,YPu6Ue,Wov6UH,W  
Pu6UwB,GOv6UxB,C;UACL,IAAI,aAAJ,C;YACH,aPq6UuC,gB;YAA5B,WOp6UX,aPo6UgC,GOp6UhC,EAAS,  
MAAT,C;YACA,e;;YAEA,c;;UPi6UA,iB;UACA,IAAK,WAAI,OAAJ,C;;QAZOT,OA2OO,W;O;KApPX,C;sFAY  
A,yB;MAAA,wE;MA2OA,+D;MA3OA,yC;QASW,kBAAU,oB;QA2OD,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,U  
A5OqD,WA4O3C,CAAY,OAAZ,C;UOt7UP,U;UADP,YPw7Ue,Wox7UH,WPw7UwB,GOx7UxB,C;UACL,IAAI,  
aAAJ,C;YACH,aPs7UuC,gB;YAA5B,WOr7UX,aPq7UgC,GOr7UhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPk7U  
A,iB;UACA,IAAK,WAAI,OAAJ,C;;QA9OT,OAgPO,W;O;KAZPX,C;sFAYA,yB;MAAA,wE;MAgPA,+D;MAhP  
A,yC;QASW,kBAAU,oB;QAgPD,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,UajPmD,WaiPzC,CAAY,OAAZ,C;UO  
v8UP,U;UADP,YPy8Ue,Woz8UH,WPY8UwB,GOz8UxB,C;UACL,IAAI,aAAJ,C;YACH,aPu8UuC,gB;YAA5B,  
Wot8UX,aPs8UgC,Got8UhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPm8UA,iB;UACA,IAAK,WAAI,OAAJ,C;;Q  
AnPT,OAqPO,W;O;KA9PX,C;sFAYA,yB;MAAA,wE;MAqPA,+D;MArPA,yC;QASW,kBAAU,oB;QAqPD,Q;QA  
AhB,iD;UAAgB,cAAhB,e;UACI,UAtPoD,WAsP1C,CAAY,OAAZ,C;Uox9UP,U;UADP,YP09Ue,Wo19UH,WP0  
9UwB,GO19UxB,C;UACL,IAAI,aAAJ,C;YACH,aPw9UuC,gB;YAA5B,Wov9UX,aPu9UgC,GOv9UhC,EAAS,M  
AAT,C;YACA,e;;YAEA,c;;UPo9UA,iB;UACA,IAAK,WAAI,OAAJ,C;;QAxPT,OA0PO,W;O;KANQX,C;sFAYA,  
yB;MAAA,wE;MA0PA,+D;MA1PA,yC;QASW,kBAAU,oB;QA0PD,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,UA3  
PqD,WA2P3C,CAAY,OAAZ,C;UOz+UP,U;UADP,YP2+Ue,W03+UH,WP2+UwB,GO3+UxB,C;UACL,IAAI,aA  
AJ,C;YACH,aPy+UuC,gB;YAA5B,Wox+UX,aPw+UgC,GOx+UhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPq+U  
A,iB;UACA,IAAK,WAAI,OAAJ,C;;QA7PT,OA+PO,W;O;KAXQX,C;sFAYA,yB;MAAA,wE;MA+PA,+D;MA/P  
A,yC;QASW,kBAAU,oB;QA+PD,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,UAhQsD,WAgQ5C,CAAY,OAAZ,C;U  
O1/UP,U;UADP,YP4/Ue,W05/UH,WP4/UwB,GO5/UxB,C;UACL,IAAI,aAAJ,C;YACH,aP0/UuC,gB;YAA5B,W  
Oz/UX,aPy/UgC,GOz/UhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPs/UA,iB;UACA,IAAK,WAAI,OAAJ,C;;QAIQ  
T,OAoQO,W;O;KA7QX,C;sFAYA,yB;MAAA,wE;MAoQA,+D;MApQA,yC;QASW,kBAAU,oB;QAoQD,Q;QAA  
hB,iD;UAAgB,cAAhB,e;UACI,UArQuD,WaqQ7C,CAAY,OAAZ,C;UO3gVP,U;UADP,YP6gVe,W07gVH,WP6  
gVwB,GO7gVxB,C;UACL,IAAI,aAAJ,C;YACH,aP2gVuC,gB;YAA5B,W01gVX,aP0gVgC,GO1gVhC,EAAS,M  
AAT,C;YACA,e;;YAEA,c;;UPugVA,iB;UACA,IAAK,WAAI,OAAJ,C;;QAvQT,OAyQO,W;O;KAIRX,C;sFAYA,  
yB;MAAA,wE;MAyQA,oC;MAAA,+D;MAAA,gC;MAzQA,yC;QASW,kBAAU,oB;QAYQD,Q;QAAhB,iD;UAA  
gB,cAAhB,0B;UACI,UA1QoD,WA0Q1C,CAAY,oBAAZ,C;UO5hVP,U;UADP,YP8hVe,W09hVH,WP8hVwB,G  
O9hVxB,C;UACL,IAAI,aAAJ,C;YACH,aP4hVuC,gB;YAA5B,W03hVX,aP2hVgC,GO3hVhC,EAAS,MAAT,C;Y  
ACA,e;;YAEA,c;;UPwhVA,iB;UACA,IAAK,WAAI,oBAAJ,C;;QA5QT,OA8QO,W;O;KAvRX,C;sFAYA,yB;MA  
AA,wE;MA8QA,+D;MA9QA,yD;QAUW,kBAAU,oB;QA8QD,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,UA/QiD,  
WA+QvC,CAAY,OAAZ,C;UO9iVP,U;UADP,YPgjVe,WohjVH,WPgjVwB,GOhjVxB,C;UACL,IAAI,aAAJ,C;Y  
ACH,aP8iVuC,gB;YAA5B,W07iVX,aP6iVgC,GO7iVhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UP0iVA,iB;UACA  
,IAAK,WajRyD,cAiRrD,CAAE,OAAf,CAAJ,C;;QajRT,OAmRO,W;O;KA7RX,C;sFAaA,yB;MAAA,wE;MAmR  
A,+D;MANRA,yD;QAUW,kBAAU,oB;QAmRD,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,UApRiD,WaORvC,CAA  
Y,OAAZ,C;UOhkVP,U;UADP,YPkkVe,WolkVH,WPkkVwB,GOlkVxB,C;UACL,IAAI,aAAJ,C;YACH,aPkgVuC  
,gB;YAA5B,W0/jVX,aP+jVgC,GO/jVhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UP4jVA,iB;UACA,IAAK,WatRy  
D,cAsRrD,CAAE,OAAf,CAAJ,C;;QatRT,OAwRO,W;O;KAISX,C;uFAaA,yB;MAAA,wE;MAwRA,+D;MAxRA,  
yD;QAUW,kBAAU,oB;QAwRD,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,UazRiD,WaYrVc,CAAY,OAAZ,C;UOI  
IVP,U;UADP,YPolVe,WoplVH,WPolVwB,GOplVxB,C;UACL,IAAI,aAAJ,C;YACH,aPklVuC,gB;YAA5B,Wojl  
VX,aPilVgC,GOjlVhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UP8kVA,iB;UACA,IAAK,WA3RyD,cA2RrD,CAAE,  
OAAf,CAAJ,C;;QA3RT,OA6RO,W;O;KAvSX,C;uFAaA,yB;MAAA,wE;MA6RA,+D;MA7RA,yD;QAUW,kBAA  
U,oB;QA6RD,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,UA9RiD,WA8RvC,CAAY,OAAZ,C;UOpMVP,U;UADP,Y  
PsmVe,WotmVH,WPsmVwB,GOtmVxB,C;UACL,IAAI,aAAJ,C;YACH,aPomVuC,gB;YAA5B,WOnmVX,aPmm  
VgC,GOmVhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPgmVA,iB;UACA,IAAK,WahSyD,cAgSrD,CAAE,OAAf,  
CAAJ,C;;QAhST,OAkSO,W;O;KA5SX,C;uFAaA,yB;MAAA,wE;MAkSA,+D;MAISA,yD;QAUW,kBAAU,oB;Q  
AkSD,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,UAnSiD,WAmSvC,CAAY,OAAZ,C;UOtnVP,U;UADP,YPwnVe,W  
OxnVH,WPwnVwB,GOxnVxB,C;UACL,IAAI,aAAJ,C;YACH,aPsnVuC,gB;YAA5B,WOrnVX,aPqnVgC,GOrnV  
hC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPknVA,iB;UACA,IAAK,WArSyD,cAqSrD,CAAE,OAAf,CAAJ,C;;QAr



ST,OAuSO,W;O;KAjTX,C;uFAaA,yB;MAAA,wE;MAuSA,+D;MAvSA,yD;QAUW,kBAAU,oB;QAUdS,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,UAXSiD,WAWSvC,CAAY,OAAZ,C;UOXoVP,U;UADP,YP0oVe,WO1oVH,WP0oVwB,GO1oVxB,C;UACL,IAAI,aAAJ,C;YACH,aPwoVuC,gB;YAA5B,WOvoVX,aPuoVgC,GOvoVhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPooVA,iB;UACA,IAAK,WA1SyD,cA0SrD,CAAe,OAAf,CAAJ,C;;QA1ST,OA4SO,W;O;KAiTX,C;uFAaA,yB;MAAA,wE;MA4SA,+D;MA5SA,yD;QAUW,kBAAU,oB;QA4SD,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,UA7SiD,WA6SvC,CAAY,OAAZ,C;UO1pVP,U;UADP,YP4pVe,WO5pVH,WP4pVwB,GO5pVxB,C;UACL,IAAI,aAAJ,C;YACH,aP0pVuC,gB;YAA5B,WOzpVX,aPypVgC,GOzpVhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPspVA,iB;UACA,IAAK,WA/SyD,cA+SrD,CAAe,OAAf,CAAJ,C;;QA/ST,OAIto,W;O;KA3TX,C;uFAaA,yB;MAAA,wE;MAiTA,+D;MAjTA,yD;QAUW,kBAAU,oB;QAItd,Q;QAAhB,iD;UAAgB,cAAhB,e;UACI,UAITiD,WAKtVc,CAAY,OAAZ,C;UO5qVP,U;UADP,YP8qVe,WO9qVH,WP8qVwB,GO9qVxB,C;UACL,IAAI,aAAJ,C;YACH,aP4qVuC,gB;YAA5B,WO3qVX,aP2qVgC,GO3qVhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPwqVA,iB;UACA,IAAK,WApTyD,cAoTrD,CAAe,OAAf,CAAJ,C;;QApTT,OAsTO,W;O;KAhUX,C;uFAaA,yB;MAAA,wE;MAStA,oC;MAAA,+D;MAAA,gC;MAiTA,yD;QAUW,kBAAU,oB;QAsTD,Q;QAAhB,iD;UAAgB,cAAhB,oB;UACI,UAvTiD,WAuTvC,CAAY,oBAAZ,C;UO9rVP,U;UADP,YPgsVe,WOhsVH,WPgsVwB,GOhsVxB,C;UACL,IAAI,aAAJ,C;YACH,aP8rVuC,gB;YAA5B,WO7rVX,aP6rVgC,GO7rVhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPOrVA,iB;UACA,IAAK,WAZTyD,cAyTrD,CAAe,oBAaf,CAAJ,C;;QAZTT,OA2TO,W;O;KArUX,C;uFAaA,yB;MAAA,+D;MAAA,sD;QASoB,Q;QAAhB,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,UAAU,YAAY,OAAZ,C;UOp5UP,U;UADP,YPs5Ue,WOt5UH,WP5UwB,GOt5UxB,C;UACL,IAAI,aAAJ,C;YACH,aP5UuC,gB;YAA5B,WOn5UX,aPm5UgC,GOm5UhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPg5UA,iB;UACA,IAAK,WAAI,OAAJ,C;;QAET,OAAO,W;O;KAdX,C;0FAiBA,yB;MAAA,+D;MAAA,sD;QASoB,Q;QAAhB,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,UAAU,YAAY,OAAZ,C;UOr6UP,U;UADP,YPu6Ue,WOv6UH,WPu6UwB,GOv6UxB,C;UACL,IAAI,aAAJ,C;YACH,aPq6UuC,gB;YAA5B,WOp6UX,aPo6UgC,GOp6UhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPI6UA,iB;UACA,IAAK,WAAI,OAAJ,C;;QAET,OAAO,W;O;KAdX,C;0FAiBA,yB;MAAA,+D;MAAA,sD;QASoB,Q;QAAhB,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,UAAU,YAAY,OAAZ,C;UOt7UP,U;UADP,YPw7Ue,WOx7UH,WPw7UwB,GOx7UxB,C;UACL,IAAI,aAAJ,C;YACH,aPs7UuC,gB;YAA5B,WOr7UX,aPq7UgC,GO7UhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPk7UA,iB;UACA,IAAK,WAAI,OAAJ,C;;QAET,OAAO,W;O;KAdX,C;0FAiBA,yB;MAAA,+D;MAAA,sD;QASoB,Q;QAAhB,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,UAAU,YAAY,OAAZ,C;UOv8UP,U;UADP,YPy8Ue,WOz8UH,WPy8UwB,GOz8UxB,C;UACL,IAAI,aAAJ,C;YACH,aPu8UuC,gB;YAA5B,WOt8UX,aPs8UgC,GOt8UhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPm8UA,iB;UACA,IAAK,WAAI,OAAJ,C;;QAET,OAAO,W;O;KAdX,C;0FAiBA,yB;MAAA,+D;MAAA,sD;QASoB,Q;QAAhB,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,UAAU,YAAY,OAAZ,C;UOx9UP,U;UADP,YP09Ue,WO19UH,WP09UwB,GO19UxB,C;UACL,IAAI,aAAJ,C;YACH,aPw9UuC,gB;YAA5B,WOv9UX,aPu9UgC,GOv9UhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPo9UA,iB;UACA,IAAK,WAAI,OAAJ,C;;QAET,OAAO,W;O;KAdX,C;0FAiBA,yB;MAAA,+D;MAAA,sD;QASoB,Q;QAAhB,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,UAAU,YAAY,OAAZ,C;UOz+UP,U;UADP,YP2+Ue,WO3+UH,WP2+UwB,GO3+UxB,C;UACL,IAAI,aAAJ,C;YACH,aPy+UuC,gB;YAA5B,WOx+UX,aPw+UgC,GOx+UhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPq+UA,iB;UACA,IAAK,WAAI,OAAJ,C;;QAET,OAAO,W;O;KAdX,C;0FAiBA,yB;MAAA,+D;MAAA,sD;QASoB,Q;QAAhB,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,UAAU,YAAY,OAAZ,C;UO1/UP,U;UADP,YP4/Ue,WO5/UH,WP4/UwB,GO5/UxB,C;UACL,IAAI,aAAJ,C;YACH,aP0/UuC,gB;YAA5B,WOz/UX,aPy/UgC,GOz/UhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPs/UA,iB;UACA,IAAK,WAAI,OAAJ,C;;QAET,OAAO,W;O;KAdX,C;0FAiBA,yB;MAAA,+D;MAAA,sD;QASoB,Q;QAAhB,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,UAAU,YAAY,OAAZ,C;UO3gVP,U;UADP,YP6gVe,WO7gVH,WP6gVwB,GO7gVxB,C;UACL,IAAI,aAAJ,C;YACH,aP2gVuC,gB;YAA5B,WO1gVX,aP0gVgC,GO1gVhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPugVA,iB;UACA,IAAK,WAAI,OAAJ,C;;QAET,OAAO,W;O;KAdX,C;0FAiBA,yB;MAAA,oC;MAAA,+D;MAAA,gC;MAAA,sD;QASoB,Q;QAAhB,wBAAgB,SAAhB,gB;UAAgB,cAAhB,UAAgB,SAAhB,O;UACI,UAAU,YAAY,oBAAZ,C;UO5hVP,U;UADP,YP8hVe,WO9hVH,WP8hVwB,GO9hVxB,C;UACL,IAAI,aAAJ,C;YACH,aP4hVuC,gB;YAA5B,WO3hVX,aP2hVgC,GO3hVhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPwhVA,iB;UACA,IAAK,WAAI,oBAAJ,C;;QAET,OAAO,W;O;KAdX,C;0FAiBA,yB;MAAA,+D;MAAA,sE;QAUoB,Q;QAAhB,wBAAg

B,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,UAAU,YAAY,OAAZ,C;UO9iVP,U;UADP,YPgjVe,WOhjVH,WP  
gjVwB,GOHjVxB,C;UACL,IAAI,aAAJ,C;YACH,aP8iVuC,gB;YAA5B,WO7iVX,aP6iVgC,GO7iVhC,EAAS,MA  
AT,C;YACA,e;;YAEA,c;;UP0iVA,iB;UACA,IAAK,WAAI,eAAe,OAAf,CAAJ,C;;QAET,OAAO,W;O;KafX,C;0F  
AkBA,yB;MAAA,+D;MAAA,sE;QAUoB,Q;QAAhB,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,UA  
AU,YAAY,OAAZ,C;UOhkVP,U;UADP,YPkkVe,W0lkVH,WPkkVwB,GOlkVxB,C;UACL,IAAI,aAAJ,C;YACH,  
aPkgVuC,gB;YAA5B,WO/jVX,aP+jVgC,GO/jVhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UP4jVA,iB;UACA,IAA  
K,WAAI,eAAe,OAAf,CAAJ,C;;QAET,OAAO,W;O;KafX,C;2FakBA,yB;MAAA,+D;MAAA,sE;QAUoB,Q;QAA  
hB,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,UAAU,YAAY,OAAZ,C;UOllVP,U;UADP,YPolVe,W  
OplVH,WPolVwB,GOplVxB,C;UACL,IAAI,aAAJ,C;YACH,aPkIVuC,gB;YAA5B,WOjIVX,aPilVgC,GOjIVhC,E  
AAS,MAAT,C;YACA,e;;YAEA,c;;UP8kVA,iB;UACA,IAAK,WAAI,eAAe,OAAf,CAAJ,C;;QAET,OAAO,W;O;K  
AfX,C;2FakBA,yB;MAAA,+D;MAAA,sE;QAUoB,Q;QAAhB,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;  
UACI,UAAU,YAAY,OAAZ,C;UOpmVP,U;UADP,YPsmVe,W0tmVH,WPsmVwB,GOtmVxB,C;UACL,IAAI,aA  
AJ,C;YACH,aPomVuC,gB;YAA5B,WOnmVX,aPmmVgC,GOnmVhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPgm  
VA,iB;UACA,IAAK,WAAI,eAAe,OAAf,CAAJ,C;;QAET,OAAO,W;O;KafX,C;2FakBA,yB;MAAA,+D;MAAA,  
sE;QAUoB,Q;QAAhB,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,UAAU,YAAY,OAAZ,C;UOtnVP,  
U;UADP,YPwnVe,W0xnVH,WPwnVwB,GOxnVxB,C;UACL,IAAI,aAAJ,C;YACH,aPsnVuC,gB;YAA5B,WOrn  
VX,aPqnVgC,GOrnVhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPknVA,iB;UACA,IAAK,WAAI,eAAe,OAAf,CAA  
J,C;;QAET,OAAO,W;O;KafX,C;2FakBA,yB;MAAA,+D;MAAA,sE;QAUoB,Q;QAAhB,wBAAgB,SAAhB,gB;U  
AAgB,cAAA,SAAhB,M;UACI,UAAU,YAAY,OAAZ,C;UOxoVP,U;UADP,YP0oVe,W0loVH,WP0oVwB,GOlo  
VxB,C;UACL,IAAI,aAAJ,C;YACH,aPwoVuC,gB;YAA5B,WOvoVX,aPuoVgC,GOvoVhC,EAAS,MAAT,C;YAC  
A,e;;YAEA,c;;UPooVA,iB;UACA,IAAK,WAAI,eAAe,OAAf,CAAJ,C;;QAET,OAAO,W;O;KafX,C;2FakBA,yB;  
MAAA,+D;MAAA,sE;QAUoB,Q;QAAhB,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,UAAU,YAAY,  
OAAZ,C;UO1pVP,U;UADP,YP4pVe,W05pVH,WP4pVwB,GO5pVxB,C;UACL,IAAI,aAAJ,C;YACH,aP0pVuC,  
gB;YAA5B,WOzpVX,aPypVgC,GOzpVhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UPspVA,iB;UACA,IAAK,WAAI  
,eAAe,OAAf,CAAJ,C;;QAET,OAAO,W;O;KafX,C;2FakBA,yB;MAAA,+D;MAAA,sE;QAUoB,Q;QAAhB,wBA  
AgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,UAAU,YAAY,OAAZ,C;UO5qVP,U;UADP,YP8qVe,W09qVH  
,WP8qVwB,GO9qVxB,C;UACL,IAAI,aAAJ,C;YACH,aP4qVuC,gB;YAA5B,WO3qVX,aP2qVgC,GO3qVhC,EA  
AS,MAAT,C;YACA,e;;YAEA,c;;UPwqVA,iB;UACA,IAAK,WAAI,eAAe,OAAf,CAAJ,C;;QAET,OAAO,W;O;K  
AfX,C;2FakBA,yB;MAAA,oC;MAAA,+D;MAAA,gC;MAAA,sE;QAUoB,Q;QAAhB,wBAAgB,SAAhB,gB;UAA  
gB,cAAhB,UAAgB,SAAhB,O;UACI,UAAU,YAAY,oBAAZ,C;UO9rVP,U;UADP,YPgsVe,W0hsVH,WPgsVwB,  
GOhsVxB,C;UACL,IAAI,aAAJ,C;YACH,aP8rVuC,gB;YAA5B,WO7rVX,aP6rVgC,GO7rVhC,EAAS,MAAT,C;Y  
ACA,e;;YAEA,c;;UP0rVA,iB;UACA,IAAK,WAAI,eAAe,oBAAf,CAAJ,C;;QAET,OAAO,W;O;KafX,C;0FakBA  
,yB;MAAA,kC;MAAA,4C;MAAA,wE;QAQW,sC;QAAA,8C;O;MARX,oDASQ,Y;QAA6C,OAAgB,qBAAhB,oB  
AAgB,C;O;MATrE,iDAUQ,mB;QAAoC,gCAAY,OAAZ,C;O;MAV5C,gF;MAAA,yC;QAQI,2D;O;KARJ,C;4EA  
cA,yB;MAAA,gE;MAAA,uC;QAOW,kBAAM,eAAa,gBAAb,C;QA+UA,Q;QAAb,iD;UAAa,WAAb,e;UACI,WAA  
Y,WAhViB,SAgVb,CAAU,IAAV,CAAJ,C;;QAhVhB,OaiVO,W;O;KaxVX,C;8EAU,yB;MAAA,gE;MAAA,uC  
;QAOW,kBAAM,eAAa,gBAAb,C;QA+UA,Q;QAAb,iD;UAAa,WAAb,e;UACI,WAAy,WAhViB,SAgVb,CAAU,I  
AAV,CAAJ,C;;QAhVhB,OaiVO,W;O;KaxVX,C;8EAU,yB;MAAA,gE;MAAA,uC;QAOW,kBAAM,eAAa,gBA  
Ab,C;QA+UA,Q;QAAb,iD;UAAa,WAAb,e;UACI,WAAy,WAhViB,SAgVb,CAAU,IAAV,CAAJ,C;;QAhVhB,OA  
iVO,W;O;KaxVX,C;8EAU,yB;MAAA,gE;MAAA,uC;QAOW,kBAAM,eAAa,gBAAb,C;QA+UA,Q;QAAb,iD;  
UAAa,WAAb,e;UACI,WAAy,WAhViB,SAgVb,CAAU,IAAV,CAAJ,C;;QAhVhB,OaiVO,W;O;KaxVX,C;8EAU  
A,yB;MAAA,gE;MAAA,uC;QAOW,kBAAM,eAAa,gBAAb,C;QA+UA,Q;QAAb,iD;UAAa,WAAb,e;UACI,WAA  
Y,WAhViB,SAgVb,CAAU,IAAV,CAAJ,C;;QAhVhB,OaiVO,W;O;KaxVX,C;8EAU,yB;MAAA,gE;MAAA,uC  
;QAOW,kBAAM,eAAa,gBAAb,C;QA+UA,Q;QAAb,iD;UAAa,WAAb,e;UACI,WAAy,WAhViB,SAgVb,CAAU,I  
AAV,CAAJ,C;;QAhVhB,OaiVO,W;O;KaxVX,C;8EAU,yB;MAAA,gE;MAAA,uC;QAOW,kBAAM,eAAa,gBA  
Ab,C;QA+UA,Q;QAAb,iD;UAAa,WAAb,e;UACI,WAAy,WAhViB,SAgVb,CAAU,IAAV,CAAJ,C;;QAhVhB,OA  
iVO,W;O;KaxVX,C;8EAU,yB;MAAA,gE;MAAA,uC;QAOW,kBAAM,eAAa,gBAAb,C;QA+UA,Q;QAAb,iD;  
UAAa,WAAb,e;UACI,WAAy,WAhViB,SAgVb,CAAU,IAAV,CAAJ,C;;QAhVhB,OaiVO,W;O;KaxVX,C;8EAU

A,yB;MAAA,gE;MAiVA,oC;MAAA,gC;MAjVA,uC;QAOW,kBAAM,eAAa,gBAAb,C;QA+UA,Q;QAAb,iD;UA  
Aa,WAAb,0B;UACI,WAAY,WAhViB,SAgVb,CAAU,iBAAV,CAAJ,C;;QAhVhB,OaiVO,W;O;KAxVX,C;0FAU  
A,yB;MAAA,gE;MAAA,uC;QAOW,kBAAa,eAAa,gBAAb,C;QAHP,gB;QADb,YAAY,C;QACZ,iD;UAAa,WA  
Ab,e;UACI,WAAY,WajHwB,SAiHpB,EAAU,cAAV,EAAU,sBAAV,WAAMb,IAAnB,CAAJ,C;;QajHhB,OAkH  
O,W;O;KAzHX,C;4FAUA,yB;MAAA,gE;MAAA,uC;QAOW,kBAAa,eAAa,gBAAb,C;QAmHP,gB;QADb,YAAY  
,C;QACZ,iD;UAAa,WAAb,e;UACI,WAAY,WApHwB,SAoHpB,EAAU,cAAV,EAAU,sBAAV,WAAMb,IAAnB,  
CAAJ,C;;QApHhB,OAqHO,W;O;KA5HX,C;4FAUA,yB;MAAA,gE;MAAA,uC;QAOW,kBAAa,eAAa,gBAAb,C;  
QAsHP,gB;QADb,YAAY,C;QACZ,iD;UAAa,WAAb,e;UACI,WAAY,WAvHwB,SAuHpB,EAAU,cAAV,EAAU,s  
BAAV,WAAMb,IAAnB,CAAJ,C;;QAvHhB,OAwhO,W;O;KA/HX,C;4FAUA,yB;MAAA,gE;MAAA,uC;QAOW,  
kBAAa,eAAa,gBAAb,C;QayHP,gB;QADb,YAAY,C;QACZ,iD;UAAa,WAAb,e;UACI,WAAY,WA1HwB,SA0Hp  
B,EAAU,cAAV,EAAU,sBAAV,WAAMb,IAAnB,CAAJ,C;;QA1HhB,OA2HO,W;O;KAIIX,C;4FAUA,yB;MAAA,  
gE;MAAA,uC;QAOW,kBAAa,eAAa,gBAAb,C;QA4HP,gB;QADb,YAAY,C;QACZ,iD;UAAa,WAAb,e;UACI,W  
AAY,WA7HwB,SA6HpB,EAAU,cAAV,EAAU,sBAAV,WAAMb,IAAnB,CAAJ,C;;QA7HhB,OA8HO,W;O;KArI  
X,C;2FAUA,yB;MAAA,gE;MAAA,uC;QAOW,kBAAa,eAAa,gBAAb,C;QA+HP,gB;QADb,YAAY,C;QACZ,iD;U  
AAa,WAAb,e;UACI,WAAY,WAhIwB,SAgIpB,EAAU,cAAV,EAAU,sBAAV,WAAMb,IAAnB,CAAJ,C;;QAhIhB  
,OaiIO,W;O;KAxIX,C;4FAUA,yB;MAAA,gE;MAAA,uC;QAOW,kBAAa,eAAa,gBAAb,C;QakIP,gB;QADb,YA  
AY,C;QACZ,iD;UAAa,WAAb,e;UACI,WAAY,WAnIwB,SAmIpB,EAAU,cAAV,EAAU,sBAAV,WAAMb,IAAn  
B,CAAJ,C;;QAnIhB,OAoIO,W;O;KA3IX,C;4FAUA,yB;MAAA,gE;MAAA,uC;QAOW,kBAAa,eAAa,gBAAb,C;  
QAqIP,gB;QADb,YAAY,C;QACZ,iD;UAAa,WAAb,e;UACI,WAAY,WAtIwB,SAsIpB,EAAU,cAAV,EAAU,sBA  
AV,WAAMb,IAAnB,CAAJ,C;;QAtIhB,OAuIO,W;O;KA9IX,C;4FAUA,yB;MAAA,gE;MAuIA,oC;MAAA,gC;M  
AvIA,uC;QAOW,kBAAa,eAAa,gBAAb,C;QAwIP,gB;QADb,YAAY,C;QACZ,iD;UAAa,WAAb,0B;UACI,WAAY  
,WazIwB,SAyIpB,EAAU,cAAV,EAAU,sBAAV,WAAMb,iBAAnB,CAAJ,C;;QazIhB,OAoIO,W;O;KAjJX,C;wG  
AUA,yB;MAAA,+D;MAAA,uC;QAOW,kBAAoB,gB;QA8iEd,gB;QADb,YAAY,C;QACZ,iD;UAAa,WAAb,e;UA  
piEmC,U;UAAA,cAVQ,SAUR,EAoiET,cApiES,EAoiET,sBApiES,WaoiEA,IApiEA,W;YAA6C,6B;;QAVhF,OA  
WO,W;O;KAIBX,C;4GAUA,yB;MAAA,oD;QA2iEiB,gB;QADb,YAAY,C;QACZ,iD;UAAa,WAAb,e;UApiEmC,  
U;UAAA,yBAoiET,cApiES,EAoiET,sBApiES,WaoiEA,IApiEA,W;YAA6C,6B;;QACHf,OAAO,W;O;KARX,C;8  
FAWA,6C;MAQiB,UACiB,M;MAF9B,YAAY,C;MACZ,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QACI,WAA  
Y,WAAI,WAAU,cAAV,EAAU,sBAAV,WAAMb,IAAnB,CAAJ,C;;MACHb,OAAO,W;K;gGAGX,6C;MAQiB,U  
ACiB,M;MAF9B,YAAY,C;MACZ,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QACI,WAAI,WAAU,cAAV,EAAU,sBAAV,WA  
AmB,IAAnB,CAAJ,C;;MACHb,OAAO,W;K;gGAGX,6C;MAQiB,UACiB,M;MAF9B,YAAY,C;MACZ,wBAAa,S  
AAb,gB;QAAa,WAAA,SAAb,M;QACI,WAAI,WAAU,cAAV,EAAU,sBAAV,WAAMb,IAAnB,CAAJ,C;;  
MACHb,OAAO,W;K;gGAGX,6C;MAQiB,UACiB,M;MAF9B,YAAY,C;MACZ,wBAAa,SAAb,gB;QAAa,WAAA  
,SAAb,M;QACI,WAAI,WAAU,cAAV,EAAU,sBAAV,WAAMb,IAAnB,CAAJ,C;;MACHb,OAAO,W;K;g  
GAGX,6C;MAQiB,UACiB,M;MAF9B,YAAY,C;MACZ,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QACI,WAA  
Y,WAAI,WAAU,cAAV,EAAU,sBAAV,WAAMb,IAAnB,CAAJ,C;;MACHb,OAAO,W;K;gGAGX,6C;MAQiB,U  
ACiB,M;MAF9B,YAAY,C;MACZ,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QACI,WAAI,WAAU,cAAV,EAAU,sBAAV,WA  
AmB,IAAnB,CAAJ,C;;MACHb,OAAO,W;K;+FAGX,6C;MAQiB,UACiB,M;MAF9B,YAA  
Y,C;MACZ,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QACI,WAAI,WAAU,cAAV,EAAU,sBAAV,WA  
AmB,IAAnB,CAAJ,C;;MACHb,OAAO,W;K;gGAGX,yB;MAAA,oC;MAAA,gC;MAAA,oD;QAQiB,UACiB,M;Q  
AF9B,YAAY,C;QACZ,wBAAa,SAAb,gB;UAAa,WAAb,UAAa,SAAb,O;UACI,WAAY,WAAI,WAAU,cAAV,EA  
AU,sBAAV,WAAMb,iBAAnB,CAAJ,C;;QACHb,OAAO,W;O;KAVX,C;0FAaA,yB;MAAA,+D;MAAA,uC;QAO  
W,kBAAa,gB;Qak2DJ,Q;QAahB,iD;UAAgB,cAAhB,e;UA11DqB,U;UAAA,cARe,SAQf,CA01DQ,OA11DR,W;  
YAAcC,6B;;QAR3D,OASO,W;O;KAhBX,C;8FAUA,yB;MAAA,oD;QA+1DoB,Q;QAahB,iD;UAAgB,cAAhB,e;  
UA11DqB,U;UAAA,wBA01DQ,OA11DR,W;YAAcC,6B;;QAC3D,OAAO,W;O;KANX,C;gFASA,6C;MAKiB,Q;  
MAAb,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QACI,WAAI,UAAU,IAAV,CAAJ,C;;MACHb,OAAO,  
W;K;kFAGX,6C;MAKiB,Q;MAAb,wBAAa,SAAb,gB;QAAa,WAAA,SAAb,M;QACI,WAAI,UAAU,IAA





AhB,M;QAAsB,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,OAAO,I;;MACrD,OAAO,K;K;+EAGX,gC;MAMoB,Q;M  
AAhB,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,OAAO,I;;  
MACrD,OAAO,K;K;+EAGX,gC;MAMoB,Q;MAAhB,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,I  
AAI,UAAU,OAAV,CAAJ,C;UAAwB,OAAO,I;;MACrD,OAAO,K;K;+EAGX,gC;MAMoB,Q;MAAhB,wBAAgB,  
SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,OAAO,I;;MACrD,OAAO,  
K;K;+EAGX,gC;MAMoB,Q;MAAhB,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OA  
AV,CAAJ,C;UAAwB,OAAO,I;;MACrD,OAAO,K;K;+EAGX,gC;MAMoB,Q;MAAhB,wBAAgB,SAAhB,gB;QA  
AGB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,OAAO,I;;MACrD,OAAO,K;K;+EAGX,yB  
;MAAA,oC;MAAA,gC;MAAA,uC;QAMoB,Q;QAAhB,wBAAgB,SAAhB,gB;UAGB,cAAhB,UAGB,SAAhB,O  
;UAAsB,IAAI,UAAU,oBAAV,CAAJ,C;YAAwB,OAAO,I;;QACrD,OAAO,K;O;KAPX,C;gFAUA,qB;MAKI,OA  
AO,gB;K;kFAGX,qB;MAKI,OAAO,gB;K;kFAGX,qB;MAKI,OAAO,gB;K;kFAGX,qB;MAKI,OAAO,gB;K;kFA  
GX,qB;MAKI,OAAO,gB;K;kFAGX,qB;MAKI,OAAO,gB;K;kFAGX,qB;MAKI,OAAO,gB;K;kFAGX,qB;MAKI,  
OAAO,gB;K;kFAGX,qB;MAKI,OAAO,gB;K;kFAGX,gC;MAKoB,Q;MADhB,YAAY,C;MACZ,wBAAgB,SAAh  
B,gB;QAAGB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,qB;;MAC9C,OAAO,K;K;kFAGX  
,gC;MAKoB,Q;MADhB,YAAY,C;MACZ,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,  
OAAV,CAAJ,C;UAAwB,qB;;MAC9C,OAAO,K;K;mFAGX,gC;MAKoB,Q;MADhB,YAAY,C;MACZ,wBAAgB,  
SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,qB;;MAC9C,OAAO,K;K;  
mFAGX,gC;MAKoB,Q;MADhB,YAAY,C;MACZ,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,IAAI  
,UAAU,OAAV,CAAJ,C;UAAwB,qB;;MAC9C,OAAO,K;K;mFAGX,gC;MAKoB,Q;MADhB,YAAY,C;MACZ,w  
BAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,qB;;MAC9C,OAA  
O,K;K;mFAGX,gC;MAKoB,Q;MADhB,YAAY,C;MACZ,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAs  
B,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,qB;;MAC9C,OAAO,K;K;mFAGX,gC;MAKoB,Q;MADhB,YAAY,C;M  
ACZ,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,qB;;MAC9  
C,OAAO,K;K;mFAGX,gC;MAKoB,Q;MADhB,YAAY,C;MACZ,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,  
M;QAAsB,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,qB;;MAC9C,OAAO,K;K;mFAGX,yB;MAAA,oC;MAAA,gC;  
MAAA,uC;QAKoB,Q;QADhB,YAAY,C;QACZ,wBAAgB,SAAhB,gB;UAGB,cAAhB,UAGB,SAAhB,O;UAAs  
B,IAAI,UAAU,oBAAV,CAAJ,C;YAAwB,qB;;QAC9C,OAAO,K;O;KANX,C;8EASA,yC;MAUoB,Q;MADhB,kB  
AAkB,O;MACIB,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,cAAc,UAAU,WAAV,EAAuB,OAAv  
B,C;;MACpC,OAAO,W;K;gFAGX,yC;MAUoB,Q;MADhB,kBAAkB,O;MACIB,wBAAgB,SAAhB,gB;QAAGB,c  
AAA,SAAhB,M;QAAsB,cAAc,UAAU,WAAV,EAAuB,OAAvB,C;;MACpC,OAAO,W;K;gFAGX,yC;MAUoB,Q;  
MADhB,kBAAkB,O;MACIB,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,cAAc,UAAU,WAAV,EA  
AuB,OAAvB,C;;MACpC,OAAO,W;K;gFAGX,yC;MAUoB,Q;MADhB,kBAAkB,O;MACIB,wBAAgB,SAAhB,gB  
;QAAGB,cAAA,SAAhB,M;QAAsB,cAAc,UAAU,WAAV,EAAuB,OAAvB,C;;MACpC,OAAO,W;K;gFAGX,yC;  
MAUoB,Q;MADhB,kBAAkB,O;MACIB,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,cAAc,UAAU,  
WAAV,EAAuB,OAAvB,C;;MACpC,OAAO,W;K;gFAGX,yC;MAUoB,Q;MADhB,kBAAkB,O;MACIB,wBAAgB  
,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,cAAc,UAAU,WAAV,EAAuB,OAAvB,C;;MACpC,OAAO,W;K;g  
FAGX,yC;MAUoB,Q;MADhB,kBAAkB,O;MACIB,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,cA  
Ac,UAAU,WAAV,EAAuB,OAAvB,C;;MACpC,OAAO,W;K;gFAGX,yC;MAUoB,Q;MADhB,kBAAkB,O;MACI  
B,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,cAAc,UAAU,WAAV,EAAuB,OAAvB,C;;MACpC,O  
AAO,W;K;gFAGX,yB;MAAA,oC;MAAA,gC;MAAA,gD;QAUoB,Q;QADhB,kBAAkB,O;QACIB,wBAAgB,SA  
AhB,gB;UAGB,cAAhB,UAGB,SAAhB,O;UAAsB,cAAc,UAAU,WAAV,EAAuB,oBAAvB,C;;QACpC,OAAO,W  
;O;KAXX,C;4FAcA,yC;MAYoB,UAA8B,M;MAF9C,YAAY,C;MACZ,kBAAkB,O;MACIB,wBAAgB,SAAhB,gB  
;QAAGB,cAAA,SAAhB,M;QAAsB,cAAc,WAAU,cAAV,EAAU,sBAAV,WAAmB,WAAAnB,EAAGC,OAAhC,C;;  
MACpC,OAAO,W;K;8FAGX,yC;MAYoB,UAA8B,M;MAF9C,YAAY,C;MACZ,kBAAkB,O;MACIB,wBAAgB,S  
AAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,cAAc,WAAU,cAAV,EAAU,sBAAV,WAAmB,WAAAnB,EAAGC,O  
AAhC,C;;MACpC,OAAO,W;K;8FAGX,yC;MAYoB,UAA8B,M;MAF9C,YAAY,C;MACZ,kBAAkB,O;MACIB,w  
BAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,cAAc,WAAU,cAAV,EAAU,sBAAV,WAAmB,WAAAnB,EA  
AGC,OAAhC,C;;MACpC,OAAO,W;K;8FAGX,yC;MAYoB,UAA8B,M;MAF9C,YAAY,C;MACZ,kBAAkB,O;

MACIB,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,cAAc,WAAU,cAAV,EAAU,sBAAV,WAAmB,  
WAAAnB,EAAgC,OAAhC,C;;MACpC,OAAO,W;K;8FAGX,yC;MAYoB,UAA8B,M;MAF9C,YAAY,C;MACZ,kB  
AAkB,O;MACIB,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,cAAc,WAAU,cAAV,EAAU,sBAAV,  
WAAmB,WAAAnB,EAAgC,OAAhC,C;;MACpC,OAAO,W;K;8FAGX,yC;MAYoB,UAA8B,M;MAF9C,YAAY,C;  
MACZ,kBAAkB,O;MACIB,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,cAAc,WAAU,cAAV,EAA  
U,sBAAV,WAAmB,WAAAnB,EAAgC,OAAhC,C;;MACpC,OAAO,W;K;8FAGX,yC;MAYoB,UAA8B,M;MAF9C,  
YAAY,C;MACZ,kBAAkB,O;MACIB,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,cAAc,WAAU,cA  
AV,EAAU,sBAAV,WAAmB,WAAAnB,EAAgC,OAAhC,C;;MACpC,OAAO,W;K;8FAGX,yC;MAYoB,UAA8B,M  
;MAF9C,YAAY,C;MACZ,kBAAkB,O;MACIB,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QAAsB,cAAc,W  
AAU,cAAV,EAAU,sBAAV,WAAmB,WAAAnB,EAAgC,OAAhC,C;;MACpC,OAAO,W;K;8FAGX,yB;MAAA,oC;  
MAAA,gC;MAAA,gD;QAYoB,UAA8B,M;QAF9C,YAAY,C;QACZ,kBAAkB,O;QACIB,wBAAGB,SAAhB,gB;U  
AAGB,cAAhB,UAGB,SAAhB,O;UAAcB,cAAc,WAAU,cAAV,EAAU,sBAAV,WAAmB,WAAAnB,EAAgC,oBA  
AhC,C;;QACpC,OAAO,W;O;KAbX,C;wFAGBA,yB;MAAA,8D;MAAA,gD;QAYoC,Q;QAHhC,YAAY,wB;QAC  
Z,kBAAkB,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,UAAI,YAAJ,EAAI,oBAAJ,OAAV,EAAwB,  
WAAxB,C;;QAEIB,OAAO,W;O;KAdX,C;0FAiBA,yB;MAAA,8D;MAAA,gD;QAYoC,Q;QAHhC,YAAY,wB;QA  
CZ,kBAAkB,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,UAAI,YAAJ,EAAI,oBAAJ,OAAV,EAAwB  
,WAAxB,C;;QAEIB,OAAO,W;O;KAdX,C;0FAiBA,yB;MAAA,8D;MAAA,gD;QAYoC,Q;QAHhC,YAAY,wB;Q  
ACZ,kBAAkB,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,UAAI,YAAJ,EAAI,oBAAJ,OAAV,EAAw  
B,WAAxB,C;;QAEIB,OAAO,W;O;KAdX,C;0FAiBA,yB;MAAA,8D;MAAA,gD;QAYoC,Q;QAHhC,YAAY,wB;  
QACZ,kBAAkB,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,UAAI,YAAJ,EAAI,oBAAJ,OAAV,EAA  
wB,WAAxB,C;;QAEIB,OAAO,W;O;KAdX,C;0FAiBA,yB;MAAA,8D;MAAA,gD;QAYoC,Q;QAHhC,YAAY,wB;  
QACZ,kBAAkB,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,UAAI,YAAJ,EAAI,oBAAJ,OAAV,EA  
AwB,WAAxB,C;;QAEIB,OAAO,W;O;KAdX,C;0FAiBA,yB;MAAA,8D;MAAA,gD;QAYoC,Q;QAHhC,YAAY,w  
B;QACZ,kBAAkB,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,UAAI,YAAJ,EAAI,oBAAJ,OAAV,E  
AAwB,WAAxB,C;;QAEIB,OAAO,W;O;KAdX,C;0FAiBA,yB;MAAA,8D;MAAA,gD;QAYoC,Q;QAHhC,YAAY,  
wB;QACZ,kBAAkB,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,UAAI,YAAJ,EAAI,oBAAJ,OAAV,  
EAAwB,WAAxB,C;;QAEIB,OAAO,W;O;KAdX,C;0FAiBA,yB;MAAA,8D;MAAA,oC;MAAA,gD;QAYoC,Q;  
QAHhC,YAAY,wB;QACZ,kBAAkB,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,sBAAI,YAAJ,EAA  
I,oBAAJ,QAAV,EAAwB,WAAxB,C;;QAEIB,OAAO,W;O;KAdX,C;SgAiBA,yB;MAAA,8D;MAAA,gD;QAUI,Y  
AAY,wB;QACZ,kBAAkB,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,KAAY,EAAiB,UAAI,KA  
AJ,CAAjB,EAA6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,W;O;KAhBX,C;wGAmBA,yB;MAAA,8D;MAAA,gD;QA  
UI,YAAY,wB;QACZ,kBAAkB,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,KAAY,EAAiB,UAAI,KA  
AJ,CAAjB,EAA6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,W;O;KAhBX,C;wGAmBA,yB;MAAA,8D;MAAA,g  
D;QAUI,YAAY,wB;QACZ,kBAAkB,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,KAAY,EAAiB,U  
AAI,KAJ,CAAjB,EAA6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,W;O;KAhBX,C;wGAmBA,yB;MAAA,8D;MAAA  
,gD;QAUI,YAAY,wB;QACZ,kBAAkB,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,KAAY,EAAiB,  
UAAI,KAJ,CAAjB,EAA6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,W;O;KAhBX,C;wGAmBA,yB;MAAA,8D;MA  
AA,gD;QAUI,YAAY,wB;QACZ,kBAAkB,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,KAAY,EAAi  
B,UAAI,KAJ,CAAjB,EAA6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,W;O;KAhBX,C;wGAmBA,yB;MAAA,8D;  
MAAA,gD;QAUI,YAAY,wB;QACZ,kBAAkB,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,KAAY,E  
AAiB,UAAI,KAJ,CAAjB,EAA6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,W;O;KAhBX,C;wGAmBA,yB;MAAA,8  
D;MAAA,oC;MAAA,gD;QAUI,YAAY,wB;QACZ,kBAAkB,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UA





O;;;QA3IP,yB;O;KAHJ,C;kFAMA,yB;MA2IA,8D;MA3IA,sC;QAGW,sB;;UA+IP,IA31LO,qBAAQ,CA21Lf,C;YAAe,qBAAO,I;YAAP,uB;WACf,cAAc,UAAK,CAAL,C;UACd,gBAAqB,wB;UACrB,IAAI,cAAa,CAAjB,C;YAAoB,qBAAO,O;YAAP,uB;WACpB,eAnJmB,QAmJJ,CAAS,OAAT,C;UACf,aAAU,CAAV,OAAa,SAAb,M;YACI,QAAQ,UAAK,CAAL,C;YACR,QATJe,QAsJP,CAAS,CAAT,C;YACR,IAAI,2BAAW,CAAX,KAAJ,C;cACI,UAAU,C;cACV,WAAW,C;;UAGnB,qBAAO,O;;;QA5JP,yB;O;KAHJ,C;kFAMA,yB;MA4JA,8D;MA5JA,sC;QAGW,sB;;UAgKP,IA12LO,qBAAQ,CA02Lf,C;YAAe,qBAAO,I;YAAP,uB;WACf,cAAc,UAAK,CAAL,C;UACd,gBAAqB,wB;UACrB,IAAI,cAAa,CAAjB,C;YAAoB,qBAAO,O;YAAP,uB;WACpB,eApKmB,QAoKJ,CAAS,OAAT,C;UACf,aAAU,CAAV,OAAa,SAAb,M;YACI,QAAQ,UAAK,CAAL,C;YACR,QAvKe,QAuKP,CAAS,CAAT,C;YACR,IAAI,2BAAW,CAAX,KAAJ,C;cACI,UAAU,C;cACV,WAAW,C;;UAGnB,qBAAO,O;;;QA7KP,yB;O;KAHJ,C;kFAMA,yB;MA6KA,8D;MA7KA,sC;QAGW,sB;;UAIpL,IAz3LO,qBAAQ,CAy3Lf,C;YAAe,qBAAO,I;YAAP,uB;WACf,cAAc,UAAK,CAAL,C;UACd,gBAAqB,wB;UACrB,IAAI,cAAa,CAAjB,C;YAAoB,qBAAO,O;YAAP,uB;WACpB,eArLmB,QAqLJ,CAAS,OAAT,C;UACf,aAAU,CAAV,OAAa,SAAb,M;YACI,QAAQ,UAAK,CAAL,C;YACR,QAxLe,QAwLP,CAAS,CAAT,C;YACR,IAAI,2BAAW,CAAX,KAAJ,C;cACI,UAAU,C;cACV,WAAW,C;;UAGnB,qBAAO,O;;;QA9LP,yB;O;KAHJ,C;kFAMA,yB;MA8LA,8D;MAAA,oC;MA9LA,sC;QAGW,sB;;UAKMP,IAx4LO,qBAAQ,CAw4Lf,C;YAAe,qBAAO,I;YAAP,uB;WACf,cAAc,UAAK,CAAL,C;UACd,gBAAqB,wB;UACrB,IAAI,cAAa,CAAjB,C;YAAoB,qBAAO,O;YAAP,uB;WACpB,eAtMmB,QAsMJ,CAAS,oBAAT,C;UACf,aAAU,CAAV,OAAa,SAAb,M;YACI,QAAQ,UAAK,CAAL,C;YACR,QAzMe,QAyMP,CAAS,cAAT,C;YACR,IAAI,2BAAW,CAAX,KAAJ,C;cACI,UAAU,C;cACV,WAAW,C;;UAGnB,qBAAO,O;;;QA/MP,yB;O;KAHJ,C;4FAMA,yB;MAAA,8D;MAAA,sC;QAOI,IAhxLO,qBAAQ,CAGxLf,C;UAAe,OAAO,I;QACtB,cAAc,UAAK,CAAL,C;QACd,gBAAqB,cAAL,SAAK,C;QACrB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,SAAS,OAAT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,UAAK,CAAL,C;UACR,QAAQ,SAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KApBX,C;8FAuBA,yB;MAAA,8D;MAAA,sC;QAOI,IA/xLO,qBAAQ,CA+xLf,C;UAAe,OAAO,I;QACtB,cAAc,UAAK,CAAL,C;QACd,gBAAqB,cAAL,SAAK,C;QACrB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,SAAS,OAAT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,UAAK,CAAL,C;UACR,QAAQ,SAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KApBX,C;8FAuBA,yB;MAAA,8D;MAAA,sC;QAOI,IA9yLO,qBAAQ,CA8yLf,C;UAAe,OAAO,I;QACtB,cAAc,UAAK,CAAL,C;QACd,gBAAqB,cAAL,SAAK,C;QACrB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,SAAS,OAAT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,UAAK,CAAL,C;UACR,QAAQ,SAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KApBX,C;8FAuBA,yB;MAAA,8D;MAAA,sC;QAOI,IA7zLO,qBAAQ,CA6zLf,C;UAAe,OAAO,I;QACtB,cAAc,UAAK,CAAL,C;QACd,gBAAqB,cAAL,SAAK,C;QACrB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,SAAS,OAAT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,UAAK,CAAL,C;UACR,QAAQ,SAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KApBX,C;8FAuBA,yB;MAAA,8D;MAAA,sC;QAOI,IA50LO,qBAAQ,CA40Lf,C;UAAe,OAAO,I;QACtB,cAAc,UAAK,CAAL,C;QACd,gBAAqB,cAAL,SAAK,C;QACrB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,SAAS,OAAT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,UAAK,CAAL,C;UACR,QAAQ,SAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KApBX,C;8FAuBA,yB;MAAA,8D;MAAA,sC;QAOI,IA31LO,qBAAQ,CA21Lf,C;UAAe,OAAO,I;QACtB,cAAc,UAAK,CAAL,C;QACd,gBAAqB,cAAL,SAAK,C;QACrB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,SAAS,OAAT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,UAAK,CAAL,C;UACR,QAAQ,SAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KApBX,C;8FAuBA,yB;MAAA,8D;MAAA,sC;QAOI,IA12LO,qBAAQ,CA02Lf,C;UAAe,OAAO,I;QACtB,cAAc,UAAK,CAAL,C;QACd,gBAAqB,cAAL,SAAK,C;QACrB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,SAAS,OAAT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,UAAK,CAAL,C;UACR,QAAQ,SAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KApBX,C;8FAuBA,yB;MAAA,8D;MAAA,sC;QAOI,IAz3LO,qBAAQ,CAy3Lf,C;UAAe,OAAO,I;QACtB,cAAc,UAAK,CAAL,C;QACd,gBAAqB,cAAL,SAAK,C;QACrB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,SAAS,OAAT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,UAAK,CAAL,C;UACR,QAAQ,SAAS,C

AAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KApBX,  
C;8FAuBA,yB;MAAA,8D;MAAA,oC;MAAA,sC;QAOI,IAx4LO,qBAAQ,CAw4Lf,C;UAAe,OAAO,I;QACtB,cA  
Ac,UAAK,CAAL,C;QACd,gBAAqB,cAAL,SAAK,C;QACrB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,e  
AAe,SAAS,oBAAT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,UAAK,CAAL,C;UACR,QAAQ,SAAS,  
cAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KApBX,  
C;gFAuBA,yB;MAAA,sE;MAAA,8D;MkBhnbA,iB;MIBgnbA,sC;QAeiB,Q;QAFb,IAr+LO,qBAAQ,CAq+Lf,C;U  
AAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,S  
AAS,UAAK,CAAL,CAAT,C;UACR,WkBznbg,MAAO,KIBynbO,QkBznbP,ElBynbiB,CkBznbjB,C;;QIB2nbd,OA  
AO,Q;O;KAnBX,C;kFAsBA,yB;MAAA,sE;MAAA,8D;MkbtobA,iB;MIBsobA,sC;QAeiB,Q;QAFb,IAN/LO,qBAA  
Q,CAM/Lf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;  
UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkB/obG,MAAO,KIB+obO,QkB/obP,ElB+obiB,CkB/objB,  
C;;QIBipbd,OAAO,Q;O;KAnBX,C;kFAsBA,yB;MAAA,sE;MAAA,8D;MkB5pbA,iB;MIB4pbA,sC;QAeiB,Q;QAF  
b,IAjgMO,qBAAQ,CAigMf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,  
aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBBrqB,MAAO,KIBqqbO,QkBBrqP,ElB  
qqbiB,CkBBrqjB,C;;QIBuqbd,OAAO,Q;O;KAnBX,C;kFAsBA,yB;MAAA,sE;MAAA,8D;MkBlrbA,iB;MIBkrbA,s  
C;QAeiB,Q;QAFb,IA/gMO,qBAAQ,CA+gMf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;  
QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkB3rbG,MAAO,KIB2r  
bO,QkB3rbP,ElB2rbiB,CkB3rbjB,C;;QIB6rbd,OAAO,Q;O;KAnBX,C;kFAsBA,yB;MAAA,sE;MAAA,8D;MkBxsb  
A,iB;MIBwsbA,sC;QAeiB,Q;QAFb,IA7hMO,qBAAQ,CA6hMf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,  
CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBjtb  
G,MAAO,KIBitbO,QkBjtbP,ElBitbiB,CkBjtbjB,C;;QIBmtbd,OAAO,Q;O;KAnBX,C;kFAsBA,yB;MAAA,sE;MAA  
A,8D;MkB9tbA,iB;MIB8tbA,sC;QAeiB,Q;QAFb,IA3iMO,qBAAQ,CA2iMf,C;UAAe,MAAM,6B;QACrB,eAAe,S  
AAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;U  
ACR,WkBvubG,MAAO,KIBuubO,QkBvubP,ElBuubiB,CkBvubjB,C;;QIByubd,OAAO,Q;O;KAnBX,C;kFAsBA,y  
B;MAAA,sE;MAAA,8D;MkBpvbA,iB;MIBovbA,sC;QAeiB,Q;QAFb,IAzjMO,qBAAQ,CAyjMf,C;UAAe,MAAM,  
6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,  
CAAL,CAAT,C;UACR,WkB7vbG,MAAO,KIB6vbO,QkB7vbP,ElB6vbiB,CkB7vbjB,C;;QIB+vbd,OAAO,Q;O;KA  
nBX,C;kFAsBA,yB;MAAA,sE;MAAA,8D;MkB1wbA,iB;MIB0wbA,sC;QAeiB,Q;QAFb,IAvkMO,qBAAQ,CAuk  
Mf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,  
QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBnxbG,MAAO,KIBmxbO,QkBnxbP,ElBmxbiB,CkBnxbjB,C;;QI  
Bqxbd,OAAO,Q;O;KAnBX,C;kFAsBA,yB;MAAA,sE;MAAA,oC;MAAA,8D;MkBhybA,iB;MIBgybA,sC;QAeiB,  
Q;QAFb,IArlMO,qBAAQ,CAqlMf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,EAAT,C;QACF,+B;  
QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,EAAT,C;UACR,WkBzybG,MAAO,KIByybO,QkBz  
ybP,ElByybiB,CkBzybjB,C;;QIB2ybd,OAAO,Q;O;KAnBX,C;kFAsBA,yB;MAAA,sE;MAAA,8D;MkBj0bA,iB;MI  
Bi0bA,sC;QAeiB,Q;QAFb,IA3qMO,qBAAQ,CA2qMf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,C  
AAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkB10bG,MAA  
O,KIB00bO,QkB10bP,ElB00biB,CkB10bjB,C;;QIB40bd,OAAO,Q;O;KAnBX,C;kFAsBA,yB;MAAA,sE;MAAA,8  
D;MkBv1bA,iB;MIBu1bA,sC;QAeiB,Q;QAFb,IAzrMO,qBAAQ,CAyrMf,C;UAAe,MAAM,6B;QACrB,eAAe,SA  
AS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UA  
CR,WkBh2bG,MAAO,KIBg2bO,QkBh2bP,ElBg2biB,CkBh2bjB,C;;QIBk2bd,OAAO,Q;O;KAnBX,C;mFAsBA,yB  
;MAAA,sE;MAAA,8D;MkB72bA,iB;MIB62bA,sC;QAeiB,Q;QAFb,IAvsMO,qBAAQ,CAusMf,C;UAAe,MAAM,  
6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,  
CAAL,CAAT,C;UACR,WkBt3bG,MAAO,KIBs3bO,QkBt3bP,ElBs3biB,CkBt3bjB,C;;QIBw3bd,OAAO,Q;O;KAN  
BX,C;mFAsBA,yB;MAAA,sE;MAAA,8D;MkBn4bA,iB;MIBm4bA,sC;QAeiB,Q;QAFb,IArtMO,qBAAQ,CAqtMf,  
C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QA  
AQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkB54bG,MAAO,KIB44bO,QkB54bP,ElB44biB,CkB54bjB,C;;QIB84  
bd,OAAO,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE;MAAA,8D;MkBz5bA,iB;MIBy5bA,sC;QAeiB,Q;QAFb,IANu  
MO,qBAAQ,CAMuMf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAA

U,CAA V,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBl6bG,MAAO,KIBk6bO,QkBl6bP,ElBk6biB ,CkBl6bjB,C;;QlBo6bd,OAAO,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE;MAAA,8D;MkB/6bA,iB;MIB+6bA,sC;Q AeIb,Q;QAFb,IAjvMO,qBAAQ,CAivMf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QAC F,+B;QAAb,aAAU,CAA V,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBx7bG,MAAO,KIBw7bO, QkBx7bP,ElBw7biB,CkBx7bjB,C;;QIB07bd,OAAO,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE;MAAA,8D;MkBr8b A,iB;MIBq8bA,sC;QAeiB,Q;QAFb,IA/vMO,qBAAQ,CA+vMf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK, CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAA V,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkB98b G,MAAO,KIB88bO,QkB98bP,ElB88biB,CkB98bjB,C;;QlB9bd,OAAO,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE; MAAA,8D;MkB39bA,iB;MIB29bA,sC;QAeiB,Q;QAFb,IA7wMO,qBAAQ,CA6wMf,C;UAAe,MAAM,6B;QACrB ,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAA V,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CA AT,C;UACR,WkBp+bG,MAAO,KIBo+bO,QkBp+bP,ElBo+biB,CkBp+bjB,C;;QIBs+bd,OAAO,Q;O;KAnBX,C;m FAsBA,yB;MAAA,sE;MAAA,oC;MAAA,8D;MkBJ/bA,iB;MIBi/bA,sC;QAeiB,Q;QAFb,IA3xMO,qBAAQ,CA2x Mf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,EAAT,C;QACF,+B;QAAb,aAAU,CAA V,iB;UACI, QAAQ,SAAS,sBAAK,CAAL,EAAT,C;UACR,WkB1/bG,MAAO,KIB0/bO,QkB1/bP,ElB0/biB,CkB1/bjB,C;;QIB4 /bd,OAAO,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE;MAAA,8D;MAAA,sC;QAaiB,Q;QAFb,IA/2MO,qBAAQ,CA +2Mf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAA V,iB;UAC I,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO ,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE;MAAA,8D;MAAA,sC;QAaiB,Q;QAFb,IA73MO,qBAAQ,CA63Mf,C;U AAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAA V,iB;UACI,QAAQ,S AAS,UAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAn BX,C;mFAsBA,yB;MAAA,sE;MAAA,8D;MAAA,sC;QAaiB,Q;QAFb,IA34MO,qBAAQ,CA24Mf,C;UAAe,MAA M,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAA V,iB;UACI,QAAQ,SAAS,UAA K,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;mFA sBA,yB;MAAA,sE;MAAA,8D;MAAA,sC;QAaiB,Q;QAFb,IAz5MO,qBAAQ,Cay5Mf,C;UAAe,MAAM,6B;QAC rB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAA V,iB;UACI,QAAQ,SAAS,UAAK,CAAL,C AAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;mFAsBA,yB;M AAA,sE;MAAA,8D;MAAA,sC;QAaiB,Q;QAFb,IAv6MO,qBAAQ,CAu6Mf,C;UAAe,MAAM,6B;QACrB,eAAe,S AAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAA V,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;U ACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE; MAAA,8D;MAAA,sC;QAaiB,Q;QAFb,IAr7MO,qBAAQ,CAq7Mf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UA AK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAA V,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAA I,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE;MAAA,8D ;MAAA,sC;QAaiB,Q;QAFb,IAN8MO,qBAAQ,CAm8Mf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL ,CAAT,C;QACF,+B;QAAb,aAAU,CAA V,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW, CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE;MAAA,8D;MAAA,s C;QAaiB,Q;QAFb,IAj9MO,qBAAQ,CAi9Mf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C; QACF,+B;QAAb,aAAU,CAA V,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,K AAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE;MAAA,oC;MAAA,8D;MAAA, sC;QAaiB,Q;QAFb,IA/9MO,qBAAQ,CA+9Mf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,EAAT, C;QACF,+B;QAAb,aAAU,CAA V,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,EAAT,C;UACR,IAAI,2BAAW,CAAX, KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;4FAsBA,yB;MAAA,8D;MkBlscA,iB;MIBkscA,sC;Q AaiB,Q;QAFb,IArjNO,qBAAQ,CAqjNf,C;UAAe,OAAO,I;QACTB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+ B;QAAb,aAAU,CAA V,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBzscG,MAAO,KIByscO,QkBz scP,ElBysciB,CkBzscjB,C;;QIB2scd,OAAO,Q;O;KAjBX,C;8FAoBA,yB;MAAA,8D;MkBttcA,iB;MIBstcA,sC;QA aiB,Q;QAFb,IAjkNO,qBAAQ,CAikNf,C;UAAe,OAAO,I;QACTB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B; QAAb,aAAU,CAA V,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkB7tcG,MAAO,KIB6tcO,QkB7tc P,ElB6tciB,CkB7tcjB,C;;QIB+tdc,OAAO,Q;O;KAjBX,C;8FAoBA,yB;MAAA,8D;MkBlucA,iB;MIB0ucA,sC;QAa iB,Q;QAFb,IA7kNO,qBAAQ,CA6kNf,C;UAAe,OAAO,I;QACTB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;

QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBjvcG,MAAO,KIBivcO,QkBjvc  
P,ElBivciB,CkBjvcjB,C;;QIBmvd,OAAO,Q;O;KAjBX,C;8FAoBA,yB;MAAA,8D;MkB9vcA,iB;MIB8vcA,sC;QA  
aiB,Q;QAFb,IAziNO,qBAAQ,CAyInf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;  
QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBrcwG,MAAO,KIBqwcO,QkBr  
wcP,ElBqwcjB,CkBrcwjB,C;;QIBuwcd,OAAO,Q;O;KAjBX,C;8FAoBA,yB;MAAA,8D;MkB1xcA,iB;MIBkxcA,sC  
;QAaiB,Q;QAFb,IArmNO,qBAAQ,CAqmNf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QA  
CF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBzxcG,MAAO,KIByxcO,  
QkBzxcP,ElByxciB,CkBzxcjB,C;;QIB2xcd,OAAO,Q;O;KAjBX,C;8FAoBA,yB;MAAA,8D;MkBtycA,iB;MIBsycA  
,sC;QAaiB,Q;QAFb,IAjnNO,qBAAQ,CAinNf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QA  
CF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkB7ycG,MAAO,KIB6ycO,  
QkB7ycP,ElB6yciB,CkB7ycjB,C;;QIB+ycd,OAAO,Q;O;KAjBX,C;8FAoBA,yB;MAAA,8D;MkB1zcA,iB;MIB0zc  
A,sC;QAaiB,Q;QAFb,IA7nNO,qBAAQ,CA6nNf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;  
QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBj0cG,MAAO,KIBi0c  
O,QkBj0cP,ElBi0ciB,CkBj0cjB,C;;QIBm0cd,OAAO,Q;O;KAjBX,C;8FAoBA,yB;MAAA,8D;MkB90cA,iB;MIB80  
cA,sC;QAaiB,Q;QAFb,IAzoNO,qBAAQ,CAyoNf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C  
;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBrlcG,MAAO,KIBq  
1cO,QkBrlcP,ElBq1ciB,CkBrlcjB,C;;QIBu1cd,OAAO,Q;O;KAjBX,C;8FAoBA,yB;MAAA,oC;MAAA,8D;MkB12  
cA,iB;MIBk2cA,sC;QAaiB,Q;QAFb,IArpNO,qBAAQ,CAqpNf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,C  
AAL,EAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,EAAT,C;UACR,WkBz2c  
G,MAAO,KIBy2cO,QkBz2cP,ElBy2ciB,CkBz2cjB,C;;QIB22cd,OAAO,Q;O;KAjBX,C;8FAoBA,yB;MAAA,8D;M  
kBj4cA,iB;MIBi4cA,sC;QAaiB,Q;QAFb,IAzuNO,qBAAQ,CAyuNf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAA  
K,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBx  
4cG,MAAO,KIBw4cO,QkBx4cP,ElBw4ciB,CkBx4cjB,C;;QIB04cd,OAAO,Q;O;KAjBX,C;8FAoBA,yB;MAAA,8  
D;MkBBr5cA,iB;MIBq5cA,sC;QAaiB,Q;QAFb,IArvNO,qBAAQ,CAqvNf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,U  
AAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,W  
kB55cG,MAAO,KIB45cO,QkB55cP,ElB45ciB,CkB55cjB,C;;QIB85cd,OAAO,Q;O;KAjBX,C;+FAoBA,yB;MAAA  
,8D;MkBz6cA,iB;MIBy6cA,sC;QAaiB,Q;QAFb,IAjwNO,qBAAQ,CAiwNf,C;UAAe,OAAO,I;QACtB,eAAe,SAA  
S,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR  
,WkBh7cG,MAAO,KIBg7cO,QkBh7cP,ElBg7ciB,CkBh7cjB,C;;QIBk7cd,OAAO,Q;O;KAjBX,C;+FAoBA,yB;MA  
AA,8D;MkB77cA,iB;MIB67cA,sC;QAaiB,Q;QAFb,IA7wNO,qBAAQ,CA6wNf,C;UAAe,OAAO,I;QACtB,eAAe,S  
AAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;U  
ACR,WkBp8cG,MAAO,KIBo8cO,QkBp8cP,ElBo8ciB,CkBp8cjB,C;;QIBs8cd,OAAO,Q;O;KAjBX,C;+FAoBA,yB  
;MAAA,8D;MkBj9cA,iB;MIBi9cA,sC;QAaiB,Q;QAFb,IAzxNO,qBAAQ,CAyxNf,C;UAAe,OAAO,I;QACtB,eAA  
e,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;  
UACR,WkBx9cG,MAAO,KIBw9cO,QkBx9cP,ElBw9ciB,CkBx9cjB,C;;QIB09cd,OAAO,Q;O;KAjBX,C;+FAoBA,  
yB;MAAA,8D;MkBrcA,iB;MIBq+cA,sC;QAaiB,Q;QAFb,IAryNO,qBAAQ,CAqyNf,C;UAAe,OAAO,I;QACtB,e  
AAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAA  
T,C;UACR,WkB5+cG,MAAO,KIB4+cO,QkB5+cP,ElB4+ciB,CkB5+cjB,C;;QIB8+cd,OAAO,Q;O;KAjBX,C;+FA  
oBA,yB;MAAA,8D;MkBz/cA,iB;MIBy/cA,sC;QAaiB,Q;QAFb,IAjzNO,qBAAQ,CAizNf,C;UAAe,OAAO,I;QACt  
B,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,C  
AAT,C;UACR,WkBhgdG,MAAO,KIBggdO,QkBhgdP,ElBggdiB,CkBhgdjB,C;;QIBkgdd,OAAO,Q;O;KAjBX,C;+  
FAoBA,yB;MAAA,8D;MkB7gdA,iB;MIB6gdA,sC;QAaiB,Q;QAFb,IA7zNO,qBAAQ,CA6zNf,C;UAAe,OAAO,I;  
QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CA  
AL,CAAT,C;UACR,WkBphdG,MAAO,KIBohdO,QkBphdP,ElBohdiB,CkBphdjB,C;;QIBshdd,OAAO,Q;O;KAjB  
X,C;+FAoBA,yB;MAAA,oC;MAAA,8D;MkBjidA,iB;MIBiidA,sC;QAaiB,Q;QAFb,IAz0NO,qBAAQ,CAy0Nf,C;  
UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,EAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,  
SAAS,sBAAK,CAAL,EAAT,C;UACR,WkBxidG,MAAO,KIBwidO,QkBxidP,ElBwidiB,CkBxidjB,C;;QIB0idd,OA  
AO,Q;O;KAjBX,C;+FAoBA,yB;MAAA,8D;MAAA,sC;QAWiB,Q;QAFb,IA35NO,qBAAQ,CA25Nf,C;UAAe,OA

AO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;+FAoBA,yB;MAAA,8D;MAAA,sC;QAWiB,Q;QAFb,IAv6NO,qBAAQ,CAu6Nf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;+FAoBA,yB;MAAA,8D;MAAA,sC;QAWiB,Q;QAFb,IA7NO,qBAAQ,CAm7Nf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;+FAoBA,yB;MAAA,8D;MAAA,sC;QAWiB,Q;QAFb,IA/7NO,qBAAQ,CA+7Nf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;+FAoBA,yB;MAAA,8D;MAAA,sC;QAWiB,Q;QAFb,IA38NO,qBAAQ,CA28Nf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;+FAoBA,yB;MAAA,8D;MAAA,sC;QAWiB,Q;QAFb,IAv9NO,qBAAQ,CAu9Nf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;+FAoBA,yB;MAAA,8D;MAAA,sC;QAWiB,Q;QAFb,IA+/NO,qBAAQ,CA++Nf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;+FAoBA,yB;MAAA,oC;MAAA,8D;MAAA,sC;QAWiB,Q;QAFb,IA3/NO,qBAAQ,CA2/Nf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,EAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,EAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;wFAoBA,yB;MAAA,sE;MAAA,8D;MAAA,kD;QAaiB,Q;QAFb,IAj100,qBAAQ,CAi10f,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAAkC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;0FAsBA,yB;MAAA,sE;MAAA,8D;MAAA,kD;QAaiB,Q;QAFb,IA/100,qBAAQ,CA+10f,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAAkC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;0FAsBA,yB;MAAA,sE;MAAA,8D;MAAA,kD;QAaiB,Q;QAFb,IA7m00,qBAAQ,CA6m0f,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAAkC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;0FAsBA,yB;MAAA,sE;MAAA,8D;MAAA,kD;QAaiB,Q;QAFb,IA3n00,qBAAQ,CA2n0f,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAAkC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;0FAsBA,yB;MAAA,sE;MAAA,8D;MAAA,kD;QAaiB,Q;QAFb,IAzo00,qBAAQ,CAyo0f,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAAkC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;0FAsBA,yB;MAAA,sE;MAAA,8D;MAAA,kD;QAaiB,Q;QAFb,IAvp00,qBAAQ,CAvp0f,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAAkC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;0FAsBA,yB;MAAA,sE;MAAA,8D;MAAA,kD;QAaiB,Q;QAFb,IArq00,qBAAQ,CAqq0f,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAAkC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;0FAsBA,yB;MAAA,sE;MAAA,8D;MAAA,kD;QAaiB,Q;QAFb,IANr00,qBAAQ,CAMr0f,C;UAAe,MAA

M,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAAkC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;OFAsBA,yB;MAAA,sE;MAAA,oC;MAAA,8D;MAAA,kD;QAaiB,Q;QAFb,IAjsOO,qBAAQ,CAisOf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,EAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,EAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAAkC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;oGAsBA,yB;MAAA,8D;MAAA,kD;QAWiB,Q;QAFb,IARxOO,qBAAQ,CAqxOf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAAkC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;sGAoBA,yB;MAAA,8D;MAAA,kD;QAWiB,Q;QAFb,IAjyOO,qBAAQ,CAiyOf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAAkC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;sGAoBA,yB;MAAA,8D;MAAA,kD;QAWiB,Q;QAFb,IA7yOO,qBAAQ,CA6yOf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAAkC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;sGAoBA,yB;MAAA,8D;MAAA,kD;QAWiB,Q;QAFb,IAzzOO,qBAAQ,CAyzOf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAAkC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;sGAoBA,yB;MAAA,8D;MAAA,kD;QAWiB,Q;QAFb,IAr000,qBAAQ,CAq0Of,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAAkC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;sGAoBA,yB;MAAA,8D;MAAA,kD;QAWiB,Q;QAFb,IAj1OO,qBAAQ,CAi1Of,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAAkC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;sGAoBA,yB;MAAA,8D;MAAA,kD;QAWiB,Q;QAFb,IA71OO,qBAAQ,CA61Of,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAAkC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;sGAoBA,yB;MAAA,8D;MAAA,kD;QAWiB,Q;QAFb,IAz2OO,qBAAQ,CAy2Of,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAAkC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;sGAoBA,yB;MAAA,8D;MAAA,kD;QAWiB,Q;QAFb,IAr3OO,qBAAQ,CAq3Of,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,EAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,EAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAAkC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;IAoBA,8B;MASiB,Q;MAFb,IAv8OO,qBAAQ,CAu8Of,C;QAAe,OAAO,I;MAcTb,UAAU,UAAK,CAAL,C;MACG,+B;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,MkB3leG,MAAO,KIB2leE,GkB3leF,EIB2leO,CkB3leP,C;;MIB6led,OAAO,G;K;IAGX,gC;MASiB,Q;MAFb,IAv9OO,qBAAQ,CAu9Of,C;QAAe,OAAO,I;MAcTb,UAAU,UAAK,CAAL,C;MACG,+B;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,MkbtneG,MAAO,KIBsneE,GkbtneF,EIBsneO,CkbtneP,C;;MIBwned,OAAO,G;K;IAGX,gC;MAOiB,Q;MAFb,IAr+OO,qBAAQ,CAq+Of,C;QAAe,OAAO,I;MAcTb,UAAU,UAAK,CAAL,C;MACG,+B;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,sBAAM,CAAN,KAAJ,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAGX,gC;MAOiB,Q;MAFb,IA3+OO,qBAAQ,CA2+Of,C;QAAe,OAAO,I;MAcTb,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,MAAM,CAAV,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAGX,gC;MAOiB,Q;MAFb,IAj/OO,qBAAQ,CAi/Of,C;QAAe,OAAO,I;MAcTb,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,MAAM,CAAV,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAGX,gC;MAOiB,Q;MAFb,IAv/OO,qBAAQ,CAu/Of,C;QAAe,OAAO,I;MAcTb,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,MAAM,CAAV,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAGX,gC;MAOiB,Q;MAFb,IA7/OO,qBAAQ,CA6/Of,C;QAAe,OAAO,I

;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,  
,oBAAm,CAAN,KAAJ,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAGX,gC;MASiB,Q;MAFb,IArgPO,qBAAQ,C  
AqgPf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UA  
AK,CAAL,C;QACR,MkB5seG,MAAO,KiB4seE,GkB5seF,EiB4seO,CkB5seP,C;;MiB8sed,OAAO,G;K;IAGX,gC;  
MASiB,Q;MAFb,IA7gPO,qBAAQ,CA6gPf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,  
aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,MkBjteG,MAAO,KiBiteE,GkBjteF,EiBiteO,CkBjteP,C;;  
MiBmtd,OAAO,G;K;IAGX,gC;MAOiB,Q;MAFb,IA3gPO,qBAAQ,CA2gPf,C;QAAe,OAAO,I;MACtB,UAAU,U  
AAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,MAAM,CAAV,C  
;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAGX,wC;MAGI,OAAO,yBAAc,UAAc,C;K;IAGX,0C;MAGI,OAAO,2B  
AAc,UAAc,C;K;IAGX,0C;MAGI,OAAO,2BAAc,UAAc,C;K;IAGX,0C;MAGI,OAAO,2BAAc,UAAc,C;K;IAGX,  
0C;MAGI,OAAO,2BAAc,UAAc,C;K;IAGX,0C;MAGI,OAAO,2BAAc,UAAc,C;K;IAGX,0C;MAGI,OAAO,2BA  
Ac,UAAc,C;K;IAGX,0C;MAGI,OAAO,2BAAc,UAAc,C;K;IAGX,0C;MAGI,OAAO,2BAAc,UAAc,C;K;IAGX,8  
C;MAOiB,Q;MAFb,IA/oPO,qBAAQ,CA+oPf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,+B;MA  
Ab,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAAX,GA  
A6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,gD;MAOiB,Q;MAFb,IArpPO,qBAAQ,CAqpPf,C;  
QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL  
,C;QACR,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAA  
O,G;K;IAGX,gD;MAOiB,Q;MAFb,IA3pPO,qBAAQ,CA2pPf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;  
MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,UAAW,SAAQ,GAAR,EAAa,CA  
Ab,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,gD;MAOiB,Q;MAFb,IAjqPO,qBA  
AQ,CAiqPf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,  
UAAK,CAAL,C;QACR,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;  
MAE9C,OAAO,G;K;IAGX,gD;MAOiB,Q;MAFb,IAvqPO,qBAAQ,CAuqPf,C;QAAe,OAAO,I;MACtB,UAAU,UA  
AK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,UAAW,SAAQ,GA  
AR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,gD;MAOiB,Q;MAFb  
,IA7qPO,qBAAQ,CA6qPf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB  
;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAA  
oC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,gD;MAOiB,Q;MAFb,IAnrPO,qBAAQ,CAMrPf,C;QAAe,OAAO,I;MA  
CtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,UA  
AW,SAAQ,GAAR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,gD;M  
AOiB,Q;MAFb,IAzrPO,qBAAQ,CAyrPf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,a  
AAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAAX,GAA6B,  
CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,gD;MAOiB,Q;MAFb,IA/rPO,qBAAQ,CA+rPf,C;QAAe  
,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QA  
CR,IAAI,UAAW,SAAQ,gBAAR,EAAa,cAAb,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;  
K;IAGX,wB;MAII,OAAO,oB;K;IAGX,0B;MAII,OAAO,sB;K;IAGX,0B;MAGI,OAAO,sB;K;IAGX,0B;MAGI,O  
AAO,sB;K;IAGX,0B;MAGI,OAAO,sB;K;IAGX,0B;MAGI,OAAO,sB;K;IAGX,0B;MAGI,OAAO,sB;K;IAGX,0B;  
MAGI,OAAO,sB;K;IAGX,0B;MAGI,OAAO,sB;K;IAGX,0B;MAGI,OAAO,sB;K;IAGX,0B;MAGI,OAAO,sB;K;  
gFAGX,yB;MASDA,8D;MATD  
A,sC;QAGW,sB;;UA0DP,IAn4PO,qBAAQ,CAM4Pf,C;YAAe,qBAAO,I;YAAP,uB;WACf,cAAc,UAAK,CAAL,C;  
UACd,gBAAqB,wB;UACrB,IAAI,cAAa,CAAjB,C;YAAoB,qBAAO,O;YAAP,uB;WACpB,eA9DmB,QA8DJ,CA  
AS,OAAT,C;UACf,aAAU,CAAV,OAAa,SAAb,M;YACI,QAAQ,UAAK,CAAL,C;YACR,QAjEe,QAiEP,CAAS,C  
AAT,C;YACR,IAAI,2BAAW,CAAX,KAAJ,C;cACI,UAAU,C;cACV,WA AW,C;;UAGnB,qBAAO,O;;;QAVeP,yB  
;O;KAHJ,C;kFAMA,yB;MAuEA,8D;MAvEA,sC;QAGW,sB;;UA2EP,IAI5PO,qBAAQ,CAk5Pf,C;YAAe,qBAAO,  
I;YAAP,uB;WACf,cAAc,UAAK,CAAL,C;UACd,gBAAqB,wB;UACrB,IAAI,cAAa,CAAjB,C;YAAoB,qBAAO,O  
;YAAP,uB;WACpB,eA/EmB,QA+EJ,CAAS,OAAT,C;UACf,aAAU,CAAV,OAAa,SAAb,M;YACI,QAAQ,UAAK,  
CAAL,C;YACR,QAlFe,QAkFP,CAAS,CAAT,C;YACR,IAAI,2BAAW,CAAX,KAAJ,C;cACI,UAAU,C;cACV,W  
AAW,C;;UAGnB,qBAAO,O;;;QAxFP,yB;O;KAHJ,C;kFAMA,yB;MAwFA,8D;MxFA,sC;QAGW,sB;;UA4FP,I  
Aj6PO,qBAAQ,CAi6Pf,C;YAAe,qBAAO,I;YAAP,uB;WACf,cAAc,UAAK,CAAL,C;UACd,gBAAqB,wB;UACrB

,IAAI,cAAa,CAAjB,C;YAAoB,qBAAO,O;YAAP,uB;WACpB,eAhGmB,QAgGJ,CAAS,OAAT,C;UACf,aAAU,C  
AAV,OAAa,SAAb,M;YACI,QAAQ,UAAK,CAAL,C;YACR,QAnGe,QAmGP,CAAS,CAAT,C;YACR,IAAI,2BA  
AW,CAAX,KAAJ,C;cACI,UAAU,C;cACV,WAAW,C;;UAGnB,qBAAO,O;;;QAzGP,yB;O;KAHJ,C;kFAMA,yB;  
MAyGA,8D;MAzGA,sC;QAGW,sB;;UA6GP,IAh7PO,qBAAQ,CAg7Pf,C;YAAe,qBAAO,I;YAAP,uB;WACf,cAA  
c,UAAK,CAAL,C;UACd,gBAAqB,wB;UACrB,IAAI,cAAa,CAAjB,C;YAAoB,qBAAO,O;YAAP,uB;WACpB,eAj  
HmB,QAIHJ,CAAS,OAAT,C;UACf,aAAU,CAAV,OAAa,SAAb,M;YACI,QAAQ,UAAK,CAAL,C;YACR,QApH  
e,QAoHP,CAAS,CAAT,C;YACR,IAAI,2BAAW,CAAX,KAAJ,C;cACI,UAAU,C;cACV,WAAW,C;;UAGnB,qBA  
AO,O;;;QA1HP,yB;O;KAHJ,C;kFAMA,yB;MA0HA,8D;MA1HA,sC;QAGW,sB;;UA8HP,IA/7PO,qBAAQ,CA+7  
Pf,C;YAAe,qBAAO,I;YAAP,uB;WACf,cAAc,UAAK,CAAL,C;UACd,gBAAqB,wB;UACrB,IAAI,cAAa,CAAjB,  
C;YAAoB,qBAAO,O;YAAP,uB;WACpB,eAlImB,QAkIJ,CAAS,OAAT,C;UACf,aAAU,CAAV,OAAa,SAAb,M;Y  
ACI,QAAQ,UAAK,CAAL,C;YACR,QArIe,QaQIP,CAAS,CAAT,C;YACR,IAAI,2BAAW,CAAX,KAAJ,C;cACI,  
UAAU,C;cACV,WAAW,C;;UAGnB,qBAAO,O;;;QA3IP,yB;O;KAHJ,C;kFAMA,yB;MA2IA,8D;MA3IA,sC;QAG  
W,sB;;UA+IP,IA98PO,qBAAQ,CA88Pf,C;YAAe,qBAAO,I;YAAP,uB;WACf,cAAc,UAAK,CAAL,C;UACd,gBA  
AqB,wB;UACrB,IAAI,cAAa,CAAjB,C;YAAoB,qBAAO,O;YAAP,uB;WACpB,eAnJmB,QAmJJ,CAAS,OAAT,C;  
UACf,aAAU,CAAV,OAAa,SAAb,M;YACI,QAAQ,UAAK,CAAL,C;YACR,QAtJe,QAsJP,CAAS,CAAT,C;YACR  
,IAAI,2BAAW,CAAX,KAAJ,C;cACI,UAAU,C;cACV,WAAW,C;;UAGnB,qBAAO,O;;;QA5JP,yB;O;KAHJ,C;kF  
AMA,yB;MA4JA,8D;MA5JA,sC;QAGW,sB;;UAgKP,IA79PO,qBAAQ,CA69Pf,C;YAAe,qBAAO,I;YAAP,uB;W  
ACf,cAAc,UAAK,CAAL,C;UACd,gBAAqB,wB;UACrB,IAAI,cAAa,CAAjB,C;YAAoB,qBAAO,O;YAAP,uB;W  
ACpB,eApKmB,QAoKJ,CAAS,OAAT,C;UACf,aAAU,CAAV,OAAa,SAAb,M;YACI,QAAQ,UAAK,CAAL,C;Y  
ACR,QAvKe,QAuKP,CAAS,CAAT,C;YACR,IAAI,2BAAW,CAAX,KAAJ,C;cACI,UAAU,C;cACV,WAAW,C;;  
UAGnB,qBAAO,O;;;QA7KP,yB;O;KAHJ,C;kFAMA,yB;MA6KA,8D;MA7KA,sC;QAGW,sB;;UAI LP,IA5+PO,q  
BAAQ,CA4+Pf,C;YAAe,qBAAO,I;YAAP,uB;WACf,cAAc,UAAK,CAAL,C;UACd,gBAAqB,wB;UACrB,IAAI,c  
AAa,CAAjB,C;YAAoB,qBAAO,O;YAAP,uB;WACpB,eArLmB,QAqLJ,CAAS,OAAT,C;UACf,aAAU,CAAV,OA  
Aa,SAAb,M;YACI,QAAQ,UAAK,CAAL,C;YACR,QAxLe,QAuLP,CAAS,CAAT,C;YACR,IAAI,2BAAW,CAA  
X,KAAJ,C;cACI,UAAU,C;cACV,WAAW,C;;UAGnB,qBAAO,O;;;QA9LP,yB;O;KAHJ,C;kFAMA,yB;MA8LA,8  
D;MAAA,oC;MA9LA,sC;QAGW,sB;;UAKMP,IA3/PO,qBAAQ,CA2/Pf,C;YAAe,qBAAO,I;YAAP,uB;WACf,cA  
Ac,UAAK,CAAL,C;UACd,gBAAqB,wB;UACrB,IAAI,cAAa,CAAjB,C;YAAoB,qBAAO,O;YAAP,uB;WACpB,e  
AtMmB,QAsMJ,CAAS,oBAAT,C;UACf,aAAU,CAAV,OAAa,SAAb,M;YACI,QAAQ,UAAK,CAAL,C;YACR,Q  
AzMe,QAyMP,CAAS,cAAT,C;YACR,IAAI,2BAAW,CAAX,KAAJ,C;cACI,UAAU,C;cACV,WAAW,C;;UAGnB,  
qBAAO,O;;;QA/MP,yB;O;KAHJ,C;4FAMA,yB;MAAA,8D;MAAA,sC;QAOL,IA4PO,qBAAQ,CAM4Pf,C;UAAe  
,OAAO,I;QACtB,cAAc,UAAK,CAAL,C;QACd,gBAAqB,cAAL,SAAK,C;QACrB,IAAI,cAAa,CAAjB,C;UAAoB,  
OAAO,O;QAC3B,eAAe,SAAS,OAAT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,UAAK,CAAL,C;UA  
CR,QAAQ,SAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,O  
AAO,O;O;KApBX,C;8FAuBA,yB;MAAA,8D;MAAA,sC;QAOL,IA5PO,qBAAQ,Cak5Pf,C;UAAe,OAAO,I;QAC  
tB,cAAc,UAAK,CAAL,C;QACd,gBAAqB,cAAL,SAAK,C;QACrB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC  
3B,eAAe,SAAS,OAAT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,UAAK,CAAL,C;UACR,QAAQ,SA  
AS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KA  
pBX,C;8FAuBA,yB;MAAA,8D;MAAA,sC;QAOL,IAj6PO,qBAAQ,Cai6Pf,C;UAAe,OAAO,I;QACtB,cAAc,UAA  
K,CAAL,C;QACd,gBAAqB,cAAL,SAAK,C;QACrB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,SA  
AS,OAAT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,UAAK,CAAL,C;UACR,QAAQ,SAAS,CAAT,C;  
UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KApBX,C;8FAu  
BA,yB;MAAA,8D;MAAA,sC;QAOL,IAh7PO,qBAAQ,CAg7Pf,C;UAAe,OAAO,I;QACtB,cAAc,UAAK,CAAL,C;  
QACd,gBAAqB,cAAL,SAAK,C;QACrB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,SAAS,OAAT,C;  
QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,UAAK,CAAL,C;UACR,QAAQ,SAAS,CAAT,C;UACR,IAAI,  
2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KApBX,C;8FAuBA,yB;MAA  
A,8D;MAAA,sC;QAOL,IA/7PO,qBAAQ,CA+7Pf,C;UAAe,OAAO,I;QACtB,cAAc,UAAK,CAAL,C;QACd,gBAA  
qB,cAAL,SAAK,C;QACrB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,SAAS,OAAT,C;QACf,aAAU  
,CAAV,OAAa,SAAb,M;UACI,QAAQ,UAAK,CAAL,C;UACR,QAAQ,SAAS,CAAT,C;UACR,IAAI,2BAAW,CA



AX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KApBX,C;8FAuBA,yB;MAAA,8D;MAAA,sC;QAOI,IA98PO,qBAAQ,CA88Pf,C;UAAe,OAAO,I;QACtB,cAAc,UAAK,CAAL,C;QACd,gBAAqB,cAAL,SA AK,C;QACrB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,SAAS,OAAT,C;QACf,aAAU,CAAV,OAA a,SAAb,M;UACI,QAAQ,UAAK,CAAL,C;UACR,QAAQ,SAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C; YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KApBX,C;8FAuBA,yB;MAAA,8D;MAAA,sC;QAOI,IA 79PO,qBAAQ,CA69Pf,C;UAAe,OAAO,I;QACtB,cAAc,UAAK,CAAL,C;QACd,gBAAqB,cAAL,SAAK,C;QACr B,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,SAAS,OAAT,C;QACf,aAAU,CAAV,OAAa,SAAb,M; UACI,QAAQ,UAAK,CAAL,C;UACR,QAAQ,SAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAA U,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KApBX,C;8FAuBA,yB;MAAA,8D;MAAA,sC;QAOI,IA5+PO,qBA AQ,CA4+Pf,C;UAAe,OAAO,I;QACtB,cAAc,UAAK,CAAL,C;QACd,gBAAqB,cAAL,SAAK,C;QACrB,IAAI,cA Aa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,SAAS,OAAT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAA Q,UAAK,CAAL,C;UACR,QAAQ,SAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV ,WAAW,C;;QAGnB,OAAO,O;O;KApBX,C;8FAuBA,yB;MAAA,8D;MAAA,oC;MAAA,sC;QAOI,IA3/PO,qBAA Q,CA2/Pf,C;UAAe,OAAO,I;QACtB,cAAc,UAAK,CAAL,C;QACd,gBAAqB,cAAL,SAAK,C;QACrB,IAAI,cAAa, CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,SAAS,oBAAT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ, UAAK,CAAL,C;UACR,QAAQ,SAAS,cAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,W AAW,C;;QAGnB,OAAO,O;O;KApBX,C;gFAuBA,yB;MAAA,sE;MAAA,8D;MkB/gfA,iB;MIB+gfA,sC;QAeiB,Q ;QAFb,IAxlQO,qBAAQ,CAwlQf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;Q AAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBxhfG,MAAO,KIBwhfO,QkBxhfP ,ElBwhfiB,CkBxhfjB,C;;QIB0hfd,OAAO,Q;O;KAnBX,C;kFAsBA,yB;MAAA,sE;MAAA,8D;MkBrifA,iB;MIBqif A,sC;QAeiB,Q;QAFb,IAtmQO,qBAAQ,CAsmQf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT ,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkB9ifG,MAAO,KIB 8ifO,QkB9ifP,ElB8ifiB,CkB9ifjB,C;;QIBgjf,OAAO,Q;O;KAnBX,C;kFAsBA,yB;MAAA,sE;MAAA,8D;MkB3jf A,iB;MIB2jfA,sC;QAeiB,Q;QAFb,IApnQO,qBAAQ,CAonQf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,C AAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBpkfG ,MAAO,KIBokfO,QkBpkfP,ElBokfiB,CkBpkfjB,C;;QIBskfd,OAAO,Q;O;KAnBX,C;kFAsBA,yB;MAAA,sE;MAA A,8D;MkBjlfA,iB;MIBilfA,sC;QAeiB,Q;QAFb,IAloQO,qBAAQ,CAkoQf,C;UAAe,MAAM,6B;QACrB,eAAe,SA AS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UA CR,WkB1lfG,MAAO,KIB0lfO,QkB1lfP,ElB0lfiB,CkB1lfjB,C;;QIB4lfd,OAAO,Q;O;KAnBX,C;kFAsBA,yB;MAA A,sE;MAAA,8D;MkBvmfA,iB;MIBumfA,sC;QAeiB,Q;QAFb,IAhpQO,qBAAQ,CAGpQf,C;UAAe,MAAM,6B;QA CrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL, CAAT,C;UACR,WkBhnfG,MAAO,KIBgnfO,QkBhnfP,ElBgnfiB,CkBhnfjB,C;;QIBknfd,OAAO,Q;O;KAnBX,C;k FAsBA,yB;MAAA,sE;MAAA,8D;MkB7nfA,iB;MIB6nfA,sC;QAeiB,Q;QAFb,IA9pQO,qBAAQ,CA8pQf,C;UAAe ,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAA S,UAAK,CAAL,CAAT,C;UACR,WkBtofG,MAAO,KIBsofO,QkBtofP,ElBsofiB,CkBtofiB,C;;QIBwofd,OAAO,Q; O;KAnBX,C;kFAsBA,yB;MAAA,sE;MAAA,8D;MkBnfpA,iB;MIBmpfA,sC;QAeiB,Q;QAFb,IA5qQO,qBAAQ,C A4qQf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UA CI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkB5pfG,MAAO,KIB4pfO,QkB5pfP,ElB4pfiB,CkB5pfjB,C;;QI B8pfd,OAAO,Q;O;KAnBX,C;kFAsBA,yB;MAAA,sE;MAAA,8D;MkBzqfA,iB;MIByqfA,sC;QAeiB,Q;QAFb,IA1r QO,qBAAQ,CA0rQf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU, CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkB1rfG,MAAO,KIBkrfO,QkB1rfP,ElBkrfiB,CkB lrfjB,C;;QIBorfd,OAAO,Q;O;KAnBX,C;kFAsBA,yB;MAAA,sE;MAAA,oC;MAAA,8D;MkB/rfA,iB;MIB+rfA,sC; QAeiB,Q;QAFb,IAxsQO,qBAAQ,CAwsQf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,EAAT,C;Q ACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,EAAT,C;UACR,WkBxsfG,MAAO,KIBwsf O,QkBxsfP,ElBwsfiB,CkBxsfjB,C;;QIB0sfd,OAAO,Q;O;KAnBX,C;kFAsBA,yB;MAAA,sE;MAAA,8D;MkBhufA ,iB;MIBgufA,sC;QAeiB,Q;QAFb,IA9xQO,qBAAQ,CA8xQf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,C AAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBzufG, MAAO,KIByufO,QkBzufP,ElByufiB,CkBzufjB,C;;QIB2ufd,OAAO,Q;O;KAnBX,C;kFAsBA,yB;MAAA,sE;MAA

A,8D;MkBtvfA,iB;MIBsvfA,sC;QAeiB,Q;QAFb,IA5yQO,qBAAQ,CA4yQf,C;UAAe,MAAM,6B;QACrB,eAAe,S  
AAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;U  
ACR,WkB/vfG,MAAO,KIB+vfO,QkB/vfP,EIB+vfIB,CkB/vfjB,C;;QIBiwfd,OAAO,Q;O;KAnBX,C;mFAsBA,yB;  
MAAA,sE;MAAA,8D;MkB5wfA,iB;MIB4wfA,sC;QAeiB,Q;QAFb,IA1zQO,qBAAQ,CA0zQf,C;UAAe,MAAM,6  
B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,C  
AAL,CAAT,C;UACR,WkBrxfG,MAAO,KIBqxfO,QkBrxfP,EIBqxfIB,CkBxfjB,C;;QIBuxfd,OAAO,Q;O;KAnBX,  
C;mFAsBA,yB;MAAA,sE;MAAA,8D;MkBlyfA,iB;MIBkyfA,sC;QAeiB,Q;QAFb,IAx0QO,qBAAQ,CAw0Qf,C;U  
AAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,S  
AAS,UAAK,CAAL,CAAT,C;UACR,WkB3yfG,MAAO,KIB2yfO,QkB3yfP,EIB2yfIB,CkB3yfjB,C;;QIB6yfd,OAA  
O,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE;MAAA,8D;MkBxzfA,iB;MIBwzfA,sC;QAeiB,Q;QAFb,IAt1QO,qBAA  
Q,CAs1Qf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;  
UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBj0fG,MAAO,KIBi0fO,QkBj0fP,EIBi0fIB,CkBj0fjB,C;;Q  
IBm0fd,OAAO,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE;MAAA,8D;MkB90fA,iB;MIB80fA,sC;QAeiB,Q;QAFb,I  
Ap2QO,qBAAQ,CAo2Qf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aA  
AU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBv1fG,MAAO,KIBu1fO,QkBv1fP,EIBu1fI  
B,CkBv1fjB,C;;QIBy1fd,OAAO,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE;MAAA,8D;MkBp2fA,iB;MIBo2fA,sC;Q  
AeiB,Q;QAFb,IAI3QO,qBAAQ,CAk3Qf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QAC  
F,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkB72fG,MAAO,KIB62fO,Q  
kB72fP,EIB62fIB,CkB72fjB,C;;QIB+2fd,OAAO,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE;MAAA,8D;MkB13fA,iB  
;MIB03fA,sC;QAeiB,Q;QAFb,IAh4QO,qBAAQ,CAg4Qf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAA  
L,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBn4fG,M  
AAO,KIBm4fO,QkBn4fP,EIBm4fIB,CkBn4fjB,C;;QIBq4fd,OAAO,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE;MAA  
A,oC;MAAA,8D;MkBh5fA,iB;MIBg5fA,sC;QAeiB,Q;QAFb,IA94QO,qBAAQ,CA84Qf,C;UAAe,MAAM,6B;QA  
CrB,eAAe,SAAS,sBAK,CAAL,EAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAK,CAA  
L,EAAT,C;UACR,WkBz5fG,MAAO,KIBy5fO,QkBz5fP,EIBy5fIB,CkBz5fjB,C;;QIB25fd,OAAO,Q;O;KAnBX,C;  
mFAsBA,yB;MAAA,sE;MAAA,8D;MAAA,sC;QAaiB,Q;QAFb,IAI+QO,qBAAQ,CAk+Qf,C;UAAe,MAAM,6B;Q  
ACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAA  
L,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;mFAsBA,y  
B;MAAA,sE;MAAA,8D;MAAA,sC;QAaiB,Q;QAFb,IAh/QO,qBAAQ,CAg/Qf,C;UAAe,MAAM,6B;QACrB,eAA  
e,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;  
UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE  
;MAAA,8D;MAAA,sC;QAaiB,Q;QAFb,IA9/QO,qBAAQ,CA8/Qf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAA  
K,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,  
2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE;MAAA,8D;  
MAAA,sC;QAaiB,Q;QAFb,IA5gRO,qBAAQ,CA4gRf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,C  
AAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,C  
AAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE;MAAA,8D;MAAA,sC;  
QAaiB,Q;QAFb,IA1hRO,qBAAQ,CA0hRf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QA  
CF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ  
,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE;MAAA,8D;MAAA,sC;QAaiB,Q;Q  
AFb,IAxiRO,qBAAQ,CAwiRf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QA  
Ab,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,  
WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE;MAAA,8D;MAAA,sC;QAaiB,Q;QAFb,IAtjR  
O,qBAAQ,CAsjRf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,C  
AAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;Q  
AGnB,OAAO,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE;MAAA,8D;MAAA,sC;QAaiB,Q;QAFb,IApkRO,qBAAQ,  
CAokRf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;U  
ACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OA

AO,Q;O;KAnBX,C;mFAsBA,yB;MAAA,sE;MAAA,oC;MAAA,8D;MAAA,sC;QAaiB,Q;QAFb,IAIIRo,qBAAQ,CAkIRf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,EAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,EAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OA AO,Q;O;KAnBX,C;4FAsBA,yB;MAAA,8D;MkBJmgBA,iB;MIBimgBA,sC;QAaiB,Q;QAFb,IAxqRO,qBAAQ,CA wqRf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,Q AAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBxmgBG,MAAO,KIBwmgBO,QkBxmgBP,ElBwmgBiB,Ckxmg BJB,C;;QIB0mgBd,OAAO,Q;O;KAjBX,C;8FAoBA,yB;MAAA,8D;MkBrngBA,iB;MIBqngBA,sC;QAaiB,Q;QAFb ,IAprRO,qBAAQ,CAorRf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAA U,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkB5ngBG,MAAO,KIB4ngBO,QkB5ngBP,ElB 4ngBiB,CkB5ngBjB,C;;QIB8ngBd,OAAO,Q;O;KAjBX,C;8FAoBA,yB;MAAA,8D;MkBzogBA,iB;MIByogBA,sC; QAaiB,Q;QAFb,IAhsRO,qBAAQ,CAGsRf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF, +B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBhpgBG,MAAO,KIBgpgBO, QkBhpgBP,ElBgpgBiB,CkBhpgBjB,C;;QIBkpgBd,OAAO,Q;O;KAjBX,C;8FAoBA,yB;MAAA,8D;MkB7pgBA,iB ;MIB6pgBA,sC;QAaiB,Q;QAFb,IA5sRO,qBAAQ,CA4sRf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL, CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBpqqBG,M AAO,KIBoqqBO,QkBpqqBP,ElBoqqBiB,CkBpqqBjB,C;;QIBsqgBd,OAAO,Q;O;KAjBX,C;8FAoBA,yB;MAAA,8 D;MkBjrgBA,iB;MIBirgBA,sC;QAaiB,Q;QAFb,IAxtRO,qBAAQ,CAwtRf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS, UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR, WkBxrgBG,MAAO,KIBwrgBO,QkBxrgBP,ElBwrgBiB,CkBxrgBjB,C;;QIB0rgBd,OAAO,Q;O;KAjBX,C;8FAoBA ,yB;MAAA,8D;MkBrsrgBA,iB;MIBqsgBA,sC;QAaiB,Q;QAFb,IApuRO,qBAAQ,CAouRf,C;UAAe,OAAO,I;QACt B,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,C AAT,C;UACR,WkB5sgBG,MAAO,KIB4sgBO,QkB5sgBP,ElB4sgBiB,CkB5sgBjB,C;;QIB8sgBd,OAAO,Q;O;KAj BX,C;8FAoBA,yB;MAAA,8D;MkBztgBA,iB;MIBytgBA,sC;QAaiB,Q;QAFb,IAhvRO,qBAAQ,CAGvRf,C;UAAe, OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,U AAK,CAAL,CAAT,C;UACR,WkBhugBG,MAAO,KIBgugBO,QkBhugBP,ElBgugBiB,CkBhugBjB,C;;QIBkugBd, OAAO,Q;O;KAjBX,C;8FAoBA,yB;MAAA,8D;MkB7ugBA,iB;MIB6ugBA,sC;QAaiB,Q;QAFb,IA5vRO,qBAAQ, CA4vRf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UAC I,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBpvgBG,MAAO,KIBovgBO,QkBpvgBP,ElBovgBiB,CkBpvgB jB,C;;QIBsvgBd,OAAO,Q;O;KAjBX,C;8FAoBA,yB;MAAA,oC;MAAA,8D;MkBjwgBA,iB;MIBiwgBA,sC;QAai B,Q;QAFb,IAxwRO,qBAAQ,CAwwRf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,EAAT,C;QACF,+ B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,EAAT,C;UACR,WkBxwgBG,MAAO,KIBwwgBO ,QkBxwgBP,ElBwwgBiB,CkBxwgBjB,C;;QIB0wgBd,OAAO,Q;O;KAjBX,C;8FAoBA,yB;MAAA,8D;MkBhygBA ,iB;MIBgygBA,sC;QAaiB,Q;QAFb,IA51RO,qBAAQ,CA41Rf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CA AL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBvygBG ,MAAO,KIBuygBO,QkBvygBP,ElBuygBiB,CkBvygBjB,C;;QIByygBd,OAAO,Q;O;KAjBX,C;8FAoBA,yB;MAA A,8D;MkBpzgBA,iB;MIBozgBA,sC;QAaiB,Q;QAFb,IAx2RO,qBAAQ,CAw2Rf,C;UAAe,OAAO,I;QACtB,eAAe, SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;U ACR,WkB3zgBG,MAAO,KIB2zgBO,QkB3zgBP,ElB2zgBiB,CkB3zgBjB,C;;QIB6zgBd,OAAO,Q;O;KAjBX,C;+F AoBA,yB;MAAA,8D;MkBx0gBA,iB;MIBw0gBA,sC;QAaiB,Q;QAFb,IAp3RO,qBAAQ,CAo3Rf,C;UAAe,OAAO, I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,C AAL,CAAT,C;UACR,WkB/0gBG,MAAO,KIB+0gBO,QkB/0gBP,ElB+0gBiB,CkB/0gBjB,C;;QIBi1gBd,OAAO,Q; O;KAjBX,C;+FAoBA,yB;MAAA,8D;MkB51gBA,iB;MIB41gBA,sC;QAaiB,Q;QAFb,IAh4RO,qBAAQ,CAG4Rf,C ;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,S AAS,UAAK,CAAL,CAAT,C;UACR,WkBn2gBG,MAAO,KIBm2gBO,QkBn2gBP,ElBm2gBiB,CkBn2gBjB,C;;Ql Bq2gBd,OAAO,Q;O;KAjBX,C;+FAoBA,yB;MAAA,8D;MkBh3gBA,iB;MIBg3gBA,sC;QAaiB,Q;QAFb,IA54RO, qBAAQ,CA44Rf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV, iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkBv3gBG,MAAO,KIBu3gBO,QkBv3gBP,ElBu3gBiB,C kBv3gBjB,C;;QIBy3gBd,OAAO,Q;O;KAjBX,C;+FAoBA,yB;MAAA,8D;MkBp4gBA,iB;MIBo4gBA,sC;QAaiB,Q

;QAFb,IAx5RO,qBAAQ,CAw5Rf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QA  
Ab,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkB34gBG,MAAO,KIB24gBO,QkB34  
gBP,ElB24gBiB,CkB34gBjB,C;;QIB64gBd,OAAO,Q;O;KAjBX,C;+FAoBA,yB;MAAA,8D;MkBX5gBA,iB;MIBw  
5gBA,sC;QAaiB,Q;QAFb,IAp6RO,qBAAQ,CAo6Rf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAA  
T,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,WkB/5gBG,MAAO,  
KIB+5gBO,QkB/5gBP,ElB+5gBiB,CkB/5gBjB,C;;QIBi6gBd,OAAO,Q;O;KAjBX,C;+FAoBA,yB;MAAA,8D;MkB  
56gBA,iB;MIB46gBA,sC;QAaiB,Q;QAFb,IAh7RO,qBAAQ,CAg7Rf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UA  
AK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,Wk  
Bn7gBG,MAAO,KIBm7gBO,QkBn7gBP,ElBm7gBiB,CkBn7gBjB,C;;QIBq7gBd,OAAO,Q;O;KAjBX,C;+FAoBA,  
yB;MAAA,oC;MAAA,8D;MkBh8gBA,iB;MIBg8gBA,sC;QAaiB,Q;QAFb,IA57RO,qBAAQ,CA47Rf,C;UAAe,OA  
AO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,EAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBA  
AK,CAAL,EAAT,C;UACR,WkBv8gBG,MAAO,KIBu8gBO,QkBv8gBP,ElBu8gBiB,CkBv8gBjB,C;;QIBy8gBd,O  
AAO,Q;O;KAjBX,C;+FAoBA,yB;MAAA,8D;MAAA,sC;QAWiB,Q;QAFb,IA9gSO,qBAAQ,CA8gSf,C;UAAe,O  
AAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UA  
AK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;+F  
AoBA,yB;MAAA,8D;MAAA,sC;QAWiB,Q;QAFb,IA1hSO,qBAAQ,CA0hSf,C;UAAe,OAAO,I;QACtB,eAAe,SA  
AS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UA  
CR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;+FAoBA,yB;MAAA,8D;M  
AAA,sC;QAWiB,Q;QAFb,IAiSO,qBAAQ,CAsiSf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,  
C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,  
KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;+FAoBA,yB;MAAA,8D;MAAA,sC;QAWiB,Q;QAFb,  
IAIjSO,qBAAQ,CAkjSf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,  
CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;  
QAGnB,OAAO,Q;O;KAjBX,C;+FAoBA,yB;MAAA,8D;MAAA,sC;QAWiB,Q;QAFb,IA9jSO,qBAAQ,CA8jSf,C;  
UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,S  
AAS,UAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAj  
BX,C;+FAoBA,yB;MAAA,8D;MAAA,sC;QAWiB,Q;QAFb,IA1kSO,qBAAQ,CA0kSf,C;UAAe,OAAO,I;QACtB,e  
AAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAA  
T,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;+FAoBA,yB;MAA  
A,8D;MAAA,sC;QAWiB,Q;QAFb,IAItSO,qBAAQ,CAsiSf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,  
CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,  
CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;+FAoBA,yB;MAAA,8D;MAAA,sC;QAWiB,Q  
;QAFb,IAImSO,qBAAQ,CAkmSf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QA  
Ab,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,  
WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;+FAoBA,yB;MAAA,oC;MAAA,8D;MAAA,sC;QAWiB,Q;QAFb,IA9  
mSO,qBAAQ,CA8mSf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,EAAT,C;QACF,+B;QAAb,aAAU,  
CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,EAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;  
QAGnB,OAAO,Q;O;KAjBX,C;wFAoBA,yB;MAAA,sE;MAAA,8D;MAAA,kD;QAaiB,Q;QAFb,IApsSO,qBAAQ,  
CAosSf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;U  
ACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,  
CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;0FAsBA,yB;MAAA,sE;MAAA,8D;MAAA,kD;QAai  
B,Q;QAFb,IAItSO,qBAAQ,CAktSf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;  
QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB  
,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;0FAsBA,yB;MAAA,sE;MA  
AA,8D;MAAA,kD;QAaiB,Q;QAFb,IAhuSO,qBAAQ,CAguSf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,  
CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,U  
AAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,  
C;0FAsBA,yB;MAAA,sE;MAAA,8D;MAAA,kD;QAaiB,Q;QAFb,IA9uSO,qBAAQ,CA8uSf,C;UAAe,MAAM,6B;

QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;0FAsBA,yB;MAAA,sE;MAAA,8D;MAAA,kD;QAaiB,Q;QAFb,IA5vSO,qBAAQ,C A4vSf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;0FAsBA,yB;MAAA,sE;MAAA,8D;MAAA,kD;QAaiB,Q;QAFb,IA1wSO,qBAAQ,CA0wSf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;0FAsBA,yB;MAAA,sE;MAAA,8D;MAAA,kD;QAaiB,Q;QAFb,IAxxSO,qBAAQ,CAwxSf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;0FAsBA,yB;MAAA,sE;MAAA,8D;MAAA,kD;QAaiB,Q;QAFb,IAtySO,qBAAQ,CAsySf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;0FAsBA,yB;MAAA,sE;MAAA,8D;MAAA,kD;QAaiB,Q;QAFb,IApzSO,qBAAQ,CAozSf,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,EAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,EAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;oGAsBA,yB;MAAA,8D;MAAA,kD;QAWiB,Q;QAFb,IAx4SO,qBAAQ,CAw4Sf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;0FAsBA,yB;MAAA,sE;MAAA,8D;MAAA,kD;QAaiB,Q;QAFb,IA56SO,qBAAQ,CA46Sf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;0FAsBA,yB;MAAA,sE;MAAA,8D;MAAA,kD;QAWiB,Q;QAFb,IAx7SO,qBAAQ,CAw7Sf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;sGAoBA,yB;MAAA,8D;MAAA,kD;QAWiB,Q;QAFb,IAh6SO,qBAAQ,CAg6Sf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;sGAoBA,yB;MAAA,8D;MAAA,kD;QAWiB,Q;QAFb,IAh9SO,qBAAQ,CAg9Sf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;sGAoBA,yB;MAAA,8D;MAAA,kD;QAWiB,Q;QAFb,IA59SO,qBAAQ,CA49Sf,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,UAAK,CAAL,CAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,UAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;IAoBA,8B;MASiB,Q;MAFb,IA1jTO,qBAAQ,CA0jTf,C;QAae,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,+

B;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,MkB1/hBG,MAAO,KIB0/hBE,GkB1/hBF,EIB0/hBO,CkB1/hBP,C;;MIB4/hBd,OAAO,G;K;IAGX,gC;MASiB,Q;MAFb,IA1kTO,qBAAQ,CA0kTf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,+B;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,MkBrhiBG,MAAO,KIBqhiBE,GkBrhiBF,EIBqhiBO,CkBrihBP,C;;MIBuhiBd,OAAO,G;K;IAGX,gC;MAOiB,Q;MAFb,IAxlTO,qBAAQ,CAwlTf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,+B;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,sBAAM,CAAN,KAAJ,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAGX,gC;MAOiB,Q;MAFb,IA9lTO,qBAAQ,CA8lTf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,MAAM,CAAV,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAGX,gC;MAOiB,Q;MAFb,IApmTO,qBAAQ,CAomTf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,MAAM,CAAV,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAGX,gC;MAOiB,Q;MAFb,IA1mTO,qBAAQ,CA0mTf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,MAAM,CAAV,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAGX,gC;MAOiB,Q;MAFb,IAhnTO,qBAAQ,CAgnTf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,oBAAM,CAAN,KAAJ,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAGX,gC;MASiB,Q;MAFb,IAxnTO,qBAAQ,CAwnTf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,MkB3miBG,MAAO,KIB2miBE,GkB3miBF,EIB2miBO,CkB3miBP,C;;MIB6miBd,OAAO,G;K;IAGX,gC;MASiB,Q;MAFb,IAhoTO,qBAAQ,CAGoTf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,MkBhniBG,MAAO,KIBgniBE,GkBhniBF,EIBgniBO,CkBhniBP,C;;MIBkniBd,OAAO,G;K;IAGX,gC;MAOiB,Q;MAFb,IA9nTO,qBAAQ,CA8nTf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,MAAM,CAAV,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAGX,wC;MAGI,OAAO,yBAAc,UAAAd,C;K;IAGX,0C;MAGI,OAAO,2BAAc,UAAAd,C;K;IAGX,0C;MAGI,OAAO,2BAAc,UAAAd,C;K;IAGX,0C;MAGI,OAAO,2BAAc,UAAAd,C;K;IAGX,0C;MAGI,OAAO,2BAAc,UAAAd,C;K;IAGX,0C;MAGI,OAAO,2BAAc,UAAAd,C;K;IAGX,0C;MAGI,OAAO,2BAAc,UAAAd,C;K;IAGX,0C;MAGI,OAAO,2BAAc,UAAAd,C;K;IAGX,8C;MAOiB,Q;MAFb,IAlwTO,qBAAQ,CAkwTf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,+B;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,gD;MAOiB,Q;MAFb,IAxwTO,qBAAQ,CAwwTf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,gD;MAOiB,Q;MAFb,IA9wTO,qBAAQ,CA8wTf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,gD;MAOiB,Q;MAFb,IApxTO,qBAAQ,CAoxTf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,gD;MAOiB,Q;MAFb,IA1xTO,qBAAQ,CA0xTf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,gD;MAOiB,Q;MAFb,IAhyTO,qBAAQ,CAGyTf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,gD;MAOiB,Q;MAFb,IA5yTO,qBAAQ,CA4yTf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,gD;MAOiB,Q;MAFb,IAlzTO,qBAAQ,CAkzTf,C;QAAe,OAAO,I;MACtB,UAAU,UAAK,CAAL,C;MACG,iC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,UAAK,CAAL,C;QACR,IAAI,UAAW,SAAQ,gBAAR,EAAa,cAAb,CAA

X,GAA6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,yB;MAMI,OAj4TO,qBAAQ,C;K;IAo4TnB,2B;MAMI,OAl4TO,qBAAQ,C;K;IAq4TnB,2B;MAMI,OAn4TO,qBAAQ,C;K;IAS4TnB,2B;MAMI,OAp4TO,qBAAQ,C;K;IAu4TnB,2B;MAMI,OAr4TO,qBAAQ,C;K;IAw4TnB,2B;MAMI,OAt4TO,qBAAQ,C;K;IAY4TnB,2B;MAMI,OAv4TO,qBAAQ,C;K;IA04TnB,2B;MAMI,OAx4TO,qBAAQ,C;K;IA24TnB,2B;MAMI,OAz4TO,qBAAQ,C;K;gFA44TnB,gC;MAMoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OA AV,CAAJ,C;UAAwB,OAAO,K;;MACrD,OAAO,I;K;gFAGX,gC;MAMoB,Q;MAAhB,wBAAGB,SAAhB,gB;QA AgB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OA AV,CAAJ,C;UAAwB,OAAO,K;;MACrD,OAAO,I;K;iFAGX,gC; MAMoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OA AV,CAAJ,C;UAA wB,OAAO,K;;MACrD,OAAO,I;K;iFAGX,gC;MAMoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB, M;QAAsB,IAAI,UAAU,OA AV,CAAJ,C;UAAwB,OAAO,K;;MACrD,OAAO,I;K;iFAGX,gC;MAMoB,Q;MAAhB ,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OA AV,CAAJ,C;UAAwB,OAAO,K;;MAC rD,OAAO,I;K;iFAGX,gC;MAMoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QAAsB,IAAI,U AAU,OA AV,CAAJ,C;UAAwB,OAAO,K;;MACrD,OAAO,I;K;iFAGX,gC;MAMoB,Q;MAAhB,wBAAGB,SAAhB ,gB;QAAgB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OA AV,CAAJ,C;UAAwB,OAAO,K;;MACrD,OAAO,I;K;iFA GX,gC;MAMoB,Q;MAAhB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QAAsB,IAAI,UAAU,OA AV,CAAJ ,C;UAAwB,OAAO,K;;MACrD,OAAO,I;K;iFAGX,yB;MAAA,oC;MAAA,gC;MAAA,uC;QAMoB,Q;QAAhB,wB AAGB,SAAhB,gB;UAAgB,cAAhB,UAAgB,SAAhB,O;UAAAsB,IAAI,UAAU,oBA AV,CAAJ,C;YAAwB,OAAO,K ;;QACrD,OAAO,I;O;KAPX,C;kFAUA,6B;MAMmC,Q;MAAhB,iD;QAAgB,cAAhB,e;QAAsB,OAAO,OAAP,C;; MAArC,gB;K;oFAGJ,6B;MAMmC,Q;MAAhB,iD;QAAgB,cAAhB,e;QAAsB,OAAO,OAAP,C;;MAArC,gB;K;oF AGJ,6B;MAMmC,Q;MAAhB,iD;QAAgB,cAAhB,e;QAAsB,OAAO,OAAP,C;;MAArC,gB;K;oFAGJ,6B;MAMmC ,Q;MAAhB,iD;QAAgB,cAAhB,e;QAAsB,OAAO,OAAP,C;;MAArC,gB;K;oFAGJ,6B;MAMmC,Q;MAAhB,iD;Q AAAGB,cAAhB,e;QAAsB,OAAO,OAAP,C;;MAArC,gB;K;oFAGJ,6B;MAMmC,Q;MAAhB,iD;QAAgB,cAAhB,e; QAAsB,OAAO,OAAP,C;;MAArC,gB;K;oFAGJ,6B;MAMmC,Q;MAAhB,iD;QAAgB,cAAhB,e;QAAsB,OAAO,OA AP,C;;MAArC,gB;K;oFAGJ,6B;MAMmC,Q;MAAhB,iD;QAAgB,cAAhB,e;QAAsB,OAAO,OAAP,C;;MAArC, gB;K;oFAGJ,yB;MAAA,oC;MAAA,gC;MAAA,oC;QAMmC,Q;QAAhB,iD;UAAgB,cAAhB,0B;UAAAsB,OAAO,o BAAP,C;;QAArC,gB;O;KANJ,C;gGASA,6B;MARjJiB,gB;MADb,YAAY,C;MACZ,iD;QAAa,WAAb,e;QAAMb, QAAO,cAAP,EAAO,sBAAP,WAAgB,IAAhB,C;;MA8jJnB,gB;K;kGAGJ,6B;MAvjJiB,gB;MADb,YAAY,C;MAC Z,iD;QAAa,WAAb,e;QAAMb,QAAO,cAAP,EAAO,sBAAP,WAAgB,IAAhB,C;;MAgkJnB,gB;K;kGAGJ,6B;MAz jJiB,gB;MADb,YAAY,C;MACZ,iD;QAAa,WAAb,e;QAAMb,QAAO,cAAP,EAAO,sBAAP,WAAgB,IAAhB,C;;M AkkJnB,gB;K;kGAGJ,6B;MA3jJiB,gB;MADb,YAAY,C;MACZ,iD;QAAa,WAAb,e;QAAMb,QAAO,cAAP,EAA O,sBAAP,WAAgB,IAAhB,C;;MAokJnB,gB;K;kGAGJ,6B;MA7jJiB,gB;MADb,YAAY,C;MACZ,iD;QAAa,WAA b,e;QAAMb,QAAO,cAAP,EAAO,sBAAP,WAAgB,IAAhB,C;;MAskJnB,gB;K;kGAGJ,6B;MAjJiB,gB;MADb,Y AAY,C;MACZ,iD;QAAa,WAAb,e;QAAMb,QAAO,cAAP,EAAO,sBAAP,WAAgB,IAAhB,C;;MAwkJnB,gB;K;k GAGJ,6B;MAjkJiB,gB;MADb,YAAY,C;MACZ,iD;QAAa,WAAb,e;QAAMb,QAAO,cAAP,EAAO,sBAAP,WAA gB,IAAhB,C;;MAokJnB,gB;K;kGAGJ,6B;MAnkJiB,gB;MADb,YAAY,C;MACZ,iD;QAAa,WAAb,e;QAAMb,QA AO,cAAP,EAAO,sBAAP,WAAgB,IAAhB,C;;MA4kJnB,gB;K;kGAGJ,yB;MAAA,6B;MAAA,sC;MA5kJA,oC;M AAA,gC;MA4kJA,2BASiB,yB;QArLjB,oC;QAAA,gC;eAqLjB,0B;UAAA,4B;YAAE,aAAe,c;YA9kJjB,gB;YADb ,YAAY,C;YACZ,iD;cAAa,WAAb,0B;cAAmB,QAAO,cAAP,EAAO,sBAAP,WAAgB,iBAAhB,C;;YA8kJmB,W; W;S;OAAzB,C;MATjB,oC;QArkJiB,gB;QADb,YAAY,C;QACZ,iD;UAAa,WAAb,0B;UAAmB,QAAO,cAAP,EA AO,sBAAP,WAAgB,iBAAhB,C;;QA8kJnB,gB;O;KATJ,C;kFAYA,yB;MAAA,4F;MAAA,8D;MAAA,uC;QAgBq B,Q;QAHjB,IAhvUO,qBAAQ,CAGvUf,C;UACI,MAAM,mCAA8B,+BAA9B,C;QACV,kBAAqB,UAAK,CAAL,C ;QACJ,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,WAAV,EAAuB,UAAK,KAAL,CAAvB,C;;QAEIB,OA AO,W;O;KANBX,C;oFAsBA,yB;MAAA,4F;MAAA,8D;MAAA,uC;QAgBqB,Q;QAHjB,IA9vUO,qBAAQ,CA8vU f,C;UACI,MAAM,mCAA8B,+BAA9B,C;QACV,kBAaKB,UAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB; UACI,cAAc,UAAU,WAAV,EAAuB,UAAK,KAAL,CAAvB,C;;QAEIB,OAAO,W;O;KANBX,C;oFAsBA,yB;MA AA,4F;MAAA,8D;MAAA,uC;QAgBqB,Q;QAHjB,IA5wUO,qBAAQ,CA4wUf,C;UACI,MAAM,mCAA8B,+BAA 9B,C;QACV,kBAaKB,UAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,WAAV,EAAu B,UAAK,KAAL,CAAvB,C;;QAEIB,OAAO,W;O;KANBX,C;oFAsBA,yB;MAAA,4F;MAAA,8D;MAAA,uC;QAg

BqB,Q;QAHjB,IA1xUO,qBAAQ,CA0xUf,C;UACI,MAAM,mCAA8B,+BAA9B,C;QACV,kBAakB,UAAK,CAA L,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,WAAV,EAAuB,UAAK,KAAL,CAAvB,C;;QAEIB, OAAO,W;O;KAnBX,C;oFAsBA,yB;MAAA,4F;MAAA,8D;MAAA,uC;QAgBqB,Q;QAHjB,IAxyUO,qBAAQ,CA wyUf,C;UACI,MAAM,mCAA8B,+BAA9B,C;QACV,kBAakB,UAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd ,yB;UACI,cAAc,UAAU,WAAV,EAAuB,UAAK,KAAL,CAAvB,C;;QAEIB,OAAO,W;O;KAnBX,C;oFAsBA,yB; MAAA,4F;MAAA,8D;MAAA,uC;QAgBqB,Q;QAHjB,IAtzUO,qBAAQ,CAszUf,C;UACI,MAAM,mCAA8B,+BA A9B,C;QACV,kBAakB,UAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,WAAV,EAA uB,UAAK,KAAL,CAAvB,C;;QAEIB,OAAO,W;O;KAnBX,C;oFAsBA,yB;MAAA,4F;MAAA,8D;MAAA,uC;QA gBqB,Q;QAHjB,IAp0UO,qBAAQ,CAo0Uf,C;UACI,MAAM,mCAA8B,+BAA9B,C;QACV,kBAakB,UAAK,CAA L,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,WAAV,EAAuB,UAAK,KAAL,CAAvB,C;;QAEIB, OAAO,W;O;KAnBX,C;oFAsBA,yB;MAAA,4F;MAAA,8D;MAAA,uC;QAgBqB,Q;QAHjB,IA11UO,qBAAQ,CAk 1Uf,C;UACI,MAAM,mCAA8B,+BAA9B,C;QACV,kBAakB,UAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd, yB;UACI,cAAc,UAAU,WAAV,EAAuB,UAAK,KAAL,CAAvB,C;;QAEIB,OAAO,W;O;KAnBX,C;oFAsBA,yB; MAAA,4F;MAAA,8D;MAAA,oC;MAAA,gC;MAAA,uC;QAgBqB,Q;QAHjB,IAh2UO,qBAAQ,Cag2Uf,C;UACI, MAAM,mCAA8B,+BAA9B,C;QACV,kBAakB,UAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cA Ac,oBAAU,wBAAV,EAAuB,sBAAK,KAAL,EAAvB,E;;QAEIB,OAAO,W;O;KAnBX,C;gGAsBA,yB;MAAA,4F; MAAA,8D;MAAA,uC;QAgBqB,Q;QAHjB,IA7UO,qBAAQ,CAs7Uf,C;UACI,MAAM,mCAA8B,+BAA9B,C;QA CV,kBAaqB,UAAK,CAAL,C;QACJ,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,E AA8B,UAAK,KAAL,CAA9B,C;;QAEIB,OAAO,W;O;KAnBX,C;kGAsBA,yB;MAAA,4F;MAAA,8D;MAAA,uC; QAgBqB,Q;QAHjB,IAp8UO,qBAAQ,CAo8Uf,C;UACI,MAAM,mCAA8B,+BAA9B,C;QACV,kBAakB,UAAK,C AAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL, CAA9B,C;;QAEIB,OAAO,W;O;KAnBX,C;kGAsBA,yB;MAAA,4F;MAAA,8D;MAAA,uC;QAgBqB,Q;QAHjB,I A19UO,qBAAQ,CAk9Uf,C;UACI,MAAM,mCAA8B,+BAA9B,C;QACV,kBAakB,UAAK,CAAL,C;QACD,+B;Q AAjB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;;QAEIB,O AAO,W;O;KAnBX,C;kGAsBA,yB;MAAA,4F;MAAA,8D;MAAA,uC;QAgBqB,Q;QAHjB,IAh+UO,qBAAQ,Cag +Uf,C;UACI,MAAM,mCAA8B,+BAA9B,C;QACV,kBAakB,UAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd, yB;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;;QAEIB,OAAO,W;O;KAnBX, C;kGAsBA,yB;MAAA,4F;MAAA,8D;MAAA,uC;QAgBqB,Q;QAHjB,IA9+UO,qBAAQ,CA8+Uf,C;UACI,MAA M,mCAA8B,+BAA9B,C;QACV,kBAakB,UAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,UA AU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;;QAEIB,OAAO,W;O;KAnBX,C;kGAsBA,yB;MA AAA,4F;MAAA,8D;MAAA,uC;QAgBqB,Q;QAHjB,IA5/UO,qBAAQ,CA4/Uf,C;UACI,MAAM,mCAA8B,+BAA9 B,C;QACV,kBAakB,UAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,KAAV,EAAiB, WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;;QAEIB,OAAO,W;O;KAnBX,C;kGAsBA,yB;MAAA,4F;MAAA,8D; MAAA,uC;QAgBqB,Q;QAHjB,IA1gVO,qBAAQ,CA0gVf,C;UACI,MAAM,mCAA8B,+BAA9B,C;QACV,kBAA kB,UAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,U AAK,KAAL,CAA9B,C;;QAEIB,OAAO,W;O;KAnBX,C;kGAsBA,yB;MAAA,4F;MAAA,8D;MAAA,uC;QAgBqB ,Q;QAHjB,IAxhVO,qBAAQ,CAwhVf,C;UACI,MAAM,mCAA8B,+BAA9B,C;QACV,kBAakB,UAAK,CAAL,C; QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B ,C;;QAEIB,OAAO,W;O;KAnBX,C;kGAsBA,yB;MAAA,4F;MAAA,8D;MAAA,oC;MAAA,gC;MAAA,uC;QAgB qB,Q;QAHjB,IAtiVO,qBAAQ,CAsiVf,C;UACI,MAAM,mCAA8B,+BAA9B,C;QACV,kBAakB,UAAK,CAAL,C; QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,oBAAU,KAAV,EAAiB,wBAAjB,EAA8B,sBAAK,KAAL,EAA 9B,E;;QAEIB,OAAO,W;O;KAnBX,C;4GAsBA,yB;MAAA,8D;MAAA,uC;QAgBqB,Q;QAHjB,IA5nVO,qBAAQ, CA4nVf,C;UACI,OAAO,I;QACX,kBAAqB,UAAK,CAAL,C;QACJ,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,U AAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;;QAEIB,OAAO,W;O;KAnBX,C;8GAsBA,yB;M AAAA,8D;MAAA,uC;QAgBqB,Q;QAHjB,IA1oVO,qBAAQ,CA0oVf,C;UACI,OAAO,I;QACX,kBAakB,UAAK,C AAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL, CAA9B,C;;QAEIB,OAAO,W;O;KAnBX,C;8GAsBA,yB;MAAA,8D;MAAA,uC;QAgBqB,Q;QAHjB,IAxpVO,qB AAQ,CAwpVf,C;UACI,OAAO,I;QACX,kBAakB,UAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,c



AAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;;QAEIB,OAAO,W;O;KAnBX,C;8GAsBA,  
yB;MAAA,8D;MAAA,uC;QAgBqB,Q;QAHjB,IA1qVO,qBAAQ,CAsqVf,C;UACI,OAAO,I;QACX,kBAAkB,UAA  
K,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KA  
AL,CAA9B,C;;QAEIB,OAAO,W;O;KAnBX,C;8GAsBA,yB;MAAA,8D;MAAA,uC;QAgBqB,Q;QAHjB,IAprVO,  
qBAAQ,CAorVf,C;UACI,OAAO,I;QACX,kBAAkB,UAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,  
cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;;QAEIB,OAAO,W;O;KAnBX,C;8GAsB  
A,yB;MAAA,8D;MAAA,uC;QAgBqB,Q;QAHjB,IAIsVO,qBAAQ,CAksVf,C;UACI,OAAO,I;QACX,kBAAkB,U  
AAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,  
KAAL,CAA9B,C;;QAEIB,OAAO,W;O;KAnBX,C;8GAsBA,yB;MAAA,8D;MAAA,uC;QAgBqB,Q;QAHjB,IAht  
VO,qBAAQ,CAgtVf,C;UACI,OAAO,I;QACX,kBAAkB,UAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;U  
ACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;;QAEIB,OAAO,W;O;KAnBX,C;8G  
AsBA,yB;MAAA,8D;MAAA,uC;QAgBqB,Q;QAHjB,IA9tVO,qBAAQ,CA8tVf,C;UACI,OAAO,I;QACX,kBAAkB  
B,UAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,UA  
AK,KAAL,CAA9B,C;;QAEIB,OAAO,W;O;KAnBX,C;8GAsBA,yB;MAAA,8D;MAAA,oC;MAAA,gC;MAAA,u  
C;QAgBqB,Q;QAHjB,IA5uVO,qBAAQ,CA4uVf,C;UACI,OAAO,I;QACX,kBAAkB,UAAK,CAAL,C;QACD,+B;  
QAAjB,iBAAc,CAAd,yB;UACI,cAAc,oBAAU,KAAV,EAAiB,wBAAjB,EAA8B,sBAAK,KAAL,EAA9B,E;;QAE  
IB,OAAO,W;O;KAnBX,C;8FAsBA,yB;MAAA,8D;MAAA,uC;QAIbqB,Q;QAHjB,IAN0VO,qBAAQ,CAM0Vf,C;  
UACI,OAAO,I;QACX,kBAAqB,UAAK,CAAL,C;QACJ,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,WAA  
V,EAAuB,UAAK,KAAL,CAAvB,C;;QAEIB,OAAO,W;O;KApBX,C;gGAuBA,yB;MAAA,8D;MAAA,uC;QAIbq  
B,Q;QAHjB,IAL1VO,qBAAQ,CAk1Vf,C;UACI,OAAO,I;QACX,kBAAkB,UAAK,CAAL,C;QACD,+B;QAAjB,iB  
AAc,CAAd,yB;UACI,cAAc,UAAU,WAAV,EAAuB,UAAK,KAAL,CAAvB,C;;QAEIB,OAAO,W;O;KApBX,C;g  
GAuBA,yB;MAAA,8D;MAAA,uC;QAIbqB,Q;QAHjB,IAj2VO,qBAAQ,CAi2Vf,C;UACI,OAAO,I;QACX,kBAA  
kB,UAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,WAAV,EAAuB,UAAK,KAAL,CA  
AvB,C;;QAEIB,OAAO,W;O;KApBX,C;gGAuBA,yB;MAAA,8D;MAAA,uC;QAIbqB,Q;QAHjB,IAh3VO,qBAA  
Q,CAg3Vf,C;UACI,OAAO,I;QACX,kBAAkB,UAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc  
,UAAU,WAAV,EAAuB,UAAK,KAAL,CAAvB,C;;QAEIB,OAAO,W;O;KApBX,C;gGAuBA,yB;MAAA,8D;MA  
AA,uC;QAIbqB,Q;QAHjB,IA/3VO,qBAAQ,CA+3Vf,C;UACI,OAAO,I;QACX,kBAAkB,UAAK,CAAL,C;QACD  
,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,WAAV,EAAuB,UAAK,KAAL,CAAvB,C;;QAEIB,OAAO,W;  
O;KApBX,C;gGAuBA,yB;MAAA,8D;MAAA,uC;QAIbqB,Q;QAHjB,IA94VO,qBAAQ,CA84Vf,C;UACI,OAAO,  
I;QACX,kBAAkB,UAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,WAAV,EAAuB,U  
AAK,KAAL,CAAvB,C;;QAEIB,OAAO,W;O;KApBX,C;gGAuBA,yB;MAAA,8D;MAAA,uC;QAIbqB,Q;QAHjB,  
IA75VO,qBAAQ,CA65Vf,C;UACI,OAAO,I;QACX,kBAAkB,UAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,  
yB;UACI,cAAc,UAAU,WAAV,EAAuB,UAAK,KAAL,CAAvB,C;;QAEIB,OAAO,W;O;KApBX,C;gGAuBA,yB;  
MAAA,8D;MAAA,uC;QAIbqB,Q;QAHjB,IA56VO,qBAAQ,CA46Vf,C;UACI,OAAO,I;QACX,kBAAkB,UAAK,  
CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,WAAV,EAAuB,UAAK,KAAL,CAAvB,C;;Q  
AEIB,OAAO,W;O;KApBX,C;gGAuBA,yB;MAAA,8D;MAAA,oC;MAAA,gC;MAAA,uC;QAIbqB,Q;QAHjB,IA3  
7VO,qBAAQ,CA27Vf,C;UACI,OAAO,I;QACX,kBAAkB,UAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;  
UACI,cAAc,oBAAU,wBAAV,EAAuB,sBAAK,KAAL,EAAvB,E;;QAEIB,OAAO,W;O;KApBX,C;4FAuBA,yB;M  
AAA,8D;MAAA,4F;MAAA,uC;QAe0B,UAEO,M;QAJhC,YAAY,wB;QACZ,IAAI,QAAQ,CAAZ,C;UAAe,MAA  
M,mCAA8B,+BAA9B,C;QACrB,kBAAqB,UAAI,YAAJ,EAAL,oBAAJ,O;QACrB,OAAO,SAAS,CAAhB,C;UACI,  
cAAc,UAAU,UAAI,cAAJ,EAAL,sBAAJ,SAAV,EAAwB,WAAxB,C;;QAEIB,OAAO,W;O;KAnBX,C;8FAsBA,yB  
;MAAA,8D;MAAA,4F;MAAA,uC;QAe0B,UAEU,M;QAJhC,YAAY,wB;QACZ,IAAI,QAAQ,CAAZ,C;UAAe,M  
AAM,mCAA8B,+BAA9B,C;QACrB,kBAAkB,UAAI,YAAJ,EAAL,oBAAJ,O;QACIB,OAAO,SAAS,CAAhB,C;U  
ACI,cAAc,UAAU,UAAI,cAAJ,EAAL,sBAAJ,SAAV,EAAwB,WAAxB,C;;QAEIB,OAAO,W;O;KAnBX,C;8FAsB  
A,yB;MAAA,8D;MAAA,4F;MAAA,uC;QAe0B,UAEU,M;QAJhC,YAAY,wB;QACZ,IAAI,QAAQ,CAAZ,C;UAA  
e,MAAM,mCAA8B,+BAA9B,C;QACrB,kBAAkB,UAAI,YAAJ,EAAL,oBAAJ,O;QACIB,OAAO,SAAS,CAAhB,C  
;UACI,cAAc,UAAU,UAAI,cAAJ,EAAL,sBAAJ,SAAV,EAAwB,WAAxB,C;;QAEIB,OAAO,W;O;KAnBX,C;8FAs  
BA,yB;MAAA,8D;MAAA,4F;MAAA,uC;QAe0B,UAEU,M;QAJhC,YAAY,wB;QACZ,IAAI,QAAQ,CAAZ,C;UA

Ae,MAAM,mCAA8B,+BAA9B,C;QACrB,kBAakB,UAAI,YAAJ,EAAI,oBAAJ,O;QACIB,OAAO,SAAS,CAAhB  
 ,C;UACI,cAAc,UAAU,UAAI,cAAJ,EAAI,sBAAJ,SAAV,EAAwB,WAAxB,C;;QAEIB,OAAO,W;O;KAnBX,C;8F  
 AsBA,yB;MAAA,8D;MAAA,4F;MAAA,uC;QAe0B,UAEU,M;QAJhC,YAAY,wB;QACZ,IAAI,QAAQ,CAAZ,C;  
 UAAe,MAAM,mCAA8B,+BAA9B,C;QACrB,kBAakB,UAAI,YAAJ,EAAI,oBAAJ,O;QACIB,OAAO,SAAS,CA  
 AhB,C;UACI,cAAc,UAAU,UAAI,cAAJ,EAAI,sBAAJ,SAAV,EAAwB,WAAxB,C;;QAEIB,OAAO,W;O;KAnBX,  
 C;8FAsBA,yB;MAAA,8D;MAAA,4F;MAAA,uC;QAe0B,UAEU,M;QAJhC,YAAY,wB;QACZ,IAAI,QAAQ,CAA  
 Z,C;UAAe,MAAM,mCAA8B,+BAA9B,C;QACrB,kBAakB,UAAI,YAAJ,EAAI,oBAAJ,O;QACIB,OAAO,SAAS,  
 CAAhB,C;UACI,cAAc,UAAU,UAAI,cAAJ,EAAI,sBAAJ,SAAV,EAAwB,WAAxB,C;;QAEIB,OAAO,W;O;KAn  
 BX,C;8FAsBA,yB;MAAA,8D;MAAA,4F;MAAA,uC;QAe0B,UAEU,M;QAJhC,YAAY,wB;QACZ,IAAI,QAAQ,C  
 AAZ,C;UAAe,MAAM,mCAA8B,+BAA9B,C;QACrB,kBAakB,UAAI,YAAJ,EAAI,oBAAJ,O;QACIB,OAAO,SA  
 AS,CAAhB,C;UACI,cAAc,UAAU,UAAI,cAAJ,EAAI,sBAAJ,SAAV,EAAwB,WAAxB,C;;QAEIB,OAAO,W;O;K  
 AnBX,C;8FAsBA,yB;MAAA,8D;MAAA,4F;MAAA,uC;QAe0B,UAEU,M;QAJhC,YAAY,wB;QACZ,IAAI,QAA  
 Q,CAAZ,C;UAAe,MAAM,mCAA8B,+BAA9B,C;QACrB,kBAakB,UAAI,YAAJ,EAAI,oBAAJ,O;QACIB,OAAO,  
 SAAS,CAAhB,C;UACI,cAAc,UAAU,UAAI,cAAJ,EAAI,sBAAJ,SAAV,EAAwB,WAAxB,C;;QAEIB,OAAO,W;  
 O;KAnBX,C;8FAsBA,yB;MAAA,8D;MAAA,4F;MAAA,oC;MAAA,gC;MAAA,uC;QAe0B,UAEU,M;QAJhC,YA  
 AY,wB;QACZ,IAAI,QAAQ,CAAZ,C;UAAe,MAAM,mCAA8B,+BAA9B,C;QACrB,kBAakB,UAAI,YAAJ,EAAI  
 ,oBAAJ,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,oBAAU,sBAAl,cAAJ,EAAI,sBAAJ,UAAV,EAAwB,wB  
 AAxB,E;;QAEIB,OAAO,W;O;KAnBX,C;0GAsBA,yB;MAAA,8D;MAAA,4F;MAAA,uC;QAe6B,Q;QAFzB,YAA  
 Y,wB;QACZ,IAAI,QAAQ,CAAZ,C;UAAe,MAAM,mCAA8B,+BAA9B,C;QACrB,kBAaqB,UAAI,YAAJ,EAAI,o  
 BAAJ,O;QACrB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,KAaV,EAAiB,UAAI,KAaJ,CAAjB,EAA6B,WA  
 A7B,C;UACd,qB;;QAEJ,OAAO,W;O;KApBX,C;4GAuBA,yB;MAAA,8D;MAAA,4F;MAAA,uC;QAe0B,Q;QAFt  
 B,YAAY,wB;QACZ,IAAI,QAAQ,CAAZ,C;UAAe,MAAM,mCAA8B,+BAA9B,C;QACrB,kBAakB,UAAI,YAAJ,  
 EAAI,oBAAJ,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,KAaV,EAAiB,UAAI,KAaJ,CAAjB,EAA  
 6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,W;O;KApBX,C;4GAuBA,yB;MAAA,8D;MAAA,4F;MAAA,uC;QAe0B,  
 Q;QAFtB,YAAY,wB;QACZ,IAAI,QAAQ,CAAZ,C;UAAe,MAAM,mCAA8B,+BAA9B,C;QACrB,kBAakB,UAA  
 I,YAAJ,EAAI,oBAAJ,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,KAaV,EAAiB,UAAI,KAaJ,  
 CAAjB,EAA6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,W;O;KApBX,C;4GAuBA,yB;MAAA,8D;MAAA,4F;  
 MAAA,uC;QAe0B,Q;QAFtB,YAAY,wB;QACZ,IAAI,QAAQ,CAAZ,C;UAAe,MAAM,mCAA8B,+BAA9B,C;QACrB,kB  
 AakB,UAAI,YAAJ,EAAI,oBAAJ,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,KAaV,EAAiB,UAAI,  
 KAAJ,CAAjB,EAA6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,W;O;KApBX,C;4GAuBA,yB;MAAA,8D;MAAA,4F;  
 MAAA,uC;QAe0B,Q;QAFtB,YAAY,wB;QACZ,IAAI,QAAQ,CAAZ,C;UAAe,MAAM,mCAA8B,+BAA9B,C;QA  
 CrB,kBAakB,UAAI,YAAJ,EAAI,oBAAJ,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,KAaV,EAAiB  
 ,UAAI,KAaJ,CAAjB,EAA6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,W;O;KApBX,C;4GAuBA,yB;MAAA,8D;MA  
 AA,4F;MAAA,uC;QAe0B,Q;QAFtB,YAAY,wB;QACZ,IAAI,QAAQ,CAAZ,C;UAAe,MAAM,mCAA8B,+BAA9  
 B,C;QACrB,kBAakB,UAAI,YAAJ,EAAI,oBAAJ,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,KAaV  
 ,EAAiB,UAAI,KAaJ,CAAjB,EAA6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,W;O;KApBX,C;4GAuBA,yB;MAAA,  
 8D;MAAA,4F;MAAA,uC;QAe0B,Q;QAFtB,YAAY,wB;QACZ,IAAI,QAAQ,CAAZ,C;UAAe,MAAM,mCAA8B,+  
 BAA9B,C;QACrB,kBAakB,UAAI,YAAJ,EAAI,oBAAJ,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,  
 KAAV,EAAiB,UAAI,KAaJ,CAAjB,EAA6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,W;O;KApBX,C;4GAuBA,yB;  
 MAAA,8D;MAAA,4F;MAAA,oC;MAAA,gC;MAAA,uC;QAe0B,Q;QAFtB,YAAY,wB;QACZ,IAAI,QAAQ,CAA  
 Z,C;UAAe,MAAM,mCAA8B,+BAA9B,C;QACrB,kBAakB,UAAI,YAAJ,EAAI,oBAAJ,O;QACIB,OAAO,SAAS,  
 CAAhB,C;UACI,cAAc,oBAAU,KAaV,EAAiB,sBAAl,KAaJ,EAAjB,EAA6B,wBAA7B,E;UACd,qB;;QAEJ,OA  
 AO,W;O;KApBX,C;sHAuBA,yB;MAAA,8D;MAAA,uC;QAe6B,Q;QAFzB,YAAY,wB;QACZ,IAAI,QAAQ,CAA  
 Z,C;UAAe,OAAO,I;QACtB,kBAaqB,UAAI,YAAJ,EAAI,oBAAJ,O;QACrB,OAAO,SAAS,CAAhB,C;UACI,cAA  
 c,UAAU,KAaV,EAAiB,UAAI,KAaJ,CAAjB,EAA6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,W;O;KApBX,C;wHA



AHhB,IAp0XO,qBAAQ,CAo0Xf,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,aiBj9mBO,W;QjBk9mBP,kBAAkB,O;QACIB,wBAAGB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,cAAc,UAAU,WAAV,EAAuB,OAAvB,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KApBX,C;8FAuBA,yB;MAAA,gD;MAAA,gE;MAAA,gD;QAIBoB,Q;QAHhB,IAp1XO,qBAAQ,CAo1Xf,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,aiBz+mBO,W;QjB0+mBP,kBAAkB,O;QACIB,wBAAGB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,cAAc,UAAU,WAAV,EAAuB,OAAvB,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KArBX,C;8FAwBA,yB;MAAA,gD;MAAA,gE;MAAA,gD;QAIBoB,Q;QAHhB,IAp2XO,qBAAQ,CAo2Xf,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,aiBjgnBO,W;QjBkgnBP,kBAAkB,O;QACIB,wBAAGB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,cAAc,UAAU,WAAV,EAAuB,OAAvB,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KArBX,C;8FAwBA,yB;MAAA,gD;MAAA,gE;MAAA,gD;QAIBoB,Q;QAHhB,IAp3XO,qBAAQ,CAo3Xf,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,aiBzhnBO,W;QjB0hnBP,kBAAkB,O;QACIB,wBAAGB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,cAAc,UAAU,WAAV,EAAuB,OAAvB,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KArBX,C;8FAwBA,yB;MAAA,gD;MAAA,gE;MAAA,gD;QAIBoB,Q;QAHhB,IAp4XO,qBAAQ,CAo4Xf,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,aiBjgnBO,W;QjBkgnBP,kBAAkB,O;QACIB,wBAAGB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,cAAc,UAAU,WAAV,EAAuB,OAAvB,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KArBX,C;8FAwBA,yB;MAAA,gD;MAAA,gE;MAAA,gD;QAIBoB,Q;QAHhB,IAp5XO,qBAAQ,CAo5Xf,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,aiBzknBO,W;QjB0knBP,kBAAkB,O;QACIB,wBAAGB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,cAAc,UAAU,WAAV,EAAuB,OAAvB,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KArBX,C;8FAwBA,yB;MAAA,gD;MAAA,gE;MAAA,gD;QAIBoB,Q;QAHhB,IAp6XO,qBAAQ,CAo6Xf,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,aiBjmnBO,W;QjBkmnBP,kBAAkB,O;QACIB,wBAAGB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,cAAc,UAAU,WAAV,EAAuB,OAAvB,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KArBX,C;8FAwBA,yB;MAAA,gD;MAAA,gE;MAAA,gD;QAIBoB,Q;QAHhB,IAp7XO,qBAAQ,CAo7Xf,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,aiBznnBO,W;QjB0nnBP,kBAAkB,O;QACIB,wBAAGB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,cAAc,UAAU,WAAV,EAAuB,OAAvB,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KArBX,C;8FAwBA,yB;MAAA,gD;MAAA,gE;MAAA,gD;QAIBoB,Q;QAHhB,IAp8XO,qBAAQ,CAo8Xf,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,aiBjpnBO,W;QjBkpnBP,kBAAkB,O;QACIB,wBAAGB,SAAhB,gB;UAAgB,cAAhB,UAAgB,SAAhB,O;UACI,cAAc,UAAU,WAAV,EAAuB,oBAAvB,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KArBX,C;0GAwBA,yB;MAAA,gD;MAAA,gE;MAAA,gD;QAcI,IA5hYO,qBAAQ,CA4hYf,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,aiBzqnBO,W;QjB0qnBP,kBAAkB,O;QACIB,wD;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KArBX,C;4GAwBA,yB;MAAA,gD;MAAA,gE;MAAA,gD;QAcI,IA7iYO,qBAAQ,CA6iYf,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,aiBlsnBO,W;QjBmsnBP,kBAAkB,O;QACIB,wD;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KATBX,C;4GAyBA,yB;MAAA,gD;MAAA,gE;MAAA,gD;QAcI,IA9jYO,qBAAQ,CA8jYf,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,aiB3tnBO,W;QjB4tnBP,kBAAkB,O;QACIB,wD;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KATBX,C;4GAyBA,yB;MAAA,gD;MAAA,gE;MAAA,gD;QAcI,IA/kYO,qBAAQ,CA+kYf,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,aiBpvnBO,W;QjBqvnBP,kBAAkB,O;QACIB,wD;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KATBX,C;4GAyBA,yB;MAAA,gD;MAAA,gE;MAAA,gD;QAcI,IAhmYO,qBAAQ,CAgmYf,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,aiB7wnBO,W;QjB8wnBP,kBAAkB,O;QACIB,wD;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B,

C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KAtBX,C;4GAyBA,yB;MAAA,gD;MAAA,gE;MAAA,gD;QAeI,IAjnYO,qBAAQ,CAinYf,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,aiBtynBO,W;QjBuynBP,kBAAkB,O;QACIB,wD;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KAtBX,C;4GAyBA,yB;MAAA,gD;MAAA,gE;MAAA,gD;QAeI,IAloYO,qBAAQ,CAkoYf,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,aiB/znBO,W;QjBg0nBP,kBAAkB,O;QACIB,wD;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KAtBX,C;4GAyBA,yB;MAAA,gD;MAAA,gE;MAAA,gD;QAeI,IANpYO,qBAAQ,CampYf,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,aiBx1nBO,W;QjBy1nBP,kBAAkB,O;QACIB,wD;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KAtBX,C;4GAyBA,yB;MAAA,gD;MAAA,gE;MAAA,oC;MAAA,gD;QAeI,IAPqYO,qBAAQ,CAoqYf,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,aiBj3nBO,W;QjBk3nBP,kBAAkB,O;QACIB,wD;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,sBAAK,KAAL,EAA9B,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KAtBX,C;4GAyBA,yB;MAAA,qD;MAAA,gE;MAAA,uC;QACI,IA5vYO,qBAAQ,CA4vYf,C;UAAe,OAAO,W;QACtB,sBAaQb,UAAK,CAAL,CAArB,C;QACgC,kBAAnB,eAAa,gBAAb,C;QAA2B,sBAAI,aAAJ,C;QAAxC,aiB14nBO,W;QjB24nBP,iBAAc,CAAd,UAAsB,gBAAtB,U;UACI,gBAAc,UAAU,aAAV,EAAuB,UAAK,KAAL,CAAvB,C;UACd,MAAO,WAAI,aAAJ,C;;QAEX,OAAO,M;O;KArBX,C;kGAwBA,yB;MAAA,qD;MAAA,gE;MAAA,uC;QAWI,IAzwYO,qBAAQ,CaywYf,C;UAAe,OAAO,W;QACtB,sBAaKB,UAAK,CAAL,CAAIB,C;QACmC,kBAAtB,eAAgB,gBAAhB,C;QAA8B,sBAAI,aAAJ,C;QAA3C,aiB/5nBO,W;QjBg6nBP,iBAAc,CAAd,UAAsB,gBAAtB,U;UACI,gBAAc,UAAU,aAAV,EAAuB,UAAK,KAAL,CAAvB,C;UACd,MAAO,WAAI,aAAJ,C;;QAEX,OAAO,M;O;KAIBX,C;kGAqBA,yB;MAAA,qD;MAAA,gE;MAAA,uC;QAWI,IAtxYO,qBAAQ,CAsxYf,C;UAAe,OAAO,W;QACtB,sBAaKB,UAAK,CAAL,CAAIB,C;QACoC,kBAAvB,eAAiB,gBAAjB,C;QAA+B,sBAAI,aAAJ,C;QAA5C,aiBp7nBO,W;QjBq7nBP,iBAAc,CAAd,UAAsB,gBAAtB,U;UACI,gBAAc,UAAU,aAAV,EAAuB,UAAK,KAAL,CAAvB,C;UACd,MAAO,WAAI,aAAJ,C;;QAEX,OAAO,M;O;KAIBX,C;kGAqBA,yB;MAAA,qD;MAAA,gE;MAAA,uC;QAWI,IAAnyYO,qBAAQ,CamyYf,C;UAAe,OAAO,W;QACtB,sBAaKB,UAAK,CAAL,CAAIB,C;QACkC,kBAArB,eAAe,gBAAf,C;QAA6B,sBAAI,aAAJ,C;QAA1C,aiBz8nBO,W;QjB08nBP,iBAAc,CAAd,UAAsB,gBAAtB,U;UACI,gBAAc,UAAU,aAAV,EAAuB,UAAK,KAAL,CAAvB,C;UACd,MAAO,WAAI,aAAJ,C;;QAEX,OAAO,M;O;KAIBX,C;kGAqBA,yB;MAAA,qD;MAAA,gE;MAAA,uC;QAWI,IAhzYO,qBAAQ,CagzYf,C;UAAe,OAAO,W;QACtB,sBAaKB,UAAK,CAAL,CAAIB,C;QACmC,kBAAtB,eAAgB,gBAAhB,C;QAA8B,sBAAI,aAAJ,C;QAA3C,aiB99nBO,W;QjB+9nBP,iBAAc,CAAd,UAAsB,gBAAtB,U;UACI,gBAAc,UAAU,aAAV,EAAuB,UAAK,KAAL,CAAvB,C;UACd,MAAO,WAAI,aAAJ,C;;QAEX,OAAO,M;O;KAIBX,C;kGAqBA,yB;MAAA,qD;MAAA,gE;MAAA,uC;QAWI,IA7zYO,qBAAQ,CA6zYf,C;UAAe,OAAO,W;QACtB,sBAaKB,UAAK,CAAL,CAAIB,C;QACoC,kBAAvB,eAAiB,gBAAjB,C;QAA+B,sBAAI,aAAJ,C;QAA5C,aiBn/nBO,W;QjBo/nBP,iBAAc,CAAd,UAAsB,gBAAtB,U;UACI,gBAAc,UAAU,aAAV,EAAuB,UAAK,KAAL,CAAvB,C;UACd,MAAO,WAAI,aAAJ,C;;QAEX,OAAO,M;O;KAIBX,C;kGAqBA,yB;MAAA,qD;MAAA,gE;MAAA,uC;QAWI,IA10YO,qBAAQ,CA00Yf,C;UAAe,OAAO,W;QACtB,sBAaKB,UAAK,CAAL,CAAIB,C;QACqC,kBAAxB,eAAkB,gBAaIB,C;QAAgC,sBAAI,aAAJ,C;QAA7C,aiBxgoBO,W;QjBygoBP,iBAAc,CAAd,UAAsB,gBAAtB,U;UACI,gBAAc,UAAU,aAAV,EAAuB,UAAK,KAAL,CAAvB,C;UACd,MAAO,WAAI,aAAJ,C;;QAEX,OAAO,M;O;KAIBX,C;kGAqBA,yB;MAAA,qD;MAAA,gE;MAAA,uC;QAWI,IAv1YO,qBAAQ,CAu1Yf,C;UAAe,OAAO,W;QACtB,sBAaKB,UAAK,CAAL,CAAIB,C;QACsC,kBAAzB,eAAmB,gBAAnB,C;QAAiC,sBAAI,aAAJ,C;QAA9C,aiB7hoBO,W;QjB8hoBP,iBAAc,CAAd,UAAsB,gBAAtB,U;UACI,gBAAc,UAAU,aAAV,EAAuB,UAAK,KAAL,CAAvB,C;UACd,MAAO,WAAI,aAAJ,C;;QAEX,OAAO,M;O;KAIBX,C;kGAqBA,yB;MAAA,qD;MAAA,gE;MAAA,oC;MAAA,gC;MAAA,uC;QAWI,IAp2YO,qBAAQ,CAo2Yf,C;UAAe,OAAO,W;QACtB,sBAaKB,UAAK,CAAL,CAAIB,C;QACmC,kBAAtB,eAAgB,gBAAhB,C;QAA8B,sBAAI,0BAAJ,C;QAA3C,aiBljoBO,W;QjBmjoBP,iBAAc,CAAd,UAAsB,gBAAtB,U;UACI,gBAAc,oBAAU,0BAAV,EAAuB,sBAAK,KAAL,EAAvB,E;UACd,MAAO,WAAI,0BAAJ,C;;QAEX,OAAO,M;O;KAIBX,C;8GAqBA,yB;MAAA,qD;MAAA,gE;MAAA,uC;QACI,IA57YO,qBAAQ,CA47Yf,C;UAAe,OAAO,W;QACtB,sBAaQb,UAAK,CAAL,CAArB,C;QACgC,kBAAnB,eAAa,gBAAb,C;QAA2B,sBAAI,aAAJ,C;QAAxC,aiB

1koBO,W;QjB2koBP,iBAAc,CAAd,UAAAsB,gBAAtB,U;UACI,gBAAc,UAAU,KAAV,EAAiB,AAAjB,EAA8B,UA  
AK,KAAL,CAA9B,C;UACd,MAAO,WAAI,AAAJ,C;;QAEX,OAAO,M;O;KArBX,C;gHAWBA,yB;MAAA,qD;M  
AAA,gE;MAAA,uC;QAYI,IA18YO,qBAAQ,CA08Yf,C;UAAe,OAAO,W;QACtB,sBAAkB,UAAK,CAAL,CAA  
B,C;QACmC,kBAAtB,eAAgB,gBAAhB,C;QAA8B,sBAAI,AAAJ,C;QAA3C,aiBhmoBO,W;QjBimoBP,iBAAc,CA  
Ad,UAAAsB,gBAAtB,U;UACI,gBAAc,UAAU,KAAV,EAAiB,AAAjB,EAA8B,UAAK,KAAL,CAA9B,C;UACd,M  
AAO,WAAI,AAAJ,C;;QAEX,OAAO,M;O;KAnBX,C;gHAsBA,yB;MAAA,qD;MAAA,gE;MAAA,uC;QAYI,IAx9  
YO,qBAAQ,CAw9Yf,C;UAAe,OAAO,W;QACtB,sBAAkB,UAAK,CAAL,CAAIB,C;QACoC,kBAAvB,eAAiB,gB  
AAjB,C;QAA+B,sBAAI,AAAJ,C;QAA5C,aiBtnoBO,W;QjBunoBP,iBAAc,CAAd,UAAAsB,gBAAtB,U;UACI,gBA  
Ac,UAAU,KAAV,EAAiB,AAAjB,EAA8B,UAAK,KAAL,CAA9B,C;UACd,MAAO,WAAI,AAAJ,C;;QAEX,OAA  
O,M;O;KAnBX,C;gHAsBA,yB;MAAA,qD;MAAA,gE;MAAA,uC;QAYI,IA+YO,qBAAQ,CAs+Yf,C;UAAe,OA  
AO,W;QACtB,sBAAkB,UAAK,CAAL,CAAIB,C;QACkC,kBAArB,eAAe,gBAAf,C;QAA6B,sBAAI,AAAJ,C;QA  
A1C,aiB5ooBO,W;QjB6ooBP,iBAAc,CAAd,UAAAsB,gBAAtB,U;UACI,gBAAc,UAAU,KAAV,EAAiB,AAAjB,EA  
A8B,UAAK,KAAL,CAA9B,C;UACd,MAAO,WAAI,AAAJ,C;;QAEX,OAAO,M;O;KAnBX,C;gHAsBA,yB;MAA  
A,qD;MAAA,gE;MAAA,uC;QAYI,IAp/YO,qBAAQ,CAo/Yf,C;UAAe,OAAO,W;QACtB,sBAAkB,UAAK,CAAL,  
CAAIB,C;QACmC,kBAAtB,eAAgB,gBAAhB,C;QAA8B,sBAAI,AAAJ,C;QAA3C,aiBlqoBO,W;QjBmqoBP,iBAA  
c,CAAd,UAAAsB,gBAAtB,U;UACI,gBAAc,UAAU,KAAV,EAAiB,AAAjB,EAA8B,UAAK,KAAL,CAA9B,C;UAC  
d,MAAO,WAAI,AAAJ,C;;QAEX,OAAO,M;O;KAnBX,C;gHAsBA,yB;MAAA,qD;MAAA,gE;MAAA,uC;QAYI,I  
AlgZO,qBAAQ,CAkgZf,C;UAAe,OAAO,W;QACtB,sBAAkB,UAAK,CAAL,CAAIB,C;QACoC,kBAAvB,eAAiB,  
gBAAjB,C;QAA+B,sBAAI,AAAJ,C;QAA5C,aiBxroBO,W;QjByroBP,iBAAc,CAAd,UAAAsB,gBAAtB,U;UACI,gB  
AAc,UAAU,KAAV,EAAiB,AAAjB,EAA8B,UAAK,KAAL,CAA9B,C;UACd,MAAO,WAAI,AAAJ,C;;QAEX,OA  
AO,M;O;KAnBX,C;gHAsBA,yB;MAAA,qD;MAAA,gE;MAAA,uC;QAYI,IAhhZO,qBAAQ,CAghZf,C;UAAe,O  
AAO,W;QACtB,sBAAkB,UAAK,CAAL,CAAIB,C;QACqC,kBAAxB,eAAkB,gBAAlB,C;QAAgC,sBAAI,AAAJ,C  
;QAA7C,aiB9soBO,W;QjB+soBP,iBAAc,CAAd,UAAAsB,gBAAtB,U;UACI,gBAAc,UAAU,KAAV,EAAiB,AAAjB  
,EAA8B,UAAK,KAAL,CAA9B,C;UACd,MAAO,WAAI,AAAJ,C;;QAEX,OAAO,M;O;KAnBX,C;gHAsBA,yB;M  
AAA,qD;MAAA,gE;MAAA,uC;QAYI,IA9hZO,qBAAQ,CA8hZf,C;UAAe,OAAO,W;QACtB,sBAAkB,UAAK,C  
AAL,CAAIB,C;QACsC,kBAAzB,eAAmB,gBAAnB,C;QAAiC,sBAAI,AAAJ,C;QAA9C,aiBpuoBO,W;QjBpuoBP,i  
BAAc,CAAd,UAAAsB,gBAAtB,U;UACI,gBAAc,UAAU,KAAV,EAAiB,AAAjB,EAA8B,UAAK,KAAL,CAA9B,C;  
UACd,MAAO,WAAI,AAAJ,C;;QAEX,OAAO,M;O;KAnBX,C;gHAsBA,yB;MAAA,qD;MAAA,gE;MAAA,oC;M  
AAA,gC;MAAA,uC;QAYI,IA5iZO,qBAAQ,CA4iZf,C;UAAe,OAAO,W;QACtB,sBAAkB,UAAK,CAAL,CAAIB,  
C;QACmC,kBAAtB,eAAgB,gBAAhB,C;QAA8B,sBAAI,0BAAJ,C;QAA3C,aiB1voBO,W;QjB2voBP,iBAAc,CA  
Ad,UAAAsB,gBAAtB,U;UACI,gBAAc,oBAAU,KAAV,EAAiB,0BAAjB,EAA8B,sBAAK,KAAL,EAA9B,E;UACd,  
MAAO,WAAI,0BAAJ,C;;QAEX,OAAO,M;O;KAnBX,C;8EAsBA,yB;MA/zBA,gD;MAAA,gE;MA+zBA,gD;QAc  
W,sB;;UA7zBS,Q;UAHhB,IAp0XO,qBAAQ,CAo0Xf,C;YAAe,qBAAO,OA00BH,OA00BG,C;YAAP,uB;WACqB  
,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;UAA+B,sBA+zBzB,OA/zByB,C;UAA5C,aiBj9mBO,W;UjBk9mBP,kB  
A8zBmB,O;UA7zBnB,iD;YAAgB,cAAhB,e;YACI,cA4zBwB,SA5zBV,CAAU,WAAV,EAAuB,OAAvB,C;YACd,  
MAAO,WAAI,WAAJ,C;;UAEX,qBAAO,M;;;QAYzBP,yB;O;KADJ,C;gFAiBA,yB;MAzzBA,gD;MAAA,gE;MAyz  
BA,gD;QAeW,sB;;UA7zBS,Q;UAHhB,IAp1XO,qBAAQ,CAo1Xf,C;YAAe,qBAAO,OA0zBH,OA1zBG,C;YAAP,  
uB;WACqB,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;UAA+B,sBAyzBzB,OAzzByB,C;UAA5C,aiBz+mBO,W;Uj  
B0+mBP,kBAwzBmB,O;UA7zBnB,iD;YAAgB,cAAhB,e;YACI,cAszBwB,SAtzBV,CAAU,WAAV,EAAuB,OAA  
vB,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,qBAAO,M;;;QAmzBP,yB;O;KAFJ,C;gFAkBA,yB;MANzBA,gD;MA  
AA,gE;MAMzBA,gD;QAeW,sB;;UA7zBS,Q;UAHhB,IAp2XO,qBAAQ,CAo2Xf,C;YAAe,qBAAO,OAozBH,OA  
zBG,C;YAAP,uB;WACqB,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;UAA+B,sBAzBzB,OAAnzByB,C;UAA5C,ai  
BjgnBO,W;UjBkgnBP,kBAkzBmB,O;UA7zBnB,iD;YAAgB,cAAhB,e;YACI,cAgzBwB,SAhzBV,CAAU,WAAV,  
EAAuB,OAAvB,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,qBAAO,M;;;QA6yBP,yB;O;KAFJ,C;gFAkBA,yB;MA  
7yBA,gD;MAAA,gE;MA6yBA,gD;QAeW,sB;;UA7zBS,Q;UAHhB,IAp3XO,qBAAQ,CAo3Xf,C;YAAe,qBAAO,  
OA8yBH,OA9yBG,C;YAAP,uB;WACqB,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;UAA+B,sBA6yBzB,OA7yBy  
B,C;UAA5C,aiBzhnBO,W;UjB0hnBP,kBA4yBmB,O;UA7zBnB,iD;YAAgB,cAAhB,e;YACI,cA0yBwB,SA1yBV,  
CAAU,WAAV,EAAuB,OAAvB,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,qBAAO,M;;;QAuyBP,yB;O;KAFJ,C;g

FAkBA,yB;MAvyBA,gD;MAAA,gE;MAuyBA,gD;QAeW,sB;;UAryBS,Q;UAHhB,IAP4XO,qBAAQ,CAo4Xf,C;YAAe,qBAAO,OAwyBH,OAxyBG,C;YAAP,uB;WACqB,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;UAA+B,sBAuyBzB,OAvyByB,C;UAA5C,aiBjbnBO,W;UjBkbnBP,kBAasyBmB,O;UAryBnB,iD;YAAgB,cAAhB,e;YACI,cAoyBwB,SAPyBV,CAAU,WAAV,EAAuB,OAavB,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,qBAAO,M;;;QAiyBP,yB;O;KafJ,C;gFAkBA,yB;MAjyBA,gD;MAAA,gE;MAiyBA,gD;QAeW,sB;;UA/xBS,Q;UAHhB,IAP5XO,qBAAQ,CAo5Xf,C;YAAe,qBAAO,OAkyBH,OAlyBG,C;YAAP,uB;WACqB,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;UAA+B,sBAiyBzB,OAjyByB,C;UAA5C,aiBzknBO,W;UjB0knBP,kBAgyBmB,O;UA/xBnB,iD;YAAgB,cAAhB,e;YACI,cA8xBwB,SA9xBV,CAAU,WAAV,EAAuB,OAavB,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,qBAAO,M;;;QA2xBP,yB;O;KafJ,C;gFAkBA,yB;MA3xBA,gD;MAAA,gE;MA2xBA,gD;QAeW,sB;;UAzxBS,Q;UAHhB,IAP6XO,qBAAQ,CAo6Xf,C;YAAe,qBAAO,OA4xBH,OA5xBG,C;YAAP,uB;WACqB,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;UAA+B,sBA2xBzB,OA3xByB,C;UAA5C,aiBjmnBO,W;UjBkmnBP,kBA0xBmB,O;UAzxBnB,iD;YAAgB,cAAhB,e;YACI,cAwxBwB,SAxxBV,CAAU,WAAV,EAAuB,OAavB,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,qBAAO,M;;;QAqxBP,yB;O;KafJ,C;gFAkBA,yB;MARxBA,gD;MAAA,gE;MAqxBA,gD;QAeW,sB;;UANxBS,Q;UAHhB,IAP7XO,qBAAQ,CAo7Xf,C;YAAe,qBAAO,OA5xBH,OA6xBG,C;YAAP,uB;WACqB,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;UAA+B,sBAqxzBzB,OArxByB,C;UAA5C,aiBznnBO,W;UjB0nnBP,kBAoxBmB,O;UANxBnB,iD;YAAgB,cAAhB,e;YACI,cAkxBwB,SA1xBV,CAAU,WAAV,EAAuB,OAavB,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,qBAAO,M;;;QA+wBP,yB;O;KafJ,C;gFAkBA,yB;MA/wBA,gD;MAAA,gE;MAAA,oC;MAAA,gC;MAA+wBA,gD;QAeW,sB;;UA7wBS,Q;UAHhB,IAP8XO,qBAAQ,CAo8Xf,C;YAAe,qBAAO,OAgxBH,OA8xBG,C;YAAP,uB;WACqB,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;UAA+B,sBA+wBzB,OA/wByB,C;UAA5C,aiBjpnBO,W;UjBkpnBP,kBA8wBmB,O;UA7wBnB,iD;YAAgB,cAAhB,0B;YACI,cA4wBwB,SA5wBV,CAAU,WAAV,EAAuB,OAavB,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,qBAAO,M;;;QAywBP,yB;O;KafJ,C;4FAkBA,yB;MAzwBA,gD;MAAA,gE;MAywBA,gD;QAeW,6B;;UA1wBP,IA5hYO,qBAAQ,CA4hYf,C;YAAe,4BAAO,OA0wBI,OA1wBJ,C;YAAP,8B;WACqB,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;UAA+B,sBAywBIB,OAzwBkB,C;UAA5C,aiBzqnBO,W;UjB0qnBP,kBAwwB0B,O;UAvwB1B,wD;YACI,cAswB+B,SAtwBjB,CAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,4BAAO,M;;;QAmwBP,gC;O;KafJ,C;8FAkBA,yB;MANwBA,gD;MAAA,gE;MAMwBA,gD;QAgBW,6B;;UApwBP,IA7iYO,qBAAQ,CA6iYf,C;YAAe,4BAAO,OAowBI,OApwBJ,C;YAAP,8B;WACqB,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;UAA+B,sBAMwBIB,OAAnwBkB,C;UAA5C,aiBlsnBO,W;UjBmsnBP,kBAkwB0B,O;UAjwB1B,wD;YACI,cAgwB+B,SAhwBjB,CAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,4BAAO,M;;;QA6vBP,gC;O;KAhBJ,C;8FAMBA,yB;MA7vBA,gD;MAAA,gE;MA6vBA,gD;QAgBW,6B;;UA9vBP,IA9jYO,qBAAQ,CA8jYf,C;YAAe,4BAAO,OA8vBI,OA9vBJ,C;YAAP,8B;WACqB,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;UAA+B,sBA6vBIB,OA7vBkB,C;UAA5C,aiB3tnBO,W;UjB4tnBP,kBA4vB0B,O;UA3vB1B,wD;YACI,cA0vB+B,SA1vBjB,CAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,4BAAO,M;;;QAuvBP,gC;O;KAhBJ,C;8FAMBA,yB;MAvvBA,gD;MAAA,gE;MAuvBA,gD;QAgBW,6B;;UAxvBP,IAkYO,qBAAQ,CA+kYf,C;YAAe,4BAAO,OAwwBI,OAxxvBJ,C;YAAP,8B;WACqB,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;UAA+B,sBAuvBIB,OAvvBkB,C;UAA5C,aiBpvnBO,W;UjBqvnBP,kBASvB0B,O;UARvB1B,wD;YACI,cAovB+B,SApvBjB,CAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,4BAAO,M;;;QAivBP,gC;O;KAhBJ,C;8FAMBA,yB;MAjvBA,gD;MAAA,gE;MAivBA,gD;QAgBW,6B;;UA1vBP,IAhmYO,qBAAQ,CAgmYf,C;YAAe,4BAAO,OAkvBI,OA1vBJ,C;YAAP,8B;WACqB,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;UAA+B,sBAivBIB,OAjvBkB,C;UAA5C,aiB7wnBO,W;UjB8wnBP,kBAgvB0B,O;UAuB1B,wD;YACI,cA8uB+B,SA9uBjB,CAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,4BAAO,M;;;QA2uBP,gC;O;KAhBJ,C;8FAMBA,yB;MA3uBA,gD;MAAA,gE;MA2uBA,gD;QAgBW,6B;;UA5uBP,IAjnYO,qBAAQ,CAinYf,C;YAAe,4BAAO,OA4uBI,OA5uBJ,C;YAAP,8B;WACqB,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;UAA+B,sBA2uBIB,OA3uBkB,C;UAA5C,aiBtynBO,W;UjBuynBP,kBA0uB0B,O;UAzuB1B,wD;YACI,cAwuB+B,SAxuBjB,CAAU,KAAV,EAAiB,WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,4BAAO,M;;;QAquBP,gC;O;KAhBJ,C;8FAMBA,yB;MARuBA,gD;MAAA,gE;MAquBA,gD;QAgBW,6B;;UA7uBP,IAloYO,qBAAQ,CAkoYf,C;YAAe,4BAAO,OA5uBI,OA7uBJ,C;YAAP,8B;WACqB,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;UAA+B,sBAquBIB,OAruBkB,C;UAA5C,aiB/

znBO,W;UjBgOnBP,kBAOuB0B,O;UAnuB1B,wD;YACl,cAkuB+B,SAluBjB,CAAU,KAaV,EAAiB,WAAjB,EAA  
8B,UAAK,KAAL,CAA9B,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,4BAAO,M;;;QA+tBP,gC;O;KAhBJ,C;8FAm  
BA,yB;MA/tBA,gD;MAAA,gE;MA+tBA,gD;QAAGBW,6B;;UAhuBP,IANpYO,qBAAQ,CampYf,C;YAAe,4BAAO  
,OAguBI,OAhUBJ,C;YAAP,8B;WACqB,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;UAA+B,sBA+tBIB,OA/tBkB,C  
;UAA5C,aiBx1nBO,W;UjBy1nBP,kBA8tB0B,O;UA7tB1B,wD;YACl,cA4tB+B,SA5tBjB,CAAU,KAaV,EAAiB,  
WAAjB,EAA8B,UAAK,KAAL,CAA9B,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,4BAAO,M;;;QAYtBP,gC;O;K  
AhBJ,C;8FAmBA,yB;MAZtBA,gD;MAAA,gE;MAAA,oC;MAytBA,gD;QAAGBW,6B;;UA1tBP,IApqYO,qBAAQ,C  
AoqYf,C;YAAe,4BAAO,OA0tBI,OA1tBJ,C;YAAP,8B;WACqB,kBAAvB,eAAa,mBAAO,CAAP,IAAb,C;UAA+B  
,sBAytBIB,OAztBkB,C;UAA5C,aiBj3nBO,W;UjBk3nBP,kBAwtB0B,O;UAvtB1B,wD;YACl,cAstB+B,SAttBjB,C  
AAU,KAaV,EAAiB,WAAjB,EAA8B,sBAK,KAAL,EAA9B,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,4BAAO,  
M;;;QAMtBP,gC;O;KAhBJ,C;gFAMBA,+B;MAOoB,Q;MADhB,UAAe,C;MACf,wBAAGB,SAAhB,gB;QAAGB,c  
AAA,SAAhB,M;QACI,YAAO,SAAS,OAAT,CAAP,I;;MAEJ,OAAO,G;K;kFAGX,+B;MAOoB,Q;MADhB,UAAe  
,C;MACf,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,YAAO,SAAS,OAAT,CAAP,I;;MAEJ,OAAO,G;  
K;kFAGX,+B;MAOoB,Q;MADhB,UAAe,C;MACf,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,YAA  
O,SAAS,OAAT,CAAP,I;;MAEJ,OAAO,G;K;kFAGX,+B;MAOoB,Q;MADhB,UAAe,C;MACf,wBAAGB,SAAhB,  
gB;QAAGB,cAAA,SAAhB,M;QACI,YAAO,SAAS,OAAT,CAAP,I;;MAEJ,OAAO,G;K;kFAGX,+B;MAOoB,Q;M  
ADhB,UAAe,C;MACf,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,YAAO,SAAS,OAAT,CAAP,I;;MA  
EJ,OAAO,G;K;kFAGX,+B;MAOoB,Q;MADhB,UAAe,C;MACf,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;  
QACI,YAAO,SAAS,OAAT,CAAP,I;;MAEJ,OAAO,G;K;kFAGX,+B;MAOoB,Q;MADhB,UAAe,C;MACf,wBAA  
gB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,YAAO,SAAS,OAAT,CAAP,I;;MAEJ,OAAO,G;K;kFAGX,+B;M  
AOoB,Q;MADhB,UAAe,C;MACf,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,YAAO,SAAS,OAAT,C  
AAP,I;;MAEJ,OAAO,G;K;kFAGX,yB;MAAA,oC;MAAA,gC;MAAA,sC;QAoOB,Q;QADhB,UAAe,C;QACf,wB  
AAGB,SAAhB,gB;UAAGB,cAAhB,UAAGB,SAAhB,O;UACI,YAAO,SAAS,oBAAT,CAAP,I;;QAEJ,OAAO,G;O;  
KAVX,C;4FAaA,+B;MAOoB,Q;MADhB,UAAkB,G;MACIB,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;Q  
ACI,OAAO,SAAS,OAAT,C;;MAEX,OAAO,G;K;8FAGX,+B;MAOoB,Q;MADhB,UAAkB,G;MACIB,wBAAGB,  
SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,OAAO,SAAS,OAAT,C;;MAEX,OAAO,G;K;8FAGX,+B;MAOoB,Q  
;MADhB,UAAkB,G;MACIB,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,OAAO,SAAS,OAAT,C;;MA  
EX,OAAO,G;K;8FAGX,+B;MAOoB,Q;MADhB,UAAkB,G;MACIB,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAh  
B,M;QACI,OAAO,SAAS,OAAT,C;;MAEX,OAAO,G;K;8FAGX,+B;MAOoB,Q;MADhB,UAAkB,G;MACIB,wB  
AAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,OAAO,SAAS,OAAT,C;;MAEX,OAAO,G;K;8FAGX,+B;MA  
OoB,Q;MADhB,UAAkB,G;MACIB,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,OAAO,SAAS,OAAT,  
C;;MAEX,OAAO,G;K;8FAGX,+B;MAOoB,Q;MADhB,UAAkB,G;MACIB,wBAAGB,SAAhB,gB;QAAGB,cAAA,  
SAAhB,M;QACI,OAAO,SAAS,OAAT,C;;MAEX,OAAO,G;K;8FAGX,+B;MAOoB,Q;MADhB,UAAkB,G;MACI  
B,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,OAAO,SAAS,OAAT,C;;MAEX,OAAO,G;K;8FAGX,y  
B;MAAA,oC;MAAA,gC;MAAA,sC;QAoOB,Q;QADhB,UAAkB,G;QACIB,wBAAGB,SAAhB,gB;UAAGB,cAAh  
B,UAAGB,SAAhB,O;UACI,OAAO,SAAS,oBAAT,C;;QAEJ,OAAO,G;O;KAVX,C;gFAaA,+B;MAUoB,Q;MADh  
B,UAAoB,C;MACpB,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,OAAO,SAAS,OAAT,C;;MAEX,O  
AAO,G;K;kFAGX,+B;MAUoB,Q;MADhB,UAAoB,C;MACpB,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;  
QACI,OAAO,SAAS,OAAT,C;;MAEX,OAAO,G;K;kFAGX,+B;MAUoB,Q;MADhB,UAAoB,C;MACpB,wBAAg  
B,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,OAAO,SAAS,OAAT,C;;MAEX,OAAO,G;K;kFAGX,+B;MAUoB,  
Q;MADhB,UAAoB,C;MACpB,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,OAAO,SAAS,OAAT,C;;  
MAEX,OAAO,G;K;kFAGX,+B;MAUoB,Q;MADhB,UAAoB,C;MACpB,wBAAGB,SAAhB,gB;QAAGB,cAAA,S  
AAhB,M;QACI,OAAO,SAAS,OAAT,C;;MAEX,OAAO,G;K;kFAGX,+B;MAUoB,Q;MADhB,UAAoB,C;MACpB  
,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,OAAO,SAAS,OAAT,C;;MAEX,OAAO,G;K;kFAGX,+B;  
MAUoB,Q;MADhB,UAAoB,C;MACpB,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,OAAO,SAAS,O  
AAT,C;;MAEX,OAAO,G;K;kFAGX,+B;MAUoB,Q;MADhB,UAAoB,C;MACpB,wBAAGB,SAAhB,gB;QAAGB,c  
AAA,SAAhB,M;QACI,OAAO,SAAS,OAAT,C;;MAEX,OAAO,G;K;kFAGX,yB;MAAA,oC;MAAA,gC;MAAA,s  
C;QAUoB,Q;QADhB,UAAoB,C;QACpB,wBAAGB,SAAhB,gB;UAAGB,cAAhB,UAAGB,SAAhB,O;UACI,OAAO



,SAAS,oBAAT,C;:QAEX,OAAO,G;O;KAbX,C;kFagBA,+B;MAUoB,Q;MADhb,UAAe,C;MACf,wBAAgB,SAA  
hB,gB;QAAGB,cAAA,SAAhB,M;QACI,YAAO,SAAS,OAAT,CAAP,I;:MAEJ,OAAO,G;K;kFAGX,+B;MAUoB,  
Q;MADhb,UAAe,C;MACf,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,YAAO,SAAS,OAAT,CAAP,I;  
;MAEJ,OAAO,G;K;mFAGX,+B;MAUoB,Q;MADhb,UAAe,C;MACf,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAh  
B,M;QACI,YAAO,SAAS,OAAT,CAAP,I;:MAEJ,OAAO,G;K;mFAGX,+B;MAUoB,Q;MADhb,UAAe,C;MACf,w  
BAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,YAAO,SAAS,OAAT,CAAP,I;:MAEJ,OAAO,G;K;mFAGX,  
+B;MAUoB,Q;MADhb,UAAe,C;MACf,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,YAAO,SAAS,O  
AAT,CAAP,I;:MAEJ,OAAO,G;K;mFAGX,+B;MAUoB,Q;MADhb,UAAe,C;MACf,wBAAgB,SAAhB,gB;QAAG  
B,cAAA,SAAhB,M;QACI,YAAO,SAAS,OAAT,CAAP,I;:MAEJ,OAAO,G;K;mFAGX,+B;MAUoB,Q;MADhb,U  
AAe,C;MACf,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,YAAO,SAAS,OAAT,CAAP,I;:MAEJ,OAA  
O,G;K;mFAGX,+B;MAUoB,Q;MADhb,UAAe,C;MACf,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,  
YAAO,SAAS,OAAT,CAAP,I;:MAEJ,OAAO,G;K;mFAGX,yB;MAAA,oC;MAAA,gC;MAAA,sC;QAUoB,Q;QA  
Dhb,UAAe,C;QACf,wBAAgB,SAAhB,gB;UAGB,cAAhB,UAGB,SAAhB,O;UACI,YAAO,SAAS,oBAAT,CA  
AP,I;:QAEJ,OAAO,G;O;KAbX,C;mFagBA,yB;MAAA,SASoB,gB;MATpB,sC;QAUoB,Q;QADhb,Y;QACA,wB  
AAGB,SAAhB,gB;UAGB,cAAA,SAAhB,M;UACI,cAAO,SAAS,OAAT,CAAP,C;:QAEJ,OAAO,G;O;KAbX,C;m  
FagBA,yB;MAAA,SASoB,gB;MATpB,sC;QAUoB,Q;QADhb,Y;QACA,wBAAGB,SAAhB,gB;UAGB,cAAA,S  
AAhB,M;UACI,cAAO,SAAS,OAAT,CAAP,C;:QAEJ,OAAO,G;O;KAbX,C;mFagBA,yB;MAAA,SASoB,gB;MA  
TpB,sC;QAUoB,Q;QADhb,Y;QACA,wBAAGB,SAAhB,gB;UAGB,cAAA,SAAhB,M;UACI,cAAO,SAAS,OA  
T,CAAP,C;:QAEJ,OAAO,G;O;KAbX,C;mFagBA,yB;MAAA,SASoB,gB;MATpB,sC;QAUoB,Q;QADhb,Y;QAC  
A,wBAAGB,SAAhB,gB;UAGB,cAAA,SAAhB,M;UACI,cAAO,SAAS,OAAT,CAAP,C;:QAEJ,OAAO,G;O;KAb  
X,C;mFagBA,yB;MAAA,SASoB,gB;MATpB,sC;QAUoB,Q;QADhb,Y;QACA,wBAAGB,SAAhB,gB;UAGB,cA  
AA,SAAhB,M;UACI,cAAO,SAAS,OAAT,CAAP,C;:QAEJ,OAAO,G;O;KAbX,C;mFagBA,yB;MAAA,SAS  
oB,gB;MATpB,sC;QAUoB,Q;QADhb,Y;QACA,wBAAGB,SAAhB,gB;UAGB,cAAA,SAAhB,M;UACI,cAAO,SA  
AS,OAAT,CAAP,C;:QAEJ,OAAO,G;O;KAbX,C;mFagBA,yB;MAAA,SASoB,gB;MATpB,sC;QAUoB,Q;QADhb,Y;  
QACA,wBAAGB,SAAhB,gB;UAGB,cAAA,SAAhB,M;UACI,cAAO,SAAS,OAAT,CAAP,C;:QAEJ,OAAO,G;O;  
KAbX,C;mFagBA,yB;MAAA,SASoB,gB;MATpB,sC;QAUoB,Q;QADhb,Y;QACA,wBAAGB,SAAhB,gB;UAG  
B,cAAA,SAAhB,M;UACI,cAAO,SAAS,OAAT,CAAP,C;:QAEJ,OAAO,G;O;KAbX,C;mFagBA,yB;MAAA,SAS  
oB,gB;MATpB,oC;MAAA,gC;MAAA,sC;QAUoB,Q;QADhb,Y;QACA,wBAAGB,SAAhB,gB;UAGB,cAAhB,U  
AAGB,SAAhB,O;UACI,cAAO,SAAS,oBAAT,CAAP,C;:QAEJ,OAAO,G;O;KAbX,C;mFagBA,yB;MGI7pBA,6B;  
MHK7pBA,sC;QAWoB,Q;QADhb,UGI7pBmC,cHk7pBnB,CGI7pBmB,C;QHm7pBnB,cwBAAGB,SAAhB,gB;UA  
AgB,cAAA,SAAhB,M;UACI,MGtvqBiD,cHsvqBjD,GGtvqB2D,KAAK,GHsvqBzD,SAAS,OAAT,CGtvqBoE,KA  
AX,IAAf,C;:QHwvqBrD,OAAO,G;O;KAdX,C;mFAiBA,yB;MGn8pBA,6B;MHm8pBA,sC;QAWoB,Q;QADhb,U  
Gn8pBmC,cHm8pBnB,CGn8pBmB,C;QH08pBnB,cwBAAGB,SAAhB,gB;UAGB,cAAA,SAAhB,M;UACI,MGvw  
qBiD,cHuwwqBjD,GGvwqB2D,KAAK,GHuwwqBzD,SAAS,OAAT,CGvwqBoE,KAAK,IAAf,C;:QHwyqBrD,OAAO  
,G;O;KAdX,C;mFAiBA,yB;MGp9pBA,6B;MHo9pBA,sC;QAWoB,Q;QADhb,UGp9pBmC,cHo9pBnB,CGp9pBm  
B,C;QHq9pBnB,cwBAAGB,SAAhB,gB;UAGB,cAAA,SAAhB,M;UACI,MGxxqBiD,cHwxqBjD,GGxxqB2D,KA  
AK,GHwxqBzD,SAAS,OAAT,CGxxqBoE,KAAK,IAAf,C;:QH0xqBrD,OAAO,G;O;KAdX,C;mFAiBA,yB;MGr+p  
BA,6B;MHq+pBA,sC;QAWoB,Q;QADhb,UGr+pBmC,cHq+pBnB,CGr+pBmB,C;QHs+pBnB,cwBAAGB,SAAhB,  
gB;UAGB,cAAA,SAAhB,M;UACI,MGzyqBiD,cHyyqBjD,GGzyqB2D,KAAK,GHyyqBzD,SAAS,OAAT,CGzyq  
BoE,KAAK,IAAf,C;:QH2yqBrD,OAAO,G;O;KAdX,C;mFAiBA,yB;MGt/pBA,6B;MHs/pBA,sC;QAWoB,Q;QAD  
hb,UGt/pBmC,cHs/pBnB,CGt/pBmB,C;QH0/pBnB,cwBAAGB,SAAhB,gB;UAGB,cAAA,SAAhB,M;UACI,MG1z  
qBiD,cH0zqBjD,GG1zqB2D,KAAK,GH0zqBzD,SAAS,OAAT,CG1zqBoE,KAAK,IAAf,C;:QH4zqBrD,OAAO,G;  
O;KAdX,C;mFAiBA,yB;MGvgqBA,6B;MHugqBA,sC;QAWoB,Q;QADhb,UGvgqBmC,cHugqBnB,CGvgqBmB,  
C;QHwgqBnB,cwBAAGB,SAAhB,gB;UAGB,cAAA,SAAhB,M;UACI,MG30qBiD,cH20qBjD,GG30qB2D,KAAK  
,GH20qBzD,SAAS,OAAT,CG30qBoE,KAAK,IAAf,C;:QH60qBrD,OAAO,G;O;KAdX,C;mFAiBA,yB;MGxhqBA  
,6B;MHwhqBA,sC;QAWoB,Q;QADhb,UGxhqBmC,cHwhqBnB,CGxhqBmB,C;QHhqBnB,cwBAAGB,SAAhB,gB  
;UAGB,cAAA,SAAhB,M;UACI,MG51qBiD,cH41qBjD,GG51qB2D,KAAK,GH41qBzD,SAAS,OAAT,CG51qBo  
E,KAAK,IAAf,C;:QH81qBrD,OAAO,G;O;KAdX,C;mFAiBA,yB;MGziqBA,6B;MHYiqBA,sC;QAWoB,Q;QADh

B,UGziqBmC,cHyiqBnB,CGziqBmB,C;QH0iqBnC,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,MG72  
qBiD,cH62qBjD,GG72qB2D,KAAK,GH62qBzD,SAAS,OAAT,CG72qBoE,KAAAX,IAAf,C;;QH+2qBrD,OAAO,G  
;O;KAdX,C;mFAiBA,yB;MAAA,oC;MAAA,gC;MG1jqBA,6B;MH0jqBA,sC;QAWoB,Q;QADhB,UG1jqBmC,cH  
0jqBnB,CG1jqBmB,C;QH2jqBnB,wBAAgB,SAAhB,gB;UAAgB,cAAhB,UAAgB,SAAhB,O;UACI,MG93qBiD,c  
H83qBjD,GG93qB2D,KAAK,GH83qBzD,SAAS,oBAAT,CG93qBoE,KAAAX,IAAf,C;;QHg4qBrD,OAAO,G;O;K  
AdX,C;mFAiBA,yB;MmBxkqBA,+B;MnBwkqBA,sC;QAWoB,Q;QADhB,UmBvkqBqC,eAAW,oBnBukqB/B,Cm  
BvkqB+B,CAAX,C;QnBwkqBrC,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,MmB54qBmD,enB44qB  
nD,GmB54qB8D,KAAK,KnB44qB5D,SAAS,OAAT,CmB54qBuE,KAAAX,CAAhB,C;;QnB84qBvD,OAAO,G;O;K  
AdX,C;mFAiBA,yB;MmBzLqBA,+B;MnBylqBA,sC;QAWoB,Q;QADhB,UmBxlqBqC,eAAW,oBnBwlqB/B,CmB  
xlqB+B,CAAX,C;QnBylqBrC,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,MmB75qBmD,enB65qBnD  
,GmB75qB8D,KAAK,KnB65qB5D,SAAS,OAAT,CmB75qBuE,KAAAX,CAAhB,C;;QnB+5qBvD,OAAO,G;O;KAd  
X,C;mFAiBA,yB;MmB1mqBA,+B;MnB0mqBA,sC;QAWoB,Q;QADhB,UmBzmqBqC,eAAW,oBnBmqB/B,Cm  
BzmqB+B,CAAX,C;QnB0mqBrC,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,MmB96qBmD,enB86q  
BnD,GmB96qB8D,KAAK,KnB86qB5D,SAAS,OAAT,CmB96qBuE,KAAAX,CAAhB,C;;QnBg7qBvD,OAAO,G;O;  
KAdX,C;kFAiBA,yB;MmB3nqBA,+B;MnB2nqBA,sC;QAWoB,Q;QADhB,UmB1nqBqC,eAAW,oBnB0nqB/B,C  
mB1nqB+B,CAAX,C;QnB2nqBrC,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,MmB/7qBmD,enB+7q  
BnD,GmB/7qB8D,KAAK,KnB+7qB5D,SAAS,OAAT,CmB/7qBuE,KAAAX,CAAhB,C;;QnBi8qBvD,OAAO,G;O;K  
AdX,C;mFAiBA,yB;MmB5oqBA,+B;MnB4oqBA,sC;QAWoB,Q;QADhB,UmB3oqBqC,eAAW,oBnB2oqB/B,Cm  
B3oqB+B,CAAX,C;QnB4oqBrC,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,MmBh9qBmD,enBg9qB  
nD,GmBh9qB8D,KAAK,KnBg9qB5D,SAAS,OAAT,CmBh9qBuE,KAAAX,CAAhB,C;;QnBk9qBvD,OAAO,G;O;K  
AdX,C;mFAiBA,yB;MmB7pqBA,+B;MnB6pqBA,sC;QAWoB,Q;QADhB,UmB5pqBqC,eAAW,oBnB4pqB/B,Cm  
B5pqB+B,CAAX,C;QnB6pqBrC,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,MmBj+qBmD,enBi+qBn  
D,GmBj+qB8D,KAAK,KnBi+qB5D,SAAS,OAAT,CmBj+qBuE,KAAAX,CAAhB,C;;QnBm+qBvD,OAAO,G;O;K  
AdX,C;mFAiBA,yB;MmB9qqBA,+B;MnB8qqBA,sC;QAWoB,Q;QADhB,UmB7qqBqC,eAAW,oBnB6qqB/B,CmB  
7qqB+B,CAAX,C;QnB8qqBrC,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,MmBl/qBmD,enBk/qBnD,  
GmBl/qB8D,KAAK,KnBk/qB5D,SAAS,OAAT,CmBl/qBuE,KAAAX,CAAhB,C;;QnBo/qBvD,OAAO,G;O;KAdX,C  
;kFAiBA,yB;MmB/rqBA,+B;MnB+rqBA,sC;QAWoB,Q;QADhB,UmB9rqBqC,eAAW,oBnB8rqB/B,CmB9rqB+B,  
CAAX,C;QnB+rqBrC,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,MmBngrBmD,enBmgrBnD,GmBng  
rB8D,KAAK,KnBmgrB5D,SAAS,OAAT,CmBngrBuE,KAAAX,CAAhB,C;;QnBqgrBvD,OAAO,G;O;KAdX,C;mF  
AiBA,yB;MAAA,oC;MAAA,gC;MmBhtqBA,+B;MnBgtqBA,sC;QAWoB,Q;QADhB,UmB/sqBqC,eAAW,oBnB+  
sqB/B,CmB/sqB+B,CAAX,C;QnBgtqBrC,wBAAgB,SAAhB,gB;UAAgB,cAAhB,UAAgB,SAAhB,O;UACI,MmB  
phrBmD,enBohrBnD,GmBphrB8D,KAAK,KnBohrB5D,SAAS,oBAAT,CmBphrBuE,KAAAX,CAAhB,C;;QnBshrB  
vD,OAAO,G;O;KAdX,C;IAiBA,mC;MAIoB,UAMT,M;MANP,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;  
QACI,IAAI,eAAJ,C;UACI,MAAM,gCAAYB,2BAAwB,SAAxB,MAAzB,C;;MAId,OAAO,0D;K;wFAGX,yB;MA  
AA,+D;MAAA,6B;MAAA,uC;QAUoB,Q;QAFhB,YAAY,gB;QACZ,aAAa,gB;QACb,wBAAgB,SAAhB,gB;UAA  
gB,cAAA,SAAhB,M;UACI,IAAI,UAAU,OAAV,CAAJ,C;YACI,KAAM,WAAI,OAAJ,C;;YAEN,MAAO,WAAI,  
OAAJ,C;;QAGf,OAAO,cAAK,KAAL,EAAY,MAAZ,C;O;KAjBX,C;0FAoBA,yB;MAAA,+D;MAAA,6B;MAAA  
,uC;QAUoB,Q;QAFhB,YAAY,gB;QACZ,aAAa,gB;QACb,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI  
,IAAI,UAAU,OAAV,CAAJ,C;YACI,KAAM,WAAI,OAAJ,C;;YAEN,MAAO,WAAI,OAAJ,C;;QAGf,OAAO,cA  
AK,KAAL,EAAY,MAAZ,C;O;KAjBX,C;0FAoBA,yB;MAAA,+D;MAAA,6B;MAAA,uC;QAUoB,Q;QAFhB,YA  
AY,gB;QACZ,aAAa,gB;QACb,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,IAAI,UAAU,OAAV,CAA  
J,C;YACI,KAAM,WAAI,OAAJ,C;;YAEN,MAAO,WAAI,OAAJ,C;;QAGf,OAAO,cAAK,KAAL,EAAY,MAAZ,  
C;O;KAjBX,C;0FAoBA,yB;MAAA,+D;MAAA,6B;MAAA,uC;QAUoB,Q;QAFhB,YAAY,gB;QACZ,aAAa,gB;Q  
ACb,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,IAAI,UAAU,OAAV,CAAJ,C;YACI,KAAM,WAAI,  
OAAJ,C;;YAEN,MAAO,WAAI,OAAJ,C;;QAGf,OAAO,cAAK,KAAL,EAAY,MAAZ,C;O;KAjBX,C;0FAoBA,y  
B;MAAA,+D;MAAA,6B;MAAA,uC;QAUoB,Q;QAFhB,YAAY,gB;QACZ,aAAa,gB;QACb,wBAAgB,SAAhB,gB  
;UAAgB,cAAA,SAAhB,M;UACI,IAAI,UAAU,OAAV,CAAJ,C;YACI,KAAM,WAAI,OAAJ,C;;YAEN,MAAO,W  
AAI,OAAJ,C;;QAGf,OAAO,cAAK,KAAL,EAAY,MAAZ,C;O;KAjBX,C;0FAoBA,yB;MAAA,+D;MAAA,6B;M

AAA,uC;QAUoB,Q;QAFhB,YAAY,gB;QACZ,aAAa,gB;QACb,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;  
UACI,IAAI,UAAU,OAAV,CAAJ,C;YACI,KAAM,WAAI,OAAJ,C;;YAEN,MAAO,WAAI,OAAJ,C;;;QAGf,OAA  
O,cAAK,KAAL,EAAY,MAAZ,C;O;KAjBX,C;0FAoBA,yB;MAAA,+D;MAAA,6B;MAAA,uC;QAUoB,Q;QAFh  
B,YAAY,gB;QACZ,aAAa,gB;QACb,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,IAAI,UAAU,OAAV  
,CAAJ,C;YACI,KAAM,WAAI,OAAJ,C;;YAEN,MAAO,WAAI,OAAJ,C;;;QAGf,OAAO,cAAK,KAAL,EAAY,M  
AAZ,C;O;KAjBX,C;0FAoBA,yB;MAAA,+D;MAAA,6B;MAAA,uC;QAUoB,Q;QAFhB,YAAY,gB;QACZ,aAAa,  
gB;QACb,wBAAgB,SAAhB,gB;UAAgB,cAAA,SAAhB,M;UACI,IAAI,UAAU,OAAV,CAAJ,C;YACI,KAAM,W  
AAI,OAAJ,C;;YAEN,MAAO,WAAI,OAAJ,C;;;QAGf,OAAO,cAAK,KAAL,EAAY,MAAZ,C;O;KAjBX,C;0FAo  
BA,yB;MAAA,+D;MAAA,oC;MAAA,gC;MAAA,6B;MAAA,uC;QAUoB,Q;QAFhB,YAAY,gB;QACZ,aAAa,gB;  
QACb,wBAAgB,SAAhB,gB;UAAgB,cAAhB,UAAgB,SAAhB,O;UACI,IAAI,UAAU,oBAAV,CAAJ,C;YACI,KA  
AM,WAAI,oBAAJ,C;;YAEN,MAAO,WAAI,oBAAJ,C;;;QAGf,OAAO,cAAK,KAAL,EAAY,MAAZ,C;O;KAjBX,  
C;IAoBA,+B;MAkGI,WkB3orBO,MAAO,KIB2orBG,gBk3orBH,ElBgrBH,KA2FkB,OkB3orBf,C;MIB4orBd,W  
AAW,iBAAa,IAAb,C;MACX,aAAU,CAAV,MAAkB,IAAIB,M;QACI,IAAK,WA9FqB,GA8FP,UAAK,CAAL,CA  
9FO,EAAnB,KA8FqB,CAAM,CAAN,CA9FF,CA8FrB,C;;MA9FT,OAgGO,I;K;IA7FX,iC;MAwGI,WkB3prBO,M  
AAO,KIB2prBG,gBk3prBH,ElB0jrBH,KAiGkB,OkB3prBf,C;MIB4prBd,WAAW,iBAAa,IAAb,C;MACX,aAAU,  
CAAV,MAAkB,IAAIB,M;QACI,IAAK,WApGqB,GAoGP,UAAK,CAAL,CAPGO,EAAnB,KAoGqB,CAAM,CA  
AN,CAPGF,CAoGrB,C;;MApGT,OAsGO,I;K;IAngX,iC;MA8GI,WkB3qrBO,MAAO,KIB2qrBG,gBk3qrBH,El  
BokrBH,KAuGkB,OkB3qrBf,C;MIB4qrBd,WAAW,iBAAa,IAAb,C;MACX,aAAU,CAAV,MAAkB,IAAIB,M;QA  
CI,IAAK,WA1GqB,GA0GP,UAAK,CAAL,CA1GO,EAAnB,KA0GqB,CAAM,CAAN,CA1GF,CA0GrB,C;;MA1G  
T,OA4GO,I;K;IAzGX,iC;MAoHI,WkB3rrBO,MAAO,KIB2rrBG,gBk3rrBH,ElB8krBH,KA6GkB,OkB3rrBf,C;M  
IB4rrBd,WAAW,iBAAa,IAAb,C;MACX,aAAU,CAAV,MAAkB,IAAIB,M;QACI,IAAK,WAhHqB,GAgHP,UAA  
K,CAAL,CAhHO,EAAnB,KAgHqB,CAAM,CAAN,CAhHF,CAGHrB,C;;MAhHT,OAKHO,I;K;IA/GX,iC;MA0HI,  
WkB3srBO,MAAO,KIB2srBG,gBk3srBH,ElBwlrBH,KAmHkB,OkB3srBf,C;MIB4srBd,WAAW,iBAAa,IAAb,C  
;MACX,aAAU,CAAV,MAAkB,IAAIB,M;QACI,IAAK,WAtHqB,GAsHP,UAAK,CAAL,CAtHO,EAAnB,KAsHq  
B,CAAM,CAAN,CAtHF,CAsHrB,C;;MAiHT,OAwHO,I;K;IArHX,iC;MAgII,WkB3trBO,MAAO,KIB2trBG,gBk3  
trBH,ElBktrBH,KAyHkB,OkB3trBf,C;MIB4trBd,WAAW,iBAAa,IAAb,C;MACX,aAAU,CAAV,MAAkB,IAA  
IB,M;QACI,IAAK,WA5HqB,GA4HP,UAAK,CAAL,CA5HO,EAAnB,KA4HqB,CAAM,CAAN,CA5HF,CA4HrB,  
C;;MA5HT,OA8HO,I;K;IA3HX,iC;MAsII,WkB3urBO,MAAO,KIB2urBG,gBk3urBH,ElB4mrBH,KA+HkB,OkB  
3urBf,C;MIB4urBd,WAAW,iBAAa,IAAb,C;MACX,aAAU,CAAV,MAAkB,IAAIB,M;QACI,IAAK,WAlIqB,GAKI  
P,UAAK,CAAL,CAIIO,EAAnB,KAKIqB,CAAM,CAAN,CAIIF,CAKIrB,C;;MAIIT,OAoIO,I;K;IAjIX,iC;MA4II,W  
kB3vrBO,MAAO,KIB2vrBG,gBk3vrBH,ElBsnrBH,KAQIkB,OkB3vrBf,C;MIB4vrBd,WAAW,iBAAa,IAAb,C;M  
ACX,aAAU,CAAV,MAAkB,IAAIB,M;QACI,IAAK,WAxIqB,GAWIP,UAAK,CAAL,CAXIO,EAAnB,KAWIqB,C  
AAM,CAAN,CAXIF,CAwIrB,C;;MAXIT,OAoIO,I;K;IAvIX,iC;MAkJI,WkB3wrBO,MAAO,KIB2wrBG,gBk3wr  
BH,ElBgorBH,KA2IkB,OkB3wrBf,C;MIB4wrBd,WAAW,iBAAa,IAAb,C;MACX,aAAU,CAAV,MAAkB,IAAIB,  
M;QACI,IAAK,WA9IqB,GA8IP,sBAAK,CAAL,EA9IO,EAAnB,KA8IqB,CAAM,CAAN,CA9IF,CA8IrB,C;;MA9  
IT,OAgJO,I;K;8EA7IX,yB;MAAA,gE;MkBzorBA,iB;MIByorBA,8C;QAQI,WkB3orBO,MAAO,KIB2orBG,gBk3  
3orBH,ElB2orBS,KAAM,OkB3orBf,C;QIB4orBd,WAAW,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M  
;UACI,IAAK,WAAI,UAAU,UAAK,CAAL,CAAV,EAAMB,MAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;  
KAbX,C;8EAgBA,yB;MAAA,gE;MkBzprBA,iB;MIByprBA,8C;QAQI,WkB3prBO,MAAO,KIB2prBG,gBk3prB  
H,ElB2prBS,KAAM,OkB3prBf,C;QIB4prBd,WAAW,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UA  
CI,IAAK,WAAI,UAAU,UAAK,CAAL,CAAV,EAAMB,MAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAb  
X,C;+EAgBA,yB;MAAA,gE;MkBzqrBA,iB;MIByqrBA,8C;QAQI,WkB3qrBO,MAAO,KIB2qrBG,gBk3qrBH,El  
B2qrBS,KAAM,OkB3qrBf,C;QIB4qrBd,WAAW,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,I  
AAK,WAAI,UAAU,UAAK,CAAL,CAAV,EAAMB,MAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAbX,C  
;8EAgBA,yB;MAAA,gE;MkBzrrBA,iB;MIByrrBA,8C;QAQI,WkB3rrBO,MAAO,KIB2rrBG,gBk3rrBH,ElB2rrB  
S,KAAM,OkB3rrBf,C;QIB4rrBd,WAAW,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,IAAK,W  
AAI,UAAU,UAAK,CAAL,CAAV,EAAMB,MAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAbX,C;+EAgB  
A,yB;MAAA,gE;MkBzsrBA,iB;MIBysrBA,8C;QAQI,WkB3srBO,MAAO,KIB2srBG,gBk3srBH,ElB2srBS,KAA

M,OkB3srBf,C;QIB4srBd,WAAW,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,IAAK,WAAI,U  
AAU,UAAK,CAAL,CAAV,EAAMb,MAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAbX,C;+EAgBA,yB;  
MAAA,gE;MkBztrBA,iB;MIBytrBA,8C;QAQI,WkB3trBO,MAAO,KIB2trBG,gBkB3trBH,EIB2trBS,KAAM,OkB  
3trBf,C;QIB4trBd,WAAW,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,IAAK,WAAI,UAAU,U  
AAK,CAAL,CAAV,EAAMb,MAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAbX,C;+EAgBA,yB;MAAA,  
gE;MkBzurBA,iB;MIByurBA,8C;QAQI,WkB3urBO,MAAO,KIB2urBG,gBkB3urBH,EIB2urBS,KAAM,OkB3urB  
f,C;QIB4urBd,WAAW,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,IAAK,WAAI,UAAU,UAA  
K,CAAL,CAAV,EAAMb,MAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAbX,C;+EAgBA,yB;MAAA,gE;  
MkBzvrBA,iB;MIByvrBA,8C;QAQI,WkB3vrBO,MAAO,KIB2vrBG,gBkB3vrBH,EIB2vrBS,KAAM,OkB3vrBf,C;  
QIB4vrBd,WAAW,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,IAAK,WAAI,UAAU,UAAK,C  
AAL,CAAV,EAAMb,MAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAbX,C;+EAgBA,yB;MAAA,gE;MA  
AA,oC;MkBzwrBA,iB;MIBywrBA,8C;QAQI,WkB3wrBO,MAAO,KIB2wrBG,gBkB3wrBH,EIB2wrBS,KAAM,O  
kB3wrBf,C;QIB4wrBd,WAAW,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,IAAK,WAAI,UAA  
U,sBAAK,CAAL,EAAMb,EAAMb,MAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAbX,C;+EAgBA,yB;MAA  
qGoB,gB;MAHhB,gBAAgB,gB;MACHb,WAAW,iBkBt3rBJ,MAAO,KIBs3rBsB,wBA5FzB,KA4FyB,EAAwB,EA  
AxB,CkBt3rBtB,EIBs3rBmD,SkBt3rBnD,CIBs3rBH,C;MACX,QAAQ,C;MACQ,OA9FL,KA8FK,W;MAAhB,OA  
AgB,cAAhB,C;QAAgB,yB;QACZ,IAAI,KAAK,SAAT,C;UAAoB,K;QACpB,IAAK,WAhGqB,GAwGP,UAAK,U  
AAL,EAAK,kBAAL,SAhGO,EAgGI,OAAGJ,CAGGrB,C;;MAHGT,OAGGO,I;K;IA/FX,kC;MA6GoB,gB;MAHhB,  
gBAAgB,gB;MACHb,WAAW,iBkBx4rBJ,MAAO,KIBw4rBsB,wBApGzB,KAoGyB,EAAwB,EAAXB,CkBx4rBtB  
,EIBw4rBmD,SkBx4rBnD,CIBw4rBH,C;MACX,QAAQ,C;MACQ,OAtGL,KAsGK,W;MAAhB,OAAgB,cAAhB,C  
;QAAgB,yB;QACZ,IAAI,KAAK,SAAT,C;UAAoB,K;QACpB,IAAK,WAxGqB,GAwGP,UAAK,UAAAL,EAAK,kB  
AAL,SAxGO,EAwGI,OAAGJ,CAGGrB,C;;MAxGT,OA0GO,I;K;IAvGX,kC;MAqHoB,gB;MAHhB,gBAAgB,gB;  
MACHb,WAAW,iBkB15rBJ,MAAO,KIB05rBsB,wBA5GzB,KA4GyB,EAAwB,EAAXB,CkB15rBtB,EIB05rBmD,  
SkB15rBnD,CIB05rBH,C;MACX,QAAQ,C;MACQ,OA9GL,KA8GK,W;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;  
QACZ,IAAI,KAAK,SAAT,C;UAAoB,K;QACpB,IAAK,WAhHqB,GAwHP,UAAK,UAAAL,EAAK,kBAAL,SAhHO  
,EAGHI,OAHHJ,CAGHrB,C;;MAHHT,OAKHO,I;K;IA/GX,kC;MA6HoB,gB;MAHhB,gBAAgB,gB;MACHb,WAA  
W,iBkB56rBJ,MAAO,KIB46rBsB,wBApHzB,KAoHyB,EAAwB,EAAXB,CkB56rBtB,EIB46rBmD,SkB56rBnD,C  
IB46rBH,C;MACX,QAAQ,C;MACQ,OAtHL,KAsHK,W;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,IAAI,KA  
AK,SAAT,C;UAAoB,K;QACpB,IAAK,WAxHqB,GAwHP,UAAK,UAAAL,EAAK,kBAAL,SAxHO,EAwHI,OAxH  
J,CAGHrB,C;;MAxHT,OA0HO,I;K;IAvHX,kC;MAqIoB,gB;MAHhB,gBAAgB,gB;MACHb,WAAW,iBkB97rBJ,  
MAAO,KIB87rBsB,wBA5HzB,KA4HyB,EAAwB,EAAXB,CkB97rBtB,EIB87rBmD,SkB97rBnD,CIB87rBH,C;M  
ACX,QAAQ,C;MACQ,OA9HL,KA8HK,W;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,IAAI,KAAK,SAAT,C  
;UAAoB,K;QACpB,IAAK,WAhIqB,GAwIP,UAAK,UAAAL,EAAK,kBAAL,SAhIO,EAGII,OAHIJ,CAGIrB,C;;MAH  
IT,OAKIO,I;K;IA/HX,kC;MA6IoB,gB;MAHhB,gBAAgB,gB;MACHb,WAAW,iBkBh9rBJ,MAAO,KIBg9rBsB,wB  
ApIzB,KAoIyB,EAAwB,EAAXB,CkBh9rBtB,EIBg9rBmD,SkBh9rBnD,CIBg9rBH,C;MACX,QAAQ,C;MACQ,O  
AtIL,KAsIK,W;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,IAAI,KAAK,SAAT,C;UAAoB,K;QACpB,IAAK,  
WAxIqB,GAwIP,UAAK,UAAAL,EAAK,kBAAL,SAxIO,EAwII,OAxIJ,CAGIrB,C;;MAxIT,OA0IO,I;K;IAvIX,kC;  
MAqJoB,gB;MAHhB,gBAAgB,gB;MACHb,WAAW,iBkB1+rBJ,MAAO,KIBk+rBsB,wBA5IzB,KA4IyB,EAAwB,  
EAAXB,CkB1+rBtB,EIBk+rBmD,SkB1+rBnD,CIBk+rBH,C;MACX,QAAQ,C;MACQ,OA9IL,KA8IK,W;MAAhB,  
OAAgB,cAAhB,C;QAAgB,yB;QACZ,IAAI,KAAK,SAAT,C;UAAoB,K;QACpB,IAAK,WAhJqB,GAwJP,UAAK,  
UAAAL,EAAK,kBAAL,SAhJO,EAGJI,OAHIJ,CAGIrB,C;;MAHJT,OAKJO,I;K;IA/IX,kC;MA6JoB,gB;MAHhB,gB  
AgB,gB;MACHb,WAAW,iBkBp/rBJ,MAAO,KIBo/rBsB,wBApJzB,KAoJyB,EAAwB,EAAXB,CkBp/rBtB,EIBo/r  
BmD,SkBp/rBnD,CIBo/rBH,C;MACX,QAAQ,C;MACQ,OAtJL,KAsJK,W;MAAhB,OAAgB,cAAhB,C;QAAgB,y  
B;QACZ,IAAI,KAAK,SAAT,C;UAAoB,K;QACpB,IAAK,WAxJqB,GAwJP,UAAK,UAAAL,EAAK,kBAAL,SAxJ  
O,EAwJI,OAxJJ,CAGIrB,C;;MAxJT,OA0JO,I;K;IAvJX,kC;MAqKoB,gB;MAHhB,gBAAgB,gB;MACHb,WAAW,  
iBkBtgsBJ,MAAO,KIBsgsBsB,wBA5JzB,KA4JyB,EAAwB,EAAXB,CkBtgsBtB,EIBsgsBmD,SkBtgsBnD,CIBsgsB  
H,C;MACX,QAAQ,C;MACQ,OA9JL,KA8JK,W;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,IAAI,KAAK,SA  
AT,C;UAAoB,K;QACpB,IAAK,WAhKqB,GAwKP,sBAAK,UAAAL,EAAK,kBAAL,UAhKO,EAGKI,OAHKJ,CAG

KrB,C;;MAhKT,OakKO,I;K;+EA/JX,yB;MAAA,kF;MAAA,gE;MkBn3rBA,iB;MIBm3rBA,8C;QAWoB,UAEY,  
M;QAL5B,gBAAGB,gB;QChB,WAAW,ekBt3rBJ,MAAO,KIBs3rBsB,wBAAN,KAAM,EAAwB,EAAxB,Ckbt3r  
BtB,ElBs3rBmD,SkBt3rBnD,CIBs3rBH,C;QACX,QAAQ,C;QACQ,uB;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;U  
ACZ,IAAI,KAAK,SAAT,C;YAAoB,K;UACpB,IAAK,WAAI,UAAU,UAAK,UAAL,EAAK,kBAAL,SAAV,EAAq  
B,OAARb,CAAJ,C;;QAET,OAAO,I;O;KafX,C;+EakBA,yB;MAAA,kF;MAAA,gE;MkBr4rBA,iB;MIBq4rBA,8C  
;QAWoB,UAEY,M;QAL5B,gBAAGB,gB;QChB,WAAW,ekBx4rBJ,MAAO,KIBw4rBsB,wBAAN,KAAM,EAA  
wB,EAAxB,Ckx4rBtB,ElBw4rBmD,SkBx4rBnD,CIBw4rBH,C;QACX,QAAQ,C;QACQ,uB;QAAhB,OAAGB,cA  
AhB,C;UAAgB,yB;UACZ,IAAI,KAAK,SAAT,C;YAAoB,K;UACpB,IAAK,WAAI,UAAU,UAAK,UAAL,EAAK,  
kBAAL,SAAV,EAAqB,OAARb,CAAJ,C;;QAET,OAAO,I;O;KafX,C;+EakBA,yB;MAAA,kF;MAAA,gE;MkBv5  
rBA,iB;MIBu5rBA,8C;QAWoB,UAEY,M;QAL5B,gBAAGB,gB;QChB,WAAW,ekB15rBJ,MAAO,KIB05rBsB,w  
BAAN,KAAM,EAAwB,EAAxB,CkB15rBtB,ElB05rBmD,SkB15rBnD,CIB05rBH,C;QACX,QAAQ,C;QACQ,uB;  
QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,IAAI,KAAK,SAAT,C;YAAoB,K;UACpB,IAAK,WAAI,UAAU,U  
AAK,UAAL,EAAK,kBAAL,SAAV,EAAqB,OAARb,CAAJ,C;;QAET,OAAO,I;O;KafX,C;+EakBA,yB;MAAA,k  
F;MAAA,gE;MkBz6rBA,iB;MIBy6rBA,8C;QAWoB,UAEY,M;QAL5B,gBAAGB,gB;QChB,WAAW,ekB56rBJ,  
MAAO,KIB46rBsB,wBAAN,KAAM,EAAwB,EAAxB,CkB56rBtB,ElB46rBmD,SkB56rBnD,CIB46rBH,C;QACX,  
QAAQ,C;QACQ,uB;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,IAAI,KAAK,SAAT,C;YAAoB,K;UACpB,IA  
AK,WAAI,UAAU,UAAK,UAAL,EAAK,kBAAL,SAAV,EAAqB,OAARb,CAAJ,C;;QAET,OAAO,I;O;KafX,C;+  
EakBA,yB;MAAA,kF;MAAA,gE;MkB37rBA,iB;MIB27rBA,8C;QAWoB,UAEY,M;QAL5B,gBAAGB,gB;QCh  
B,WAAW,ekB97rBJ,MAAO,KIB87rBsB,wBAAN,KAAM,EAAwB,EAAxB,CkB97rBtB,ElB87rBmD,SkB97rBnD  
,CIB87rBH,C;QACX,QAAQ,C;QACQ,uB;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,IAAI,KAAK,SAAT,C;  
YAAoB,K;UACpB,IAAK,WAAI,UAAU,UAAK,UAAL,EAAK,kBAAL,SAAV,EAAqB,OAARb,CAAJ,C;;QAET,  
OAAO,I;O;KafX,C;+EakBA,yB;MAAA,kF;MAAA,gE;MkB78rBA,iB;MIB68rBA,8C;QAWoB,UAEY,M;QAL5  
B,gBAAGB,gB;QChB,WAAW,ekBh9rBJ,MAAO,KIBg9rBsB,wBAAN,KAAM,EAAwB,EAAxB,CkBh9rBtB,El  
Bg9rBmD,SkBh9rBnD,CIBg9rBH,C;QACX,QAAQ,C;QACQ,uB;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,I  
AAI,KAAK,SAAT,C;YAAoB,K;UACpB,IAAK,WAAI,UAAU,UAAK,UAAL,EAAK,kBAAL,SAAV,EAAqB,OA  
ARb,CAAJ,C;;QAET,OAAO,I;O;KafX,C;+EakBA,yB;MAAA,kF;MAAA,gE;MkB/9rBA,iB;MIB+9rBA,8C;QA  
WoB,UAEY,M;QAL5B,gBAAGB,gB;QChB,WAAW,ekBl+rBJ,MAAO,KIBk+rBsB,wBAAN,KAAM,EAAwB,E  
AAxB,CkBl+rBtB,ElBk+rBmD,SkBl+rBnD,CIBk+rBH,C;QACX,QAAQ,C;QACQ,uB;QAAhB,OAAGB,cAAhB,C  
;UAAgB,yB;UACZ,IAAI,KAAK,SAAT,C;YAAoB,K;UACpB,IAAK,WAAI,UAAU,UAAK,UAAL,EAAK,kBAA  
L,SAAV,EAAqB,OAARb,CAAJ,C;;QAET,OAAO,I;O;KafX,C;+EakBA,yB;MAAA,kF;MAAA,gE;MkBj/rBA,iB;  
MIBi/rBA,8C;QAWoB,UAEY,M;QAL5B,gBAAGB,gB;QChB,WAAW,ekBp/rBJ,MAAO,KIBo/rBsB,wBAAN,K  
AAM,EAAwB,EAAxB,CkBp/rBtB,ElBo/rBmD,SkBp/rBnD,CIBo/rBH,C;QACX,QAAQ,C;QACQ,uB;QAAhB,OA  
AGB,cAAhB,C;UAAgB,yB;UACZ,IAAI,KAAK,SAAT,C;YAAoB,K;UACpB,IAAK,WAAI,UAAU,UAAK,UAAL,  
EAAK,kBAAL,SAAV,EAAqB,OAARb,CAAJ,C;;QAET,OAAO,I;O;KafX,C;+EakBA,yB;MAAA,kF;MAAA,gE;  
MAAA,oC;MkBngsBA,iB;MIBmgsBA,8C;QAWoB,UAEY,M;QAL5B,gBAAGB,gB;QChB,WAAW,ekBtgsBJ,M  
AAO,KIBsgsBsB,wBAAN,KAAM,EAAwB,EAAxB,CkBtgsBtB,ElBsgsBmD,SkBtgsBnD,CIBsgsBH,C;QACX,QA  
AQ,C;QACQ,uB;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,IAAI,KAAK,SAAT,C;YAAoB,K;UACpB,IAAK,  
WAAI,UAAU,sBAKU,UAAL,EAAK,kBAAL,UAAV,EAAqB,OAARb,CAAJ,C;;QAET,OAAO,I;O;KafX,C;IAkB  
A,kC;MAwFI,WkBvmsBO,MAAO,KIBumsBG,gBkBvmsBH,ElBshsBH,KaIFkB,OkBvmsBf,C;MIBwmsBd,WAA  
W,iBAAa,IAAb,C;MACX,aAAU,CAAV,MAAkB,IAAIB,M;QACI,IAAK,WApFqB,GAoFP,UAAK,CAAL,CAPF  
O,EAAAnB,KAoFqB,CAAM,CAAN,CAPFF,CAoFrB,C;;MApFT,OAsFO,I;K;IANFX,kC;MA8FI,WkBvnsBO,MAA  
O,KIBunsBG,gBkBvnsBH,ElBgisBH,KAuFkB,OkBvnsBf,C;MIBwnsBd,WAAW,iBAAa,IAAb,C;MACX,aAAU,C  
AAV,MAAkB,IAAIB,M;QACI,IAAK,WA1FqB,GA0FP,UAAK,CAAL,CA1FO,EAAAnB,KA0FqB,CAAM,CAAN,  
CA1FF,CA0FrB,C;;MA1FT,OA4FO,I;K;IAzFX,kC;MAoGI,WkBvosBO,MAAO,KIBuosBG,gBkBvosBH,ElB0isB  
H,KA6FkB,OkBvosBf,C;MIBwosBd,WAAW,iBAAa,IAAb,C;MACX,aAAU,CAAV,MAAkB,IAAIB,M;QACI,IA  
AK,WAhGqB,GAGP,UAAK,CAAL,CAhGO,EAAAnB,KAGGqB,CAAM,CAAN,CAhGF,CAGGrB,C;;MAhGT,OA  
kGO,I;K;IAFX,kC;MA0GI,WkBvpsBO,MAAO,KIBupsBG,gBkBvpsBH,ElBojsBH,KAmGkB,OkBvpsBf,C;MIBw  
psBd,WAAW,iBAAa,IAAb,C;MACX,aAAU,CAAV,MAAkB,IAAIB,M;QACI,IAAK,WAtGqB,GAsGP,UAAK,C

AAL,CAtGO,EAAnB,KAsGqB,CAAM,CAAN,CAtGF,CAsGrB,C;;MAtGT,OAwGO,I;K;IArGX,kC;MAgHI,WkB  
vqsBO,MAAO,KIBuqsBG,gBkVqsBH,ElB8jsBH,KAyGkB,OkBvqsBf,C;MIBwqsBd,WAAW,iBAaA,IAAb,C;M  
ACX,aAAU,CAAV,MAAkB,IAAIB,M;QACI,IAAK,WA5GqB,GA4GP,UAAK,CAAL,CA5GO,EAAnB,KA4GqB,  
CAAM,CAAN,CA5GF,CA4GrB,C;;MA5GT,OA8GO,I;K;IA3GX,kC;MAshI,WkBvrsBO,MAAO,KIBursBG,gBk  
BvrsBH,ElBwksBH,KA+GkB,OkBvrsBf,C;MIBwrsBd,WAAW,iBAaA,IAAb,C;MACX,aAAU,CAAV,MAAkB,IA  
AIB,M;QACI,IAAK,WAlHqB,GakHP,UAAK,CAAL,CAIHO,EAAnB,KakHqB,CAAM,CAAN,CAIHF,CakHrB,  
C;;MAIHT,OAoHO,I;K;IAjHX,kC;MA4HI,WkBvssBO,MAAO,KIBussBG,gBkVssBH,ElBklsBH,KAqHkB,OkB  
vssBf,C;MIBwssBd,WAAW,iBAaA,IAAb,C;MACX,aAAU,CAAV,MAAkB,IAAIB,M;QACI,IAAK,WaxHqB,GA  
wHP,UAAK,CAAL,CaxHO,EAAnB,KAwHqB,CAAM,CAAN,CaxHF,CAwHrB,C;;MAxHT,OA0HO,I;K;IAvHX  
,kC;MAkII,WkBvtsBO,MAAO,KlButsBG,gBkVtsBH,ElB4lsBH,KA2HkB,OkBvtsBf,C;MIBwtsBd,WAAW,iBA  
Aa,IAAb,C;MACX,aAAU,CAAV,MAAkB,IAAIB,M;QACI,IAAK,WA9HqB,GA8HP,sBAAK,CAAL,EA9HO,EA  
8HE,YA9HrB,KA8HqB,CAAM,CAAN,EA9HF,CA8HrB,C;;MA9HT,OAgIO,I;K;+EA7HX,yB;MAAA,gE;MkBr  
msBA,iB;MIBqmsBA,8C;QAQI,WkBvmsBO,MAAO,KIBumsBG,gBkVmsBH,ElBumsBS,KAAM,OkBvmsBf,C;  
QlBwmsBd,WAAW,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,IAAK,WAAI,UAAU,UAAK,  
CAAL,CAAV,EAAmB,MAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAbX,C;+EAgBA,yB;MAAA,gE;M  
kBrnsBA,iB;MIBqnsBA,8C;QAQI,WkBvnsBO,MAAO,KIBunsBG,gBkVnsBH,ElBunsBS,KAAM,OkBvnsBf,C;Q  
lBwnsBd,WAAW,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,IAAK,WAAI,UAAU,UAAK,CA  
AL,CAAV,EAAmB,MAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAbX,C;+EAgBA,yB;MAAA,gE;MkBr  
osBA,iB;MIBqosBA,8C;QAQI,WkBvosBO,MAAO,KIBuosBG,gBkVvosBH,ElBuosBS,KAAM,OkBvosBf,C;QlB  
wosBd,WAAW,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,IAAK,WAAI,UAAU,UAAK,CAA  
L,CAAV,EAAmB,MAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAbX,C;+EAgBA,yB;MAAA,gE;MkBrps  
BA,iB;MIBqpsBA,8C;QAQI,WkBvpsBO,MAAO,KIBupsBG,gBkVpsBH,ElBupsBS,KAAM,OkBvpsBf,C;QlBwp  
sBd,WAAW,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,IAAK,WAAI,UAAU,UAAK,CAAL,C  
AAV,EAAmB,MAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAbX,C;+EAgBA,yB;MAAA,gE;MkBrqsBA  
,iB;MIBqqsBA,8C;QAQI,WkBvqsBO,MAAO,KIBuqsBG,gBkVqsBH,ElBuqsBS,KAAM,OkBvqsBf,C;QlBwqsBd  
,WAAW,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,IAAK,WAAI,UAAU,UAAK,CAAL,CAA  
V,EAAmB,MAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAbX,C;+EAgBA,yB;MAAA,gE;MkBrssBA,iB;  
MIBqrsBA,8C;QAQI,WkBvrsBO,MAAO,KlBursBG,gBkVrsBH,ElBursBS,KAAM,OkBvrsBf,C;QlBwrsBd,WAA  
W,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,IAAK,WAAI,UAAU,UAAK,CAAL,CAAV,EA  
AmB,MAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAbX,C;+EAgBA,yB;MAAA,gE;MkBrssBA,iB;MIBq  
ssBA,8C;QAQI,WkBvssBO,MAAO,KIBussBG,gBkVssBH,ElBussBS,KAAM,OkBvssBf,C;QlBwssBd,WAAW,e  
AAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,IAAK,WAAI,UAAU,UAAK,CAAL,CAAV,EAAmB  
,MAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAbX,C;+EAgBA,yB;MAAA,gE;MAAA,oC;MkBrtsBA,iB;  
MIBqtsBA,8C;QAQI,WkBvtsBO,MAAO,KlButsBG,gBkVtsBH,ElButsBS,KAAM,OkBvtsBf,C;QlBwtsBd,WAA  
W,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,IAAK,WAAI,UAAU,sBAAK,CAAL,EA AV,EA  
AmB,kBAAM,CAAN,EAAnB,CAAJ,C;;QAET,OAAO,I;O;KAbX,C;IAgBA,4F;MAQ8D,yB;QAAA,YAA0B,I;M  
AAM,sB;QAAA,SAAuB,E;MAAI,uB;QAAA,UAAwB,E;MAAI,qB;QAAA,QAAa,E;MAAI,yB;QAAA,YAA0B,K  
;MAAO,yB;QAAA,YAAoC,I;MAGvN,Q;MAFhB,MAAO,gBAAO,MAAP,C;MACP,YAAY,C;MACZ,wBAAgB,  
SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,IAAI,iCAAU,CAAd,C;UAAiB,MAAO,gBAAO,SAAP,C;QACxB,IA  
AI,QAAQ,CAAR,IAAa,SAAS,KAA1B,C;UACW,gBAAP,MAAO,EAAC,OAAd,EAuB,SAAvB,C;;UACJ,K;;MA  
EX,IAAI,SAAS,CAAT,IAAc,QAAQ,KAA1B,C;QAAiC,MAAO,gBAAO,SAAP,C;MACxC,MAAO,gBAAO,OAA  
P,C;MACP,OAAO,M;K;IAGX,8F;MAQwD,yB;QAAA,YAA0B,I;MAAM,sB;QAAA,SAAuB,E;MAAI,uB;QAAA,  
UAAwB,E;MAAI,qB;QAAA,QAAa,E;MAAI,yB;QAAA,YAA0B,K;MAAO,yB;QAAA,YAAuC,I;MAGpN,Q;MA  
FhB,MAAO,gBAAO,MAAP,C;MACP,YAAY,C;MACZ,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,I  
AAI,iCAAU,CAAd,C;UAAiB,MAAO,gBAAO,SAAP,C;QACxB,IAAI,QAAQ,CAAR,IAAa,SAAS,KAA1B,C;UA  
CI,IAAI,iBAAJ,C;YACI,MAAO,gBAAO,UAAU,OAAV,CAAP,C;;YAEP,MAAO,gBAAO,OAAQ,WAAf,C;;UAC  
R,K;;MAEX,IAAI,SAAS,CAAT,IAAc,QAAQ,KAA1B,C;QAAiC,MAAO,gBAAO,SAAP,C;MACxC,MAAO,gBAA  
AO,OAAO,CAAP,C;MACP,OAAO,M;K;IAGX,8F;MAQyD,yB;QAAA,YAA0B,I;MAAM,sB;QAAA,SAAuB,E;MAAI,u

B;QAAA,UAAwB,E;MAAI,qB;QAAA,QAAa,E;MAAI,yB;QAAA,YAA0B,K;MAAO,yB;QAAA,YAAwC,I;MAG  
tN,Q;MAFhB,MAAO,gBAAO,MAAP,C;MACP,YAAY,C;MACZ,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,  
M;QACI,IAAI,iCAAU,CAAd,C;UAAiB,MAAO,gBAAO,SAAP,C;QACxB,IAAI,QAAQ,CAAR,IAAa,SAAS,KA  
A1B,C;UACI,IAAI,iBAAJ,C;YACI,MAAO,gBAAO,UAAU,OAAV,CAAP,C;;YAEP,MAAO,gBAAO,OAAQ,WA  
Af,C;;UACR,K;;MAEX,IAAI,SAAS,CAAT,IAAc,QAAQ,KAA1B,C;QAAiC,MAAO,gBAAO,SAAP,C;MACxC,  
MAAO,gBAAO,OAAP,C;MACP,OAAO,M;K;IAGX,8F;MAQuD,yB;QAAA,YAA0B,I;MAAM,sB;QAAA,SAAu  
B,E;MAAI,uB;QAAA,UAAwB,E;MAAI,qB;QAAA,QAAa,E;MAAI,yB;QAAA,YAA0B,K;MAAO,yB;QAAA,YA  
AsC,I;MAGIN,Q;MAFhB,MAAO,gBAAO,MAAP,C;MACP,YAAY,C;MACZ,wBAAgB,SAAhB,gB;QAAGB,cAA  
A,SAAhB,M;QACI,IAAI,iCAAU,CAAd,C;UAAiB,MAAO,gBAAO,SAAP,C;QACxB,IAAI,QAAQ,CAAR,IAAa,  
SAAS,KAA1B,C;UACI,IAAI,iBAAJ,C;YACI,MAAO,gBAAO,UAAU,OAAV,CAAP,C;;YAEP,MAAO,gBAAO,  
OAAQ,WAAf,C;;UACR,K;;MAEX,IAAI,SAAS,CAAT,IAAc,QAAQ,KAA1B,C;QAAiC,MAAO,gBAAO,SAAP,  
C;MACxC,MAAO,gBAAO,OAAP,C;MACP,OAAO,M;K;IAGX,8F;MAQwD,yB;QAAA,YAA0B,I;MAAM,sB;Q  
AAA,SAAuB,E;MAAI,uB;QAAA,UAAwB,E;MAAI,qB;QAAA,QAAa,E;MAAI,yB;QAAA,YAA0B,K;MAAO,yB  
;QAAA,YAAuC,I;MAGpN,Q;MAFhB,MAAO,gBAAO,MAAP,C;MACP,YAAY,C;MACZ,wBAAgB,SAAhB,gB;  
QAAGB,cAAA,SAAhB,M;QACI,IAAI,iCAAU,CAAd,C;UAAiB,MAAO,gBAAO,SAAP,C;QACxB,IAAI,QAAQ,  
CAAR,IAAa,SAAS,KAA1B,C;UACI,IAAI,iBAAJ,C;YACI,MAAO,gBAAO,UAAU,OAAV,CAAP,C;;YAEP,MA  
AO,gBAAO,OAAQ,WAAf,C;;UACR,K;;MAEX,IAAI,SAAS,CAAT,IAAc,QAAQ,KAA1B,C;QAAiC,MAAO,gB  
AAO,SAAP,C;MACxC,MAAO,gBAAO,OAAP,C;MACP,OAAO,M;K;IAGX,8F;MAQyD,yB;QAAA,YAA0B,I;M  
AAM,sB;QAAA,SAAuB,E;MAAI,uB;QAAA,UAAwB,E;MAAI,qB;QAAA,QAAa,E;MAAI,yB;QAAA,YAA0B,K  
;MAAO,yB;QAAA,YAAwC,I;MAGtN,Q;MAFhB,MAAO,gBAAO,MAAP,C;MACP,YAAY,C;MACZ,wBAAgB,  
SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,IAAI,iCAAU,CAAd,C;UAAiB,MAAO,gBAAO,SAAP,C;QACxB,IA  
AI,QAAQ,CAAR,IAAa,SAAS,KAA1B,C;UACI,IAAI,iBAAJ,C;YACI,MAAO,gBAAO,UAAU,OAAV,CAAP,C;;  
YAEP,MAAO,gBAAO,OAAQ,WAAf,C;;UACR,K;;MAEX,IAAI,SAAS,CAAT,IAAc,QAAQ,KAA1B,C;QAAiC,  
MAAO,gBAAO,SAAP,C;MACxC,MAAO,gBAAO,OAAP,C;MACP,OAAO,M;K;IAGX,8F;MAQ0D,yB;QAAA,Y  
AA0B,I;MAAM,sB;QAAA,SAAuB,E;MAAI,uB;QAAA,UAAwB,E;MAAI,qB;QAAA,QAAa,E;MAAI,yB;QAAA,  
YAA0B,K;MAAO,yB;QAAA,YAAyC,I;MAGxN,Q;MAFhB,MAAO,gBAAO,MAAP,C;MACP,YAAY,C;MACZ,  
wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,IAAI,iCAAU,CAAd,C;UAAiB,MAAO,gBAAO,SAAP,C;  
QACxB,IAAI,QAAQ,CAAR,IAAa,SAAS,KAA1B,C;UACI,IAAI,iBAAJ,C;YACI,MAAO,gBAAO,UAAU,OAAV,  
CAAP,C;;YAEP,MAAO,gBAAO,OAAQ,WAAf,C;;UACR,K;;MAEX,IAAI,SAAS,CAAT,IAAc,QAAQ,KAA1B,C  
;QAAiC,MAAO,gBAAO,SAAP,C;MACxC,MAAO,gBAAO,OAAP,C;MACP,OAAO,M;K;IAGX,8F;MAQ2D,yB;  
QAAA,YAA0B,I;MAAM,sB;QAAA,SAAuB,E;MAAI,uB;QAAA,UAAwB,E;MAAI,qB;QAAA,QAAa,E;MAAI,y  
B;QAAA,YAA0B,K;MAAO,yB;QAAA,YAA0C,I;MAG1N,Q;MAFhB,MAAO,gBAAO,MAAP,C;MACP,YAAY,  
C;MACZ,wBAAgB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,IAAI,iCAAU,CAAd,C;UAAiB,MAAO,gBAAO,  
SAAP,C;QACxB,IAAI,QAAQ,CAAR,IAAa,SAAS,KAA1B,C;UACI,IAAI,iBAAJ,C;YACI,MAAO,gBAAO,UAA  
U,OAAV,CAAP,C;;YAEP,MAAO,gBAAO,OAAQ,WAAf,C;;UACR,K;;MAEX,IAAI,SAAS,CAAT,IAAc,QAAQ,  
KAA1B,C;QAAiC,MAAO,gBAAO,SAAP,C;MACxC,MAAO,gBAAO,OAAP,C;MACP,OAAO,M;K;IAGX,8F;M  
AQwD,yB;QAAA,YAA0B,I;MAAM,sB;QAAA,SAAuB,E;MAAI,uB;QAAA,UAAwB,E;MAAI,qB;QAAA,QAAa,  
E;MAAI,yB;QAAA,YAA0B,K;MAAO,yB;QAAA,YAAuC,I;MAGpN,Q;MAFhB,MAAO,gBAAO,MAAP,C;MAC  
P,YAAY,C;MACZ,wBAAgB,SAAhB,gB;QAAGB,cAAhB,UAAgB,SAAhB,O;QACI,IAAI,iCAAU,CAAd,C;UAAi  
B,MAAO,gBAAO,SAAP,C;QACxB,IAAI,QAAQ,CAAR,IAAa,SAAS,KAA1B,C;UACI,IAAI,iBAAJ,C;YACI,MA  
AO,gBAAO,UAAU,oBAAV,CAAP,C;;YAEP,MAAO,gBAAO,OAAP,C;;UACR,K;;MAEX,IAAI,SAAS,CAAT,IA  
Ac,QAAQ,KAA1B,C;QAAiC,MAAO,gBAAO,SAAP,C;MACxC,MAAO,gBAAO,OAAP,C;MACP,OAAO,M;K;I  
AGX,0F;MAQyC,yB;QAAA,YAA0B,I;MAAM,sB;QAAA,SAAuB,E;MAAI,uB;QAAA,UAAwB,E;MAAI,qB;QA  
AA,QAAa,E;MAAI,yB;QAAA,YAA0B,K;MAAO,yB;QAAA,YAA0C,I;MACIN,OAAO,kBAAO,sBAAP,EAAwB  
,SAAxB,EAAmC,MAAnC,EAA2C,OAA3C,EAAoD,KAApD,EAA2D,SAA3D,EAA5E,SAAtE,CAAiF,W;K;IAG5  
F,4F;MAQkC,yB;QAAA,YAA0B,I;MAAM,sB;QAAA,SAAuB,E;MAAI,uB;QAAA,UAAwB,E;MAAI,qB;QAAA,  
QAAa,E;MAAI,yB;QAAA,YAA0B,K;MAAO,yB;QAAA,YAAuC,I;MAC9M,OAAO,oBAAO,sBAAP,EAAwB,S  
AAxB,EAAmC,MAAnC,EAA2C,OAA3C,EAAoD,KAApD,EAA2D,SAA3D,EAA5E,SAAtE,CAAiF,W;K;IAG5F,

4F;MAQmC,yB;QAAA,YAA0B,I;MAAM,sB;QAAA,SAAuB,E;MAAI,uB;QAAA,UAAwB,E;MAAI,qB;QAAA, QAAa,E;MAAI,yB;QAAA,YAA0B,K;MAAO,yB;QAAA,YAAwC,I;MACHN,OAAO,oBAAO,sBAAP,EAAwB,S AAxB,EAAmC,MAAnC,EAA2C,OAA3C,EAAoD,KAApD,EAA2D,SAA3D,EAAeE,SAAtE,CAAI,F,W;K;IAG5F, 4F;MAQiC,yB;QAAA,YAA0B,I;MAAM,sB;QAAA,SAAuB,E;MAAI,uB;QAAA,UAAwB,E;MAAI,qB;QAAA,Q AAa,E;MAAI,yB;QAAA,YAA0B,K;MAAO,yB;QAAA,YAAcC,I;MAC5M,OAAO,oBAAO,sBAAP,EAAwB,SAA xB,EAAmC,MAAnC,EAA2C,OAA3C,EAAoD,KAApD,EAA2D,SAA3D,EAAeE,SAAtE,CAAI,F,W;K;IAG5F,4F; MAQkC,yB;QAAA,YAA0B,I;MAAM,sB;QAAA,SAAuB,E;MAAI,uB;QAAA,UAAwB,E;MAAI,qB;QAAA,QAA a,E;MAAI,yB;QAAA,YAA0B,K;MAAO,yB;QAAA,YAAuC,I;MAC9M,OAAO,oBAAO,sBAAP,EAAwB,SAAxB ,EAAmC,MAAnC,EAA2C,OAA3C,EAAoD,KAApD,EAA2D,SAA3D,EAAeE,SAAtE,CAAI,F,W;K;IAG5F,4F;M AQmC,yB;QAAA,YAA0B,I;MAAM,sB;QAAA,SAAuB,E;MAAI,uB;QAAA,UAAwB,E;MAAI,qB;QAAA,QAAa, E;MAAI,yB;QAAA,YAA0B,K;MAAO,yB;QAAA,YAAwC,I;MACHN,OAAO,oBAAO,sBAAP,EAAwB,SAAxB,E AA mC,MAAnC,EAA2C,OAA3C,EAAoD,KAApD,EAA2D,SAA3D,EAAeE,SAAtE,CAAI,F,W;K;IAG5F,4F;MAQ oC,yB;QAAA,YAA0B,I;MAAM,sB;QAAA,SAAuB,E;MAAI,uB;QAAA,UAAwB,E;MAAI,qB;QAAA,QAAa,E;M AAI,yB;QAAA,YAA0B,K;MAAO,yB;QAAA,YAAyC,I;MAC1N,OAAO,oBAAO,sBAAP,EAAwB,SAAxB,EAAm C,MAAnC,EAA2C,OAA3C,EAAoD,KAApD,EAA2D,SAA3D,EAAeE,SAAtE,CAAI,F,W;K;IAG5F,4F;MAQqC,y B;QAAA,YAA0B,I;MAAM,sB;QAAA,SAAuB,E;MAAI,uB;QAAA,UAAwB,E;MAAI,qB;QAAA,QAAa,E;MAAI ,yB;QAAA,YAA0B,K;MAAO,yB;QAAA,YAA0C,I;MACpN,OAAO,oBAAO,sBAAP,EAAwB,SAAxB,EAAmC, MAAnC,EAA2C,OAA3C,EAAoD,KAApD,EAA2D,SAA3D,EAAeE,SAAtE,CAAI,F,W;K;IAG5F,4F;MAQkC,yB; QAAA,YAA0B,I;MAAM,sB;QAAA,SAAuB,E;MAAI,uB;QAAA,UAAwB,E;MAAI,qB;QAAA,QAAa,E;MAAI,y B;QAAA,YAA0B,K;MAAO,yB;QAAA,YAAuC,I;MAC9M,OAAO,oBAAO,sBAAP,EAAwB,SAAxB,EAAmC,M AAnC,EAA2C,OAA3C,EAAoD,KAApD,EAA2D,SAA3D,EAAeE,SAAtE,CAAI,F,W;K;IAQxE,4C;MAAA,mB;Q AAe,OAAK,qBAAL,eAAK,C;O;K;IAL3B,+B;MAII,IAlleO,qBAAQ,CAkIef,C;QAAe,OAAO,W;MACTB,kCAAg B,4BAAhB,C;K;IAQgB,8C;MAAA,mB;QAAE,OAAK,yBAAL,eAAK,C;O;K;IAL3B,iC;MAII,IAlleO,qBAAQ,C AkIef,C;QAAe,OAAO,W;MACTB,kCAAgB,8BAAhB,C;K;IAQgB,8C;MAAA,mB;QAAE,OAAK,0BAAL,eAAK, C;O;K;IAL3B,iC;MAII,IAlleO,qBAAQ,CAkIef,C;QAAe,OAAO,W;MACTB,kCAAgB,8BAAhB,C;K;IAQgB,8C;M AAA,mB;QAAE,OAAK,wBAAL,eAAK,C;O;K;IAL3B,iC;MAII,IAlleO,qBAAQ,CAkIef,C;QAAe,OAAO,W;MA CTB,kCAAgB,8BAAhB,C;K;IAQgB,8C;MAAA,mB;QAAE,OAAK,yBAAL,eAAK,C;O;K;IAL3B,iC;MAII,IAlleO ,qBAAQ,CAkIef,C;QAAe,OAAO,W;MACTB,kCAAgB,8BAAhB,C;K;IAQgB,8C;MAAA,mB;QAAE,OAAK,0BA AL,eAAK,C;O;K;IAL3B,iC;MAII,IAlleO,qBAAQ,CAkIef,C;QAAe,OAAO,W;MACTB,kCAAgB,8BAAhB,C;K;IA QgB,8C;MAAA,mB;QAAE,OAAK,2BAAL,eAAK,C;O;K;IAL3B,iC;MAII,IAlleO,qBAAQ,CAkIef,C;QAAe,OAA O,W;MACTB,kCAAgB,8BAAhB,C;K;IAQgB,8C;MAAA,mB;QAAE,OAAK,4BAAL,eAAK,C;O;K;IAL3B,iC;MA II,IAlleO,qBAAQ,CAkIef,C;QAAe,OAAO,W;MACTB,kCAAgB,8BAAhB,C;K;IAQgB,8C;MAAA,mB;QAAE,OA AK,yBAAL,eAAK,C;O;K;IAL3B,iC;MAII,IAlleO,qBAAQ,CAkIef,C;QAAe,OAAO,W;MACTB,kCAAgB,8BAAh B,C;K;IAUgB,4C;MAAA,mB;QAAE,OAAK,qBAAL,eAAK,C;O;K;IAP3B,+B;MAMI,IA5peO,qBAAQ,CA4pef,C ;QAAe,OAAO,e;MACTB,kCAAgB,4BAAhB,C;K;IAUgB,8C;MAAA,mB;QAAE,OAAK,yBAAL,eAAK,C;O;K;IA P3B,iC;MAMI,IA9peO,qBAAQ,CA8pef,C;QAAe,OAAO,e;MACTB,kCAAgB,8BAAhB,C;K;IAUgB,8C;MAAA,m B;QAAE,OAAK,0BAAL,eAAK,C;O;K;IAP3B,iC;MAMI,IAhqeO,qBAAQ,CAgqef,C;QAAe,OAAO,e;MACTB,kC AAgB,8BAAhB,C;K;IAUgB,8C;MAAA,mB;QAAE,OAAK,wBAAL,eAAK,C;O;K;IAP3B,iC;MAMI,IAIqeO,qBA AQ,CAkqef,C;QAAe,OAAO,e;MACTB,kCAAgB,8BAAhB,C;K;IAUgB,8C;MAAA,mB;QAAE,OAAK,yBAAL,eA AK,C;O;K;IAP3B,iC;MAMI,IApqeO,qBAAQ,CAoqef,C;QAAe,OAAO,e;MACTB,kCAAgB,8BAAhB,C;K;IAUgB, 8C;MAAA,mB;QAAE,OAAK,0BAAL,eAAK,C;O;K;IAP3B,iC;MAMI,IAtqeO,qBAAQ,CAsqef,C;QAAe,OAAO,e ;MACTB,kCAAgB,8BAAhB,C;K;IAUgB,8C;MAAA,mB;QAAE,OAAK,2BAAL,eAAK,C;O;K;IAP3B,iC;MAMI,IA xqeO,qBAAQ,CAwqef,C;QAAe,OAAO,e;MACTB,kCAAgB,8BAAhB,C;K;IAUgB,8C;MAAA,mB;QAAE,OAA K,4BAAL,eAAK,C;O;K;IAP3B,iC;MAMI,IA1qeO,qBAAQ,CA0qef,C;QAAe,OAAO,e;MACTB,kCAAgB,8BAAh B,C;K;IAUgB,8C;MAAA,mB;QAAE,OAAK,yBAAL,eAAK,C;O;K;IAP3B,iC;MAMI,IA5qeO,qBAAQ,CA4qef,C; QAAe,OAAO,e;MACTB,kCAAgB,8BAAhB,C;K;IAGJ,4B;MAOoB,Q;MAFhB,UAAkB,G;MACIB,YAAiB,C;MA CjB,wBAAGB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,OAAO,O;QACP,qB;MAEJ,OAAW,UAAS,CAAb,G AAgB,wCAAO,IAAvB,GAAgC,MAAM,K;K;IAGjD,8B;MAOoB,Q;MAFhB,UAAkB,G;MACIB,YAAiB,C;MACj



B,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,OAAO,O;QACP,qB;;MAEJ,OAAW,UAAS,CAAb,GAAgB,wCAAO,IAAvB,GAAgC,MAAM,K;K;IAGjD,8B;MAOoB,Q;MAFhB,UAakB,G;MACIB,YAAiB,C;MACjB,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,OAAO,O;QACP,qB;;MAEJ,OAAW,UAAS,CAAb,GAAgB,wCAAO,IAAvB,GAAgC,MAAM,K;K;IAGjD,8B;MAOoB,Q;MAFhB,UAakB,G;MACIB,YAAiB,C;MACjB,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,OAAO,O;QACP,qB;;MAEJ,OAAW,UAAS,CAAb,GAAgB,wCAAO,IAAvB,GAAgC,MAAM,K;K;IAGjD,8B;MAOoB,Q;MAFhB,UAakB,G;MACIB,YAAiB,C;MACjB,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,OAAO,O;QACP,qB;;MAEJ,OAAW,UAAS,CAAb,GAAgB,wCAAO,IAAvB,GAAgC,MAAM,K;K;IAGjD,8B;MAMoB,Q;MAFhB,UAakB,G;MACIB,YAAiB,C;MACjB,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,OAAO,O;QACP,qB;;MAEJ,OAAW,UAAS,CAAb,GAAgB,wCAAO,IAAvB,GAAgC,MAAM,K;K;IAGjD,8B;MAMoB,Q;MAFhB,UAakB,G;MACIB,YAAiB,C;MACjB,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,OAAO,O;QACP,qB;;MAEJ,OAAW,UAAS,CAAb,GAAgB,wCAAO,IAAvB,GAAgC,MAAM,K;K;IAGjD,8B;MAMoB,Q;MAFhB,UAakB,G;MACIB,YAAiB,C;MACjB,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,OAAO,O;QACP,qB;;MAEJ,OAAW,UAAS,CAAb,GAAgB,wCAAO,IAAvB,GAAgC,MAAM,K;K;IAGjD,+B;MAMoB,Q;MAFhB,UAakB,G;MACIB,YAAiB,C;MACjB,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,YAAO,O;;MAEX,OAAO,G;K;IAGX,0B;MAMoB,Q;MADhB,UAAe,C;MACf,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,YAAO,O;;MAEX,OAAO,G;K;IAGX,0B;MAMoB,Q;MADhB,UAAe,C;MACf,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,YAAO,OAAP,I;;MAEJ,OAAO,G;K;IAGX,0B;MAMoB,Q;MADhB,Y;MACA,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,cAAO,OAAP,C;;MAEJ,OAAO,G;K;IAGX,0B;MAMoB,Q;MADhB,UAAiB,G;MACjB,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,OA AO,O;;MAEX,OAAO,G;K;IAGX,0B;MAMoB,Q;MADhB,UAakB,G;MACIB,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,OAAO,O;;MAEX,OAAO,G;K;IAGX,0B;MAKoB,Q;MADhB,UAAe,C;MACf,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,YAAO,O;;MAEX,OAAO,G;K;IAGX,0B;MAKoB,Q;MADhB,UAAe,C;MACf,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,YAAO,O;;MAEX,OAAO,G;K;IAGX,0B;MAKoB,Q;MADhB,UAAe,C;MACf,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,YAAO,OAAP,I;;MAEJ,OAA O,G;K;IAGX,0B;MAKoB,Q;MADhB,Y;MACA,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,cAAO,OA AP,C;;MAEJ,OAAO,G;K;IAGX,0B;MAKoB,Q;MADhB,UAAiB,G;MACjB,wBAAgB,SAAhB,gB;QAAgB,cAA A,SAAhB,M;QACI,OAAO,O;;MAEX,OAAO,G;K;IAGX,2B;MAKoB,Q;MADhB,UAakB,G;MACIB,wBAAgB,S AAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,OAAO,O;;MAEX,OAAO,G;K;Ia5uuBX,oD;MAQuF,wC;K;IARvF,8C ASI,Y;MAAuC,8B;K;IAT3C,gF;4FOOA,qB;MAOI,OAAO,sBAAI,CAAJ,C;K;4FAGX,qB;MAOI,OAAO,sBAAI, CAAJ,C;K;4FAGX,qB;MAOI,OAAO,sBAAI,CAAJ,C;K;4FAGX,qB;MAOI,OAAO,sBAAI,CAAJ,C;K;4FAGX,q B;MAOI,OAAO,sBAAI,CAAJ,C;K;IAGX,wC;MAII,IAAI,oCAAJ,C;QACI,OAAO,yBAAS,OAAT,C;MACX,OA AO,qBAAQ,OAAR,KAAoB,C;K;IAWG,yC;MAAA,qB;QAAE,MAAM,8BAA0B,iDAA8C,aAA9C,MAA1B,C;O; K;IAR1C,qC;MAMI,IAAI,8BAAJ,C;QACI,OAAO,sBAAI,KAAJ,C;MACX,OAAO,6BAAgB,KAAhB,EAAuB,uB AAvB,C;K;0FAGX,4B;MAOI,OAAO,sBAAI,KAAJ,C;K;IAGX,2D;MAcqB,Q;MARjB,IAAI,8BAAJ,C;QACI,OA AsB,KA4Lf,IAAS,CAAT,IA5Le,KA4LD,IAAS,iBA5LvB,SA4LuB,CAA3B,GA5LI,SA4LkC,aA5LnB,KA4LmB,C AAtC,GA5L0B,YA4L4B,CA5LnC,KA4LmC,C;OA3L7D,IAAI,QAAQ,CAAZ,C;QACI,OAAO,aAAa,KAAb,C;M ACX,eAAe,oB;MACf,YAAy,C;MACZ,OAAO,QAAS,UAAhB,C;QACI,cAAc,QAAS,O;QACvB,IAAI,WAAS,Y AAT,EAAS,oBAAT,OA AJ,C;UACI,OAAO,O;;MAEf,OAAO,aAAa,KAAb,C;K;sGAGX,yB;MAAA,8D;MAAA,i D;QAOI,OAAW,SAAS,CAAT,IAAc,SAAS,wBAA3B,GAAc,sBAAI,KAAJ,CAAtC,GAAsD,aAAa,KAAb,C;O;K APjE,C;IAUA,6C;MAcqB,Q;MARjB,IAAI,8BAAJ,C;QACI,OAAy,YAAL,SAAK,EAAU,KAAV,C;MACHB,IAA

I,QAAQ,CAAZ,C;QACI,OAAO,I;MACX,eAAe,oB;MACf,YAA Y,C;MACZ,OAAO,QAAS,UAAhB,C;QACI,cAA c,QAAS,O;QACvB,IAAI,WAAS,YAAT,EAAS,oBAAT,OAAJ,C;UACI,OAAO,O;;MAEf,OAAO,I;K;sGAGX,yB; MAAA,sD;MAAA,mC;QAOI,OAA Y,UAA L,SAAK,EAAU,KAAV,C;O;KAPhB,C;gFAUA,gC;MAOW,sB;;QAU HS,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UAA M,IAvHH,SAuHO,CAAU,OAAV,CAAJ,C;YAAw B,qBAAO,O;YAAP,uB;;QAC9C,qBAAO,I;;MAxHP,yB;K;wFAGJ,gC;MA2VoB,Q;MADhB,WAAe,I;MACC,2B; MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,IARvC,SAqVV,CAAU,OAAV,CAAJ,C;UACI,OAAO,O;;MatVf, OAyVO,I;K;wFAtVX,gC;MAOW,qB;;QAwVP,eAAoB,+BAAa,cAAb,C;QACpB,OAAO,QAAS,cAAhB,C;UACI, cAAc,QAAS,W;UACvB,IA3Vc,SA2VV,CAAU,OAAV,CAAJ,C;YAAwB,oBAAO,O;YAAP,sB;;QAE5B,oBAAO, I;;MA7VP,wB;K;IAGJ,6B;MAMQ,kBADE,SACF,Q;QAAW,OAA Y,SAAL,SAAK,C;;QAE nB,eAAe,oB;QACf,I AAI,CAAC,QAAS,UAA d,C;UACI,MAAM,2BAAuB,sBAAvB,C;QACV,OAAO,QAAS,O;;K;IAK5B,6B;MAKI,I AAI,mBAAJ,C;QACI,MAAM,2BAAuB,gBAAvB,C;MACV,OAAO,sBAAK,CAAL,C;K;mFAGX,yB;MAAA,iE; MAAA,uC;QAKoB,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UAA M,IAAI,UAAU,OAAV,CAAJ,C;Y AAwB,OAAO,O;;QACrD,MAAM,gCAAuB,wDAAvB,C;O;KANV,C;oGASA,yB;MAAA,iE;MAAA,uC;QASW, Q;QAAA,+B;;UAYS,U;UAAA,6B;UAAhB,OAAgB,gBAAhB,C;YAAgB,2B;YACZ,aAbwB,SAaX,CAAU,OAAV ,C;YACb,IAAI,cAAJ,C;cACI,8BAAO,M;cAAP,gC;;UAGR,8BAAO,I;;QAIbA,kC;QAAA,iB;UAAmC,MAAM,g CAAuB,mEAAvB,C;SAAhD,OAAO,I;O;KATX,C;gHAYA,gC;MASoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C ;QAAgB,yB;QACZ,aAAa,UAAU,OAAV,C;QACb,IAAI,cAAJ,C;UACI,OAAO,M;;MAGf,OAAO,I;K;IAGX,mC; MAKQ,kBADE,SACF,Q;QACI,IAAI,mBAAJ,C;UACI,OAAO,I;;UAEP,OAAO,sBAAK,CAAL,C;;QAGX,eAAe,o B;QACf,IAAI,CAAC,QAAS,UAA d,C;UACI,OAAO,I;QACX,OAAO,QAAS,O;;K;IAK5B,mC;MAII,OAAW,mBA AJ,GAAe,IAAf,GAAYB,sBAAK,CAAL,C;K;+FAGpC,gC;MAIoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QA AgB,yB;QAAM,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,OAAO,O;;MACrD,OAAO,I;K;0FAGX,yB;MAAA,8D;M AAA,iD;QAKI,OAAW,SAAS,CAAT,IAAc,SAAS,wBAA3B,GAA sC,sBAAI,KAAJ,CAATc,GAA sD,I;K;IAGjE,C;IAQA,uC;MAMI,OAAW,SAAS,CAAT,IAAc,SAAS,2BAA3B,GAA sC,sBAAI,KAAJ,CAATc,GAA sD,I;K;IAGjE,uC;MAMiB,Q;MAFb,IAAI,8BAAJ,C;QAAkB,OAAO,SAAK,eAAQ,OAAR,C;MAC9B,YAA Y,C;M ACC,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QACT,mBAAmB,KAA nB,C;QACA,IAAI,gBAAW,IAAX,CAAJ,C;UA CI,OAAO,K;QACX,qB;;MAEJ,OAAO,E;K;IAGX,uC;MAKI,OAAO,wBAAQ,OAAR,C;K;gGAGX,yB;MAAA,w E;MAAA,uC;QAKiB,Q;QADb,YAA Y,C;QACC,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,mBAAmB,KAA nB, C;UACA,IAAI,UAAU,IAAV,CAAJ,C;YACI,OAAO,K;UACX,qB;;QAEJ,OAAO,E;O;KAXX,C;gGAcA,gC;MAK iB,Q;MADb,YAA Y,C;MACC,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QACT,IAAI,UAAU,IAAV,CAAJ,C;UACI,OA AO,K;QACX,qB;;MAEJ,OAAO,E;K;8FAGX,yB;MAAA,wE;MAAA,uC;QAMiB,Q;QAFb,gBAAGB,E;QACHB,Y AAY,C;QACC,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,mBAAmB,KAA nB,C;UACA,IAAI,UAAU,IAAV,CA AJ,C;YACI,YAA Y,K;UACHB,qB;;QAEJ,OAAO,S;O;KAZX,C;8FAeA,gC;MAII,eAAe,SAAK,sBAAa,cAAb,C;M ACpB,OAAO,QAAS,cAAhB,C;QACI,IAAI,UAAU,QAAS,WAA nB,CAAJ,C;UACI,OAAO,QAAS,Y;;MAGxB,O AAO,E;K;IAGX,4B;MASQ,kBADE,SACF,Q;QAAW,OAA Y,QAAL,SAAK,C;;QAE nB,eAAe,oB;QACf,IAAI,CA AC,QAAS,UAA d,C;UACI,MAAM,2BAAuB,sBAAvB,C;QACV,WAAW,QAAS,O;QACpB,OAAO,QAAS,UAAh B,C;UACI,OAAO,QAAS,O;QACpB,OAAO,I;;K;IAKnB,4B;MAQI,IAAI,mBAAJ,C;QACI,MAAM,2BAAuB,gBA AvB,C;MACV,OAAO,sBAAK,2BAAL,C;K;iFAGX,yB;MAAA,iE;MAAA,gB;MAAA,8B;MAAA,uC;QAUoB,U AQT,M;QAVP,WAAe,I;QACf,YAA Y,K;QACI,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,IAAI,UAAU,O AAV,CAAJ,C;YACI,OAAO,O;YACP,QAAQ,I;;QAGhB,IAAI,CAAC,KAAL,C;UAA Y,MAAM,gCAAuB,wDAA vB,C;QAEIB,OAAO,2E;O;KAlBX,C;iFAqBA,yB;MAAA,iE;MAAA,uC;QAQI,eAAe,SAAK,sBAAa,cAAb,C;QA CpB,OAAO,QAAS,cAAhB,C;UACI,cAAc,QAAS,W;UACvB,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;Q AEnC,MAAM,gCAAuB,kDAAvB,C;O;KAbV,C;IAgBA,2C;MAOiB,Q;MAHb,IAAI,8BAAJ,C;QAAkB,OAAO,S AAK,mBAAY,OAAZ,C;MAC9B,gBAAGB,E;MACHB,YAA Y,C;MACC,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QA CT,mBAAmB,KAA nB,C;QACA,IAAI,gBAAW,IAAX,CAAJ,C;UACI,YAA Y,K;QACHB,qB;;MAEJ,OAAO,S;K;I AGX,2C;MAKI,OAAO,4BAAY,OAAZ,C;K;IAGX,kC;MAOQ,kBADE,SACF,Q;QAAW,OAAW,mBAAJ,GAAe,I AAF,GAAYB,sBAAK,iBAAO,CAAP,IAAL,C;;QAEvC,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAA d,C;UACI,OAA O,I;QACX,WAAW,QAAS,O;QACpB,OAAO,QAAS,UAAhB,C;UACI,OAAO,QAAS,O;QACpB,OAAO,I;;K;IAK nB,kC;MAMI,OAAW,mBAAJ,GAAe,IAAf,GAAYB,sBAAK,iBAAO,CAAP,IAAL,C;K;6FAGpC,gC;MAOoB,Q;

MADhB, WAAe,I;MACC,2B;MAAhB, OAAgB,cAAhB,C;QAAgB,yB;QACZ,IAAI,UAAU,OAAV,CAAJ,C;UACI, OAAO,O;;MAGf,OAAO,I;K;6FAGX,gC;MAMI,eAAe,SAAK,sBAAa,cAAb,C;MACpB,OAAO,QAAS,cAAhB,C; QACI,cAAc,QAAS,W;QACvB,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,OAAO,O;;MAEnC,OAAO,I;K;qFAGX,yB ;MAAA,mC;MAAA,gD;MAAA,4B;QAQI,OAAO,kBAAO,cAAP,C;O;KARX,C;IAWA,sC;MAOI,IAAI,mBAAJ,C ;QACI,MAAM,2BAAuB,sBAAvB,C;MACV,OAAO,qBAAU,MAAO,iBAAQ,cAAR,CAAjB,C;K;iGAGX,yB;MA AA,mC;MAAA,4D;MAAA,4B;QAOI,OAAO,wBAAa,cAAb,C;O;KAPX,C;IAUA,4C;MAMI,IAAI,mBAAJ,C;QA CI,OAAO,I;MACX,OAAO,qBAAU,MAAO,iBAAQ,cAAR,CAAjB,C;K;IAGX,8B;MAKQ,kBADE,SACF,Q;QAA W,OAAy,UAAL,SAAK,C;;QAEEnB,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UACI,MAAM,2BAAuB,sBAA vB,C;QACV,aAAa,QAAS,O;QACtB,IAAI,QAAS,UAAb,C;UACI,MAAM,gCAAYB,uCAAzB,C;QACV,OAAO,M ;K;IAKnB,8B;MAIiB,IAAN,I;MAAA,QAAM,cAAN,C;aACH,C;UAAK,MAAM,2BAAuB,gBAAvB,C;aACX,C; UAAK,6BAAK,CAAL,C;UAAL,K;gBACQ,MAAM,gCAAYB,iCAAzB,C;;MAHIB,W;K;qFAOJ,yB;MAAA,kF;M AAA,iE;MAAA,gB;MAAA,8B;MAAA,uC;QAMoB,UAST,M;QAXP,aAAiB,I;QACjB,YAAY,K;QACI,2B;QAAh B,OAAgB,cAAhB,C;UAAgB,yB;UACZ,IAAI,UAAU,OAAV,CAAJ,C;YACI,IAAI,KAJ,C;cAAW,MAAM,8BA AyB,qDAAzB,C;YACjB,SAAS,O;YACT,QAAQ,I;;QAGhB,IAAI,CAAC,KAAL,C;UAAy,MAAM,gCAAuB,wD AAyB,C;QAEIB,OAAO,6E;O;KAFx,C;IAkBA,oC;MAKQ,kBADE,SACF,Q;QAAW,OAAW,mBAAQ,CAAZ,GA Ae,sBAAK,CAAL,CAAF,GAA4B,I;;QAEIC,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UACI,OAAO,I;QACX ,aAAa,QAAS,O;QACtB,IAAI,QAAS,UAAb,C;UACI,OAAO,I;QACX,OAAO,M;;K;IAKnB,oC;MAII,OAAW,mB AAQ,CAAZ,GAAe,sBAAK,CAAL,CAAF,GAA4B,I;K;iGAGvC,gC;MAMoB,Q;MAFhB,aAAiB,I;MACjB,YAAY, K;MACI,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,IAAI,UAAU,OAAV,CAAJ,C;UACI,IAAI,KAJ,C;Y AAW,OAAO,I;UACIB,SAAS,O;UACT,QAAQ,I;;MAGhB,IAAI,CAAC,KAAL,C;QAAy,OAAO,I;MACnB,OAA O,M;K;IAGX,8B;MAoBsC,UAGT,MAHS,EAarB,M;MN7pBb,IAAI,EMooBI,KAAK,CNpoBT,CAAJ,C;QACI,cM moBc,sD;QNloBd,MAAM,gCAAYB,OAAQ,WAAjC,C;OMmoBV,IAAI,MAAK,CAAT,C;QAAy,OAAO,mB;MA CnB,Q;MACA,IAAI,oCAAJ,C;QACI,iBAAiB,iBAAO,CAAP,I;QACjB,IAAI,cAAc,CAAIB,C;UACI,OAAO,W;Q ACX,IAAI,eAAc,CAAIB,C;UACI,OAAO,OAAO,kBAAP,C;QACX,OAAO,iBAAa,UAAb,C;QACP,IAAI,8BAAJ, C;UACI,IAAI,sCAAJ,C;YAC0B,qB;YAAtB,iBAAc,CAAd,wB;cACI,IAAK,WAAI,sBAAK,KAAL,CAAJ,C;;YAE I,wCAAA,CAAb,C;YAAb,OAAa,gBAAb,C;cAAa,wB;cACT,IAAK,WAAI,IAAJ,C;;UAEB,OAAO,I;;QAIX,OAA O,gB;;MAEX,YAAY,C;MACC,6B;MAAb,OAAa,gBAAb,C;QAAa,0B;QACT,IAAI,SAAS,CAAb,C;UAAgB,IAA K,WAAI,MAAJ,C;;UAAe,qB;;MAEXC,OAAy,qBAAL,IAAK,C;K;IAGhB,kC;MNnqBI,IAAI,EM2qBI,KAAK,C N3qBT,CAAJ,C;QACI,cM0qBc,sD;QNzqBd,MAAM,gCAAYB,OAAQ,WAAjC,C;OM0qBV,OAAO,kBAAgB,gB AAV,iBAAO,CAAP,IAAU,EAAC,CAAd,CAAhB,C;K;kGAGX,yB;MAAA,4C;MAAA,qD;MAAA,uC;QAMI,IAA I,CAAC,mBAAL,C;UACI,eAAe,+BAAa,cAAb,C;UACf,OAAO,QAAS,cAAhB,C;YACI,IAAI,CAAC,UAAU,QA AS,WAAAnB,CAAL,C;cACI,OAAO,gBAAK,QAAS,YAAT,GAAuB,CAAvB,IAAL,C;;SAInB,OAAO,W;O;KAdX, C;0FAiBA,yB;MAAA,+D;MAAA,uC;QAQiB,Q;QAFb,eAAe,K;QACf,WAAW,gB;QACE,2B;QAAb,OAAa,cAAb ,C;UAAa,sB;UACT,IAAI,QAAJ,C;YACI,IAAK,WAAI,IAAJ,C;eACJ,IAAI,CAAC,UAAU,IAAV,CAAL,C;YACD ,IAAK,WAAI,IAAJ,C;YACL,WAAW,I;;QAEEnB,OAAO,I;O;KAFx,C;oFAkBA,yB;MAAA,+D;MAAA,uC;QAM W,kBAAS,gB;QA2FA,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UAAM,IA3FU,SA2FN,CAAU,OAA V,CAAJ,C;YAAwB,WAAy,WAAI,OAAJ,C;;QA3F1D,OA4FO,W;O;KAIGX,C;kGASA,yB;MAAA,+D;MA6jCA, wE;MA7jCA,uC;QAQW,kBAAgB,gB;QA4jCV,gB;QADb,YAAY,C;QACC,2B;QAAb,OAAa,cAAb,C;UAAa,sB; UAhjCT,IAZmC,SAY/B,CAGjCkB,oBAAmB,cAAnB,EAAMb,sBAAnB,UAhjCIB,EAjC+C,IAhjC/C,CAAJ,C;Y AA2C,sBAgjCQ,IAhjCR,C;;QAZ/C,OAcO,W;O;KATBX,C;sGAWA,yB;MAkjCA,wE;MALjCA,oD;QYyjCiB,gB;Q ADb,YAAY,C;QACC,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UAhjCT,IAAI,UAgjCkB,oBAAmB,cAAnB,EAAMb,s BAAnB,UAhjCIB,EAjC+C,IAhjC/C,CAAJ,C;YAA2C,sBAgjCQ,IAhjCR,C;;QAE/C,OAAO,W;O;KAXX,C;wGA cA,yB;MAAA,+D;MAAA,sC;QAMW,kBAAmB,gB;QASV,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB; UAAM,IAAI,YAAJ,C;YAAkB,WAAy,WAAI,OAAJ,C;;QATpD,OAuO,W;O;KAhBX,C;4GASA,4C;MAMoB,Q; MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QAAM,IAAI,YAAJ,C;UAAkB,WAAy,WAAI,OAAJ,C;;MA CpD,OAAO,W;K;0FAGX,yB;MAAA,+D;MAAA,uC;QAMW,kBAAy,gB;QA4BH,Q;QAAA,2B;QAAhB,OAAgB ,cAAhB,C;UAAgB,yB;UAAM,IAAI,CA5BS,SA4BR,CAAU,OAAV,CAAL,C;YAAyB,WAAy,WAAI,OAAJ,C;;Q A5B3D,OA6BO,W;O;KANCX,C;IASA,oC;MAMI,OAAO,6BAAgB,gBAAhB,C;K;IAGX,mD;MAMoB,Q;MAAA,

2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QAAM,IAAI,eAAJ,C;UAAqB,WAAy,WAAI,OAAJ,C;;MACvD,OA  
AO,W;K;8FAGX,6C;MAMoB,Q;MAAA,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QAAM,IAAI,CAAC,UAAU  
,OAAV,CAAL,C;UAAyB,WAAy,WAAI,OAAJ,C;;MAC3D,OAAO,W;K;wFAGX,6C;MAMoB,Q;MAAA,2B;MA  
AhB,OAAGB,cAAhB,C;QAAGB,yB;QAAM,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,WAAy,WAAI,OAAJ,C;;MA  
C1D,OAAO,W;K;IAGX,sC;MAII,IAAI,OAAQ,UAAZ,C;QAAuB,Od3wBe,W;Oc4wBtC,OAA6D,SAAtD,SAAK,i  
BAAQ,OAAQ,MAAhB,EAAuB,OAAQ,aAAR,GAAuB,CAAvB,IAAvB,CAAiD,C;K;IAGjE,sC;MAOkB,Q;MAH  
d,WAAmB,wBAAR,OAAQ,EAAwB,EAAxB,C;MACnB,IAAI,SAAQ,CAAZ,C;QAAe,OAAO,W;MACtB,WAA  
W,iBAAa,IAAb,C;MACG,yB;MAAd,OAAc,cAAAd,C;QAAc,uB;QACV,IAAK,WAAI,sBAAL,KAAJ,CAAJ,C;;MA  
ET,OAAO,I;K;IAGX,8B;MAgBiB,Q;MN51Bb,IAAI,EMo1BI,KAAK,CNp1BT,CAAJ,C;QACI,cMm1Bc,sD;QN11  
Bd,MAAM,gCAAYB,OAAQ,WAAjC,C;OMm1BV,IAAI,MAAK,CAAT,C;QAAY,OAAO,W;MACnB,IAAI,oCA  
AJ,C;QACI,IAAI,KAAK,cAAT,C;UAAe,OAAO,mB;QACtB,IAAI,MAAK,CAAT,C;UAAy,OAAO,OAAO,mBA  
AP,C;OAEvB,YAAy,C;MACZ,WAAW,iBAAa,CAAb,C;MACE,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QACT,IAA  
K,WAAI,IAAJ,C;QACL,IAAI,mCAAW,CAAf,C;UACI,K;;MAER,OAAy,qBAAL,IAAK,C;K;IAGhB,kC;MAeqC  
,IAGhB,I;MNt3BjB,IAAI,EM42BI,KAAK,CN52BT,CAAJ,C;QACI,cM22Bc,sD;QN12Bd,MAAM,gCAAYB,OAA  
Q,WAAjC,C;OM22BV,IAAI,MAAK,CAAT,C;QAAY,OAAO,W;MACnB,WAAW,c;MACX,IAAI,KAAK,IAAT,  
C;QAAe,OAAO,mB;MACtB,IAAI,MAAK,CAAT,C;QAAY,OAAO,OAAO,kBAAP,C;MACnB,WAAW,iBAAa,C  
AAb,C;MACX,IAAI,sCAAJ,C;QACI,iBAAc,OAAO,CAAP,IAAd,UAA6B,IAA7B,U;UACI,IAAK,WAAI,sBAAK  
,KAAL,CAAJ,C;;QAEI,sCAAa,OAAO,CAAP,IAAb,C;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,IAAK,WAAI,IAA  
J,C;;MAEb,OAAO,I;K;kGAGX,yB;MAAA,qD;MAAA,gE;MAAA,gD;MAAA,uC;QAMI,IAAI,mBAAJ,C;UACI,  
OAAO,W;QACX,eAAe,+BAAa,cAAb,C;QACf,OAAO,QAAS,cAAhB,C;UACI,IAAI,CAAC,UAAU,QAAS,WAA  
nB,CAAL,C;YACI,QAAS,O;YACT,mBAAmB,iBAAO,QAAS,YAAhB,I;YACnB,IAAI,iBAAgB,CAApB,C;cAAu  
B,OAAO,W;YACI,kBAA3B,eAAa,YAAb,C;YACH,OAAgB,kBAAhB,C;cACI,sBAaA,eAAb,C;YAFR,OH11BD,  
W;;QGg2BP,OAAO,iB;O;KApBX,C;0FAuBA,yB;MAAA,+D;MAAA,uC;QAOiB,Q;QADb,WAAW,gB;QACE,2B  
;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,IAAI,CAAC,UAAU,IAAV,CAAL,C;YACI,K;UACJ,IAAK,WAAI,IAAJ,  
C;;QAET,OAAO,I;O;KAZX,C;IAoBA,+B;MAII,IAAI,wCAAsB,kBAAQ,CAAIC,C;QAAqC,OAAO,mB;MAC5C,  
WAAW,0B;MACN,WAAI,IAAK,C;MACL,OAAO,I;K;IAGX,uC;MAOI,aAAU,2BAAV,OAA2B,CAA3B,M;QA  
CI,QAAQ,MAAO,iBAAQ,IAAI,CAAJ,IAAR,C;QACf,sBAAK,CAAL,EAAU,SAAK,aAAI,CAAJ,EAAO,sBAAK,  
CAAL,CAAP,CAAf,C;;K;oFAIR,yB;MAAA,oD;MJn4BA,sC;MAAA,oC;MAAA,uBAOe,yB;QArEf,8D;eAqEe,4B  
;UAAA,uB;YAAU,eAAsB,gB;YAAtB,OA5Dd,cAAc,SA4DgB,CA5DhB,CAAd,EAA2B,SA4DM,CA5DN,CAA3B  
,C;W;S;OA4DI,C;MI43Bf,sC;QAMI,IAAI,iBAAO,CAAX,C;UAAc,oBJ14Bd,eAAW,iBIk4BsB,QJ14BtB,CAAX,CI  
k4Bc,C;U;KANIB,C;wGASA,yB;MAAA,oD;MJz3BA,sC;MAAA,oC;MAAA,iCAOe,yB;QAxFf,8D;eAwFe,4B;U  
AAA,uB;YAAU,eAAsB,gB;YAAtB,OA/Ed,cAAc,SA+EgB,CA/EhB,CAAd,EAA2B,SA+EM,CA/EN,CAA3B,C;  
W;S;OA+EI,C;MIk3Bf,sC;QAMI,IAAI,iBAAO,CAAX,C;UAAc,oBJx3Bd,eAAW,2BIw3BgC,QJx3BhC,CAAX,CI  
w3Bc,C;U;KANIB,C;IASA,sC;MAMI,sBAAS,cAAT,C;K;IAGJ,6B;MASgB,Q;MAHZ,IAAI,oCAAJ,C;QACI,IAA  
I,kBAAQ,CAAZ,C;UAAe,OAAy,SAAL,SAAK,C;QAEwB,kBAA3C,sBC5+Bsd,sBD4+BtD,uB;QAAmD,mB;QA  
A3D,OAAoE,OH17BjE,WGk7BiE,C;OAEjD,kBAAhB,0B;MAAwB,oB;MAA/B,OHp7BO,W;K;wFGu7BX,yB;M  
AAA,wD;MJ56BA,sC;MAAA,oC;MAAA,uBAOe,yB;QArEf,8D;eAqEe,4B;UAAA,uB;YAAU,eAAsB,gB;YAAtB  
,OA5Dd,cAAc,SA4DgB,CA5DhB,CAAd,EAA2B,SA4DM,CA5DN,CAA3B,C;W;S;OA4DI,C;MIq6Bf,sC;QAQI,O  
AAO,sBJ76BP,eAAW,iBI66BiB,QJ76BjB,CAAX,CI66BO,C;O;KARX,C;4GAWA,yB;MAAA,wD;MJp6BA,sC;M  
AAA,oC;MAAA,iCAOe,yB;QAxFf,8D;eAwFe,4B;UAAA,uB;YAAU,eAAsB,gB;YAAtB,OA/Ed,cAAc,SA+EgB,C  
A/EhB,CAAd,EAA2B,SA+EM,CA/EN,CAA3B,C;W;S;OA+EI,C;MI65Bf,sC;QAMI,OAAO,sBJn6BP,eAAW,2BI  
m6B2B,QJn6B3B,CAAX,CI66BO,C;O;KANX,C;IASA,uC;MAMI,OAAO,wBAAW,cAAX,C;K;IAGX,6C;MASE,  
Q;MAHX,IAAI,oCAAJ,C;QACG,IAAI,kBAAQ,CAAZ,C;UAAe,OAAy,SAAL,SAAK,C;QAEe,kBAAlC,sBCvhC  
uD,sBDuhCvD,uB;QAA0C,iC;QAAID,OAAyE,OH79BrE,WG69BqE,C;OAErD,kBAAhB,0B;MAAwB,mC;MAA/  
B,OH/9BO,W;K;IGk+BX,qC;MAMoB,UACL,M;MAHX,aAAa,oBAAa,cAAb,C;MACb,YAAy,C;MACI,2B;MAA  
hB,OAAGB,cAAhB,C;QAAGB,yB;QACZ,OAAO,cAAP,EAAO,sBAAP,YAAkB,O;;MACtB,OAAO,M;K;IAGX,k  
C;MAMoB,UACL,M;MAHX,aAAa,cAAU,cAAV,C;MACb,YAAy,C;MACI,2B;MAAhB,OAAGB,cAAhB,C;QAA  
gB,yB;QACZ,OAAO,cAAP,EAAO,sBAAP,YAAkB,O;;MACtB,OAAO,M;K;IAGX,kC;MAMoB,UACL,M;MAH

X,aAAa,iBAAU,cAAV,C;MACb,YAAY,C;MACI,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,oC;QACZ,OAAO,cAA  
P,EAAO,sBAAP,YAAkB,O;;MACtB,OAAO,M;K;IAGX,oC;MAMoB,UACL,M;MAHX,aAAa,iBAAY,cAAZ,C;  
MACb,YAAY,C;MACI,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,OAAO,cAAP,EAAO,sBAAP,YAAkB,  
O;;MACtB,OAAO,M;K;IAGX,mC;MAMoB,UACL,M;MAHX,aAAa,iBAAW,cAAX,C;MACb,YAAY,C;MACI,2  
B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,OAAO,cAAP,EAAO,sBAAP,YAAkB,O;;MACtB,OAAO,M;K;I  
AGX,iC;MAMoB,UACL,M;MAHX,aAAa,eAAS,cAAT,C;MACb,YAAY,C;MACI,2B;MAAhB,OAAgB,cAAhB,C  
;QAAgB,yB;QACZ,OAAO,cAAP,EAAO,sBAAP,YAAkB,O;;MACtB,OAAO,M;K;IAGX,kC;MAMoB,UACL,M;  
MAHX,aAAa,iBAAU,cAAV,C;MACb,YAAY,C;MACI,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,OAA  
O,cAAP,EAAO,sBAAP,YAAkB,O;;MACtB,OAAO,M;K;IAGX,mC;MAMoB,UACL,M;MAHX,aAAa,eAAW,cA  
AX,C;MACb,YAAY,C;MACI,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,OAAO,cAAP,EAAO,sBAAP,Y  
AAkB,O;;MACtB,OAAO,M;K;0FAGX,yB;MAAA,kF;MAAA,0D;MAAA,yD;MAAA,uE;MAAA,uC;QAWI,eAA  
wD,cAAzC,YAAY,mCAAwB,EAAXB,CAAZ,CAAYC,EAAC,EAAD,C;QACjD,kBAAY,mBAAoB,QAApB,C;QA  
yEH,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WAI1E8C,SA0E/B,CAAU,OAAV,C;UbpkBnB,  
wBAAI,IAAK,MAAT,EAAGB,IAAK,OAArB,C;;Qa0fA,OA4EO,W;O;KAXFX,C;+FAeA,yB;MAAA,kF;MAAA,0  
D;MAAA,yD;MAAA,uE;MAAA,yC;QAWI,eAAwD,cAAzC,YAAY,mCAAwB,EAAXB,CAAZ,CAAYC,EAAC,EA  
Ad,C;QACjD,kBAAC,mBAAoB,QAApB,C;QA2BL,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,  
WAAY,aA5BoC,WA4BhC,CAAY,OAAZ,CAAJ,EAA0B,OAA1B,C;;QA5BhB,OA8BO,W;O;KA1CX,C;+FAeA,y  
B;MAAA,kF;MAAA,0D;MAAA,yD;MAAA,uE;MAAA,yD;QAU1,eAAwD,cAAzC,YAAY,mCAAwB,EAAXB,C  
AAZ,CAAYC,EAAC,EAAD,C;QACjD,kBAAC,mBAAoB,QAApB,C;QA6BL,Q;QAAA,2B;QAAhB,OAAgB,cAAh  
B,C;UAAgB,yB;UACZ,WAAy,aA9BoC,WA8BhC,CAAY,OAAZ,CAAJ,EA9BiD,cA8BvB,CAAE,OAAf,CAA1B,  
C;;QA9BhB,OA9CO,W;O;KA3CX,C;mGAcA,+C;MAUoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB  
;QACZ,WAAy,aAAI,YAAY,OAAZ,CAAJ,EAA0B,OAA1B,C;;MAEhB,OAAO,W;K;mGAGX,+D;MAUoB,Q;M  
AAA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,WAAy,aAAI,YAAY,OAAZ,CAAJ,EAA0B,eAAe,OAAf  
,CAA1B,C;;MAEhB,OAAO,W;K;8FAGX,6C;MASoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QA  
CZ,WAAe,UAAU,OAAV,C;QbpkBnB,wBAAI,IAAK,MAAT,EAAGB,IAAK,OAArB,C;;MaskBA,OAAO,W;K;kG  
AGX,yB;MAAA,kF;MAAA,0D;MAAA,yD;MAAA,uE;MAAA,2C;QAYI,aAAa,mBAA6D,cAAzC,YAAY,mCAA  
wB,EAAXB,CAAZ,CAAYC,EAAC,EAAD,CAA7D,C;QAcG,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;  
UAbO,MAcP,aAAI,OAAJ,EAde,aAcF,CAAc,OAAAd,CAAb,C;;QAdhB,OAAuB,M;O;KAb3B,C;sGAgBA,iD;MA  
UoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,WAAy,aAAI,OAAJ,EAAa,cAAc,OAAAd,CAA  
b,C;;MAEhB,OAAO,W;K;IAGX,gD;MAIiB,Q;MAAA,2B;MAAb,OAAa,cAAb,C;QAAA,sB;QACT,WAAy,WAA  
I,IAAJ,C;;MAEhB,OAAO,W;K;IAGX,gC;MAII,OAAO,0BAAa,eAAW,YAAY,mCAAwB,EAAXB,CAAZ,CAAX,  
CAAb,C;K;IAGX,6B;MAKqB,IAAN,I;MADX,IAAI,oCAAJ,C;QACW,QAAM,cAAN,C;eACH,C;YAAK,kB;YA  
AL,K;eACA,C;YAAK,cAAW,8BAAJ,GAakB,sBAAI,CAAJ,CAAIB,GAA8B,oBAAW,OAAhD,C;YAAL,K;kBA  
Ca,uBAAL,SAAK,C;YAHV,K;;QAAP,W;OAMJ,OAA4B,qBAAhB,gBAAL,SAAK,CAAgB,C;K;IAGhC,oC;MAII  
,IAAI,oCAAJ,C;QACI,OAAy,gBAAL,SAAK,C;MACHB,OAAO,0BAAa,gBAAb,C;K;IAGX,oC;MAII,OAAO,iB  
AAU,SAAV,C;K;IAGX,4B;MAOqB,IAAN,I;MADX,IAAI,oCAAJ,C;QACW,QAAM,cAAN,C;eACH,C;YAAK,iB  
;YAAL,K;eACA,C;YAAK,aAAU,8BAAJ,GAakB,sBAAK,CAAL,CAAIB,GAA+B,oBAAW,OAAhD,C;YAAL,K;  
kBACQ,iCAAa,qBAAiB,YAAY,cAAZ,CAAJB,CAAb,C;YABL,K;;QAAP,W;OAMJ,OAAwC,oBAAjC,0BAAa,s  
BAAb,CAAiC,C;K;sFAG5C,yB;MAAA,+D;MAwFA,gD;MAxFA,uC;QAMW,kBAAU,gB;QAsFD,Q;QAAA,2B;  
QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WAvF6B,SAuFIB,CAAU,OAAV,C;UACC,OAAZ,WAAy,EAAO,  
IAAP,C;;QAxFhB,OA0FO,W;O;KAhGX,C;uFASA,yB;MAAA,+D;MA0FA,gD;MA1FA,uC;QAUW,kBAAU,gB;  
QAwFD,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WazF6B,SAyFIB,CAAU,OAAV,C;UACC,  
OAAZ,WAAy,EAAO,IAAP,C;;QA1FhB,OA4FO,W;O;KatGX,C;oGAaA,yB;MAAA,+D;MA8BA,wE;MAAA,gD  
;MA9BA,uC;QAYW,kBAAiB,gB;QA6BR,gB;QADhB,YAAY,C;QACI,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,y  
B;UACZ,WA9BoC,SA8BzB,CAAU,oBAAmB,cAAnB,EAAMB,sBAAnB,UAAV,EAAuC,OAAvC,C;UACC,OAA  
Z,WAAy,EAAO,IAAP,C;;QA/BhB,OAiCO,W;O;KA7CX,C;oGAeA,yB;MAAA,+D;MAiCA,wE;MAAA,gD;MAj  
CA,uC;QAYW,kBAAiB,gB;QAgCR,gB;QADhB,YAAY,C;QACI,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UA  
CZ,WAjCoC,SAiCzB,CAAU,oBAAmB,cAAnB,EAAMB,sBAAnB,UAAV,EAAuC,OAAvC,C;UACC,OAAZ,WA

AY,EAAO,IAAP,C;;QAIChB,OAoCO,W;O;KAhDX,C;wGAeA,yB;MAAA,wE;MAAA,gD;MAAA,oD;QAWoB,  
UAC4B,M;QAF5C,YAAy,C;QACI,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,WAAW,UAAU,oBAAmB,  
cAAnB,EAAMb,sBAAnB,UAAV,EAAuC,OAAvC,C;UACC,OAAZ,WAAy,EAAO,IAAP,C;;QAEhB,OAAO,W;  
O;KafX,C;yGakBA,yB;MAAA,wE;MAAA,gD;MAAA,oD;QAWoB,UAC4B,M;QAF5C,YAAy,C;QACI,2B;QA  
AhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,WAAW,UAAU,oBAAmB,cAAnB,EAAMb,sBAAnB,UAAV,EAAuC,  
OAAvC,C;UACC,OAAZ,WAAy,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KafX,C;0FAkBA,yB;MAAA,gD;MAAA,  
oD;QAIoB,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,WAAW,UAAU,OAAV,C;UACC,OAAZ,  
WAAy,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KARX,C;2FAWA,yB;MAAA,gD;MAAA,oD;QAQoB,Q;QAAA,2B  
;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,WAAW,UAAU,OAAV,C;UACC,OAAZ,WAAy,EAAO,IAAP,C;;  
QAEhB,OAAO,W;O;KAZX,C;uFAeA,yB;MAAA,wE;MAyBA,+D;MAzBA,yC;QASW,kBAAU,oB;QAYBD,Q;Q  
AAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,UA1BiD,WA0BvC,CAAY,OAAZ,C;UbvnCP,U;UADP,  
YaynCe,WbznCH,WaynCwB,GbznCxB,C;UACL,IAAI,aAAJ,C;YACH,aaunCuC,gB;YAA5B,WbtnCX,aasnCgC,G  
btnChC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UamnCA,iB;UACA,IAAK,WAAI,OAAJ,C;;QA5BT,OA8BO,W;O;K  
AvCX,C;uFAYA,yB;MAAA,wE;MA8BA,+D;MA9BA,yD;QAUW,kBAAU,oB;QA8BD,Q;QAAA,2B;QAAhB,OA  
AgB,cAAhB,C;UAAgB,yB;UACZ,UA/BiD,WA+BvC,CAAY,OAAZ,C;UbzoCP,U;UADP,Ya2oCe,Wb3oCH,Wa2  
oCwB,Gb3oCxB,C;UACL,IAAI,aAAJ,C;YACH,aayoCuC,gB;YAA5B,WbxoCX,aawoCgC,GbxoChC,EAAS,MAA  
T,C;YACA,e;;YAEA,c;;UaqoCA,iB;UACA,IAAK,WAjCyD,cAiCrD,CAAe,OAAf,CAAJ,C;;QAJCT,OAmCO,W;  
O;KA7CX,C;0FAaA,yB;MAAA,+D;MAAA,sD;QASoB,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UA  
CZ,UAAU,YAAy,OAAZ,C;UbvnCP,U;UADP,YaynCe,WbznCH,WaynCwB,GbznCxB,C;UACL,IAAI,aAAJ,C;Y  
ACH,aaunCuC,gB;YAA5B,WbtnCX,aasnCgC,GbtnChC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UamnCA,iB;UACA,  
IAAK,WAAI,OAAJ,C;;QAET,OAAO,W;O;KAdX,C;2FAiBA,yB;MAAA,+D;MAAA,sE;QAUoB,Q;QAAA,2B;Q  
AAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,UAAU,YAAy,OAAZ,C;UbzoCP,U;UADP,Ya2oCe,Wb3oCH,Wa2o  
CwB,Gb3oCxB,C;UACL,IAAI,aAAJ,C;YACH,aayoCuC,gB;YAA5B,WbxoCX,aawoCgC,GbxoChC,EAAS,MAA  
T,C;YACA,e;;YAEA,c;;UaqoCA,iB;UACA,IAAK,WAAI,eAAe,OAAf,CAAJ,C;;QAET,OAAO,W;O;KafX,C;4FA  
kBA,yB;MAAA,kC;MAAA,4C;MAAA,wE;QAQW,sC;QAAA,8C;O;MARX,oDASQ,Y;QAA6C,OAAA,oBAAgB,  
W;O;MATrE,iDAUQ,mB;QAAoC,gCAAY,OAAZ,C;O;MAV5C,gF;MAAA,yC;QAQI,2D;O;KARJ,C;8EAcA,yB;  
MAAA,kF;MAAA,gE;MAAA,uC;QAOW,kBAAM,eAAa,mCAAwB,EAAXB,CAAb,C;QAUeA,Q;QAAA,2B;QA  
Ab,OAAa,cAAb,C;UAAa,sB;UACT,WAAy,WAXEwC,SAwEpC,CAAU,IAAV,CAAJ,C;;QAXeHb,OAYEO,W;O;  
KAhFX,C;4FAUA,yB;MAAA,kF;MAAA,gE;MA+BA,wE;MA/BA,uC;QAOW,kBAAa,eAAa,mCAAwB,EAAXB,  
CAAb,C;QAGCP,gB;QADb,YAAy,C;QACC,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,WAAy,WAJC+C,SAiC  
3C,CAAU,oBAAmB,cAAnB,EAAMb,sBAAnB,UAAV,EAAuC,IAAvC,CAAJ,C;;QAJChB,OAkCO,W;O;KAZCX,  
C;0GAUA,yB;MAAA,+D;MAoSA,wE;MApSA,uC;QAOW,kBAAoB,gB;QAoSd,gB;QADb,YAAy,C;QACC,2B;  
QAAb,OAAa,cAAb,C;UAAa,sB;UA1RSB,U;UAAA,cAVQ,SAUR,CAORT,oBAAmB,cAAnB,EAAMb,sBAAnB,  
UA1RS,EA0RoB,IA1RpB,W;YAA6C,6B;;QAVhF,OAwo,W;O;KAlBX,C;8GAUA,yB;MA0RA,wE;MA1RA,oD;  
QAIiSiB,gB;QADb,YAAy,C;QACC,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UA1RSB,U;UAAA,wBAORT,oBAAmB,  
cAAnB,EAAMb,sBAAnB,UA1RS,EA0RoB,IA1RpB,W;YAA6C,6B;;QACHf,OAAO,W;O;KARX,C;+FAWA,yB;  
MAAA,wE;MAAA,oD;QAQiB,UACoC,M;QAFjD,YAAy,C;QACC,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,  
WAAy,WAAI,UAAU,oBAAmB,cAAnB,EAAMb,sBAAnB,UAAV,EAAuC,IAAvC,CAAJ,C;;QACHb,OAAO,W;  
O;KAVX,C;4FAaA,yB;MAAA,+D;MAAA,uC;QAOW,kBAAa,gB;QAWPJ,Q;QAAA,2B;QAAhB,OAAGB,cAAhB  
,C;UAAgB,yB;UAhPK,U;UAAA,cARe,SAQf,CAGPQ,OAHPR,W;YAA5C,6B;;QAR3D,OASO,W;O;KAhBX,C;gG  
AUA,yB;MAAA,oD;QAqPoB,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UAhPK,U;UAAA,wBAGPQ,  
OAHPR,W;YAA5C,6B;;QAC3D,OAAO,W;O;KANX,C;kFASA,6C;MAKiB,Q;MAAA,2B;MAAb,OAAa,cAAb,C;  
QAAa,sB;QACT,WAAy,WAAI,UAAU,IAAV,CAAJ,C;;MACHb,OAAO,W;K;IAQiB,4C;MAAA,mB;QAAE,gC;  
O;K;IAL9B,gC;MAKI,OAAO,qBAAiB,6BAAjB,C;K;IAGX,+B;MASI,OAA2B,SAAf,eAAL,SAAK,CAAe,C;K;4  
FAG/B,yB;MAAA,2D;MAAA,+D;MAAA,sC;QAYc,Q;QAFV,UAAU,c;QACV,WAAW,gB;QACD,2B;QAAV,O  
AAU,cAAV,C;UAAU,mB;UACN,UAAU,SAAS,CAAT,C;UACV,IAAI,GAAI,WAAI,GAJI,CAAR,C;YACL,IAA  
K,WAAI,CAAJ,C;;QAEb,OAAO,I;O;KAjBX,C;IAoBA,uC;MAQI,UAAe,eAAL,SAAK,C;MACX,YAAJ,GAIE  
AAU,KAAV,C;MACJ,OAAO,G;K;IAGX,sC;MAMI,UAAe,eAAL,SAAK,C;MACX,YAAJ,GAIE,AAU,KAAV,

C;MACJ,OAAO,G;K;IAGX,mC;MAMiB,IAAN,I;MACH,kBADs,SACT,c;QAAoB,4BAAc,SAAd,C;;QACZ,iCA  
Aa,sBAAb,C;MAFZ,W;K;IAMJ,mC;MAUI,UAAe,eAAL,SAAK,C;MACX,OAAJ,GAAL,EAAO,KAAP,C;MACJ,  
OAAO,G;K;8EAGX,yB;MAAA,gD;MAAA,uC;QAOoB,Q;QADhB,IAAI,wCAAsB,mBAA1B,C;UAAqC,OAAO,I  
;QAC5B,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UAAM,IAAI,CAAC,UAAU,OAAV,CAAL,C;YAAyB,OAA  
O,K;;QACtD,OAAO,I;O;KARX,C;IAWA,2B;MAMI,IAAI,oCAAJ,C;QAAwB,OAAO,CAAC,mB;MACHc,OAAO  
,oBAAW,U;K;+EAGtB,yB;MAAA,gD;MAAA,uC;QAOoB,Q;QADhB,IAAI,wCAAsB,mBAA1B,C;UAAqC,OAA  
O,K;QAC5B,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UAAM,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,I;  
;QACrD,OAAO,K;O;KARX,C;IAWA,6B;MAMoB,Q;MAFhB,IAAI,oCAAJ,C;QAAwB,OAAO,c;MAC/B,YAAY,  
C;MACI,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QAAM,oBAAmB,qBAAnB,EAAmB,KAAmB,E;;MACtB,O  
AAO,K;K;mFAGX,qB;MAKI,OAAO,c;K;mFAGX,yB;MAAA,gD;MAAA,wE;MAAA,uC;QAMoB,Q;QAFhB,IA  
AI,wCAAsB,mBAA1B,C;UAAqC,OAAO,C;QAC5C,YAAY,C;QACI,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;  
UAAM,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,oBAAmB,qBAAnB,EAAmB,KAAmB,E;;QAC9C,OAAO,K;O;KA  
PX,C;gFAUA,yC;MAUoB,Q;MADhB,kBAAkB,O;MACF,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QAAM,cA  
Ac,UAAU,WAAV,EAAuB,OAAvB,C;;MACpC,OAAO,W;K;8FAGX,yB;MAAA,wE;MAAA,gD;QAYoB,UAAiD  
,M;QAFjE,YAAY,C;QACZ,kBAAkB,O;QACF,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UAAM,cAAc,UAAU,  
oBAAmB,cAAnB,EAAmB,sBAAnB,UAAV,EAAuC,WAAvC,EAAoD,OAAPD,C;;QACpC,OAAO,W;O;KAbX,C  
;0FAGBA,yC;MASI,kBAAkB,O;MACIB,IAAI,CAAC,mBAAL,C;QACI,eAAe,+BAAa,cAAb,C;QACf,OAAO,QA  
AS,cAAhB,C;UACI,cAAc,UAAU,QAAS,WAAmB,EAA+B,WAA/B,C;;OAGtB,OAAO,W;K;wGAGX,yC;MAUI,k  
BAAkB,O;MACIB,IAAI,CAAC,mBAAL,C;QACI,eAAe,+BAAa,cAAb,C;QACf,OAAO,QAAS,cAAhB,C;UACI,Y  
AAY,QAAS,gB;UACrB,cAAc,UAAU,KAAV,EAAiB,QAAS,WAA1B,EAAcC,WAAtC,C;;OAGtB,OAAO,W;K;s  
FAGX,6B;MAKoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QAAM,OAAO,OAAP,C;;K;oGAG1B,y  
B;MAAA,wE;MAAA,oC;QAOiB,UAAgC,M;QAD7C,YAAY,C;QACC,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UAA  
M,OAAO,oBAAmB,cAAnB,EAAmB,sBAAnB,UAAP,EAAoC,IAAPC,C;;O;KAPvB,C;IAUA,0B;MAII,OAAO,sB  
;K;IAGX,2B;MAII,OAAO,uB;K;IAGX,2B;MAGI,OAAO,uB;K;kFAGX,+B;MAGW,sB;;QAUP,eAAe,oB;QACf,I  
AAI,CAAC,QAAS,UAAAd,C;UAAyB,qBAAO,I;UAAP,uB;SACzB,cAAc,QAAS,O;QACvB,IAAI,CAAC,QAAS,U  
AAAd,C;UAAyB,qBAAO,O;UAAP,uB;SACzB,eAdmB,QAcJ,CAAS,OAAT,C;;UAEX,QAAQ,QAAS,O;UACjB,Q  
AjBe,QAiBP,CAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAED,  
QAAT,QAAS,W;QACIB,qBAAO,O;;MAvBP,yB;K;8FAGJ,+B;MAOI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAA  
d,C;QAAyB,OAAO,I;MACHc,cAAc,QAAS,O;MACvB,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,OAAO,O;MACHc,  
eAAe,SAAS,OAAT,C;;QAEX,QAAQ,QAAS,O;QACjB,QAAQ,SAAS,CAAT,C;QACR,IAAI,2BAAW,CAAX,KA  
AJ,C;UACI,UAAU,C;UACV,WAAW,C;;MAED,QAAT,QAAS,W;MACIB,OAAO,O;K;mFAGX,yB;MAAA,sE;M  
F/yDA,iB;ME+yDA,sC;QAaI,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B;QAC/B,eAAe,S  
AAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QAAQ,SAAS,QAAS,OAAIB,C;UACR,WFzzDG,M  
AAO,KEyzDO,QFzzDP,EEyzDiB,CFzzDjB,C;;QE2zDd,OAAO,Q;O;KApBX,C;mFAuBA,yB;MAAA,sE;MFj1DA  
,iB;MEi1DA,sC;QAaI,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B;QAC/B,eAAe,SAAS,Q  
AAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QAAQ,SAAS,QAAS,OAAIB,C;UACR,WF31DG,MAAO,  
KE21DO,QF31DP,EE21DiB,CF31DjB,C;;QE61Dd,OAAO,Q;O;KApBX,C;mFAuBA,yB;MAAA,sE;MAAA,sC;Q  
AWI,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B;QAC/B,eAAe,SAAS,QAAS,OAAIB,C;Q  
ACf,OAAO,QAAS,UAAhB,C;UACI,QAAQ,SAAS,QAAS,OAAIB,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YAC  
I,WAAW,C;;QAGnB,OAAO,Q;O;KApBX,C;+FAuBA,yB;MFp3DA,iB;MEo3DA,sC;QAWI,eAAe,oB;QACf,IAAI  
,CAAC,QAAS,UAAAd,C;UAAyB,OAAO,I;QACCh,eAAe,SAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C  
;UACI,QAAQ,SAAS,QAAS,OAAIB,C;UACR,WF53DG,MAAO,KE43DO,QF53DP,EE43DiB,CF53DjB,C;;QE83  
Dd,OAAO,Q;O;KAIBX,C;+FAqBA,yB;MFp5DA,iB;MEo5DA,sC;QAWI,eAAe,oB;QACf,IAAI,CAAC,QAAS,UA  
Ad,C;UAAyB,OAAO,I;QACCh,eAAe,SAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QAAQ,SA  
AS,QAAS,OAAIB,C;UACR,WF55DG,MAAO,KE45DO,QF55DP,EE45DiB,CF55DjB,C;;QE85Dd,OAAO,Q;O;K  
AIBX,C;+FAqBA,+B;MASI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHc,eAAe,SA  
AS,QAAS,OAAIB,C;MACf,OAAO,QAAS,UAAhB,C;QACI,QAAQ,SAAS,QAAS,OAAIB,C;QACR,IAAI,2BAAW,  
CAAX,KAAJ,C;UACI,WAAW,C;;MAGnB,OAAO,Q;K;0FAGX,yB;MAAA,sE;MAAA,kD;QAWI,eAAe,oB;QAC

f,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B;QAC/B,eAAe,SAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS, UAAhB,C;UACI,QAAQ,SAAS,QAAS,OAAIB,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GA AkC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KApBX,C;sGAuBA,2C;MASI,eAAe,oB;MACf,IAAI,CAA C,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHc,eAAe,SAAS,QAAS,OAAIB,C;MACf,OAAO,QAAS,UAAhB,C;QA CI,QAAQ,SAAS,QAAS,OAAIB,C;QACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C ;UACI,WAAW,C;;MAGnB,OAAO,Q;K;IAGX,gC;MAOI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAAAd,C;QAAyB, OAAO,I;MACHc,UAAU,QAAS,O;MACnB,OAAO,QAAS,UAAhB,C;QACI,QAAQ,QAAS,O;QACjB,MFn+DG, MAAO,KEm+DE,GFn+DF,EEem+DO,CFn+DP,C;;MEq+Dd,OAAO,G;K;IAGX,iC;MAOI,eAAe,oB;MACf,IAAI,C AAC,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHc,UAAU,QAAS,O;MACnB,OAAO,QAAS,UAAhB,C;QACI,QAA Q,QAAS,O;QACjB,MF//DG,MAAO,KE+/DE,GF//DF,EE+/DO,CF//DP,C;;MEigEd,OAAO,G;K;IAGX,iC;MAKI,e AAe,oB;MACf,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHc,UAAU,QAAS,O;MACnB,OAAO,QAAS, UAAhB,C;QACI,QAAQ,QAAS,O;QACjB,IAAI,sBAAM,CAAN,KAJ,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K ;IAGX,0C;MAGI,OAAO,2BAAc,UAAAd,C;K;IAGX,gD;MAKI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAAAd,C;QA AyB,OAAO,I;MACHc,UAAU,QAAS,O;MACnB,OAAO,QAAS,UAAhB,C;QACI,QAAQ,QAAS,O;QACjB,IAAI, UAAW,SAAQ,GAAR,EAaA,CAAb,CAAX,GAA6B,CAAJ,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,0 B;MAII,OAAO,sB;K;IAGX,2B;MAII,OAAO,uB;K;IAGX,2B;MAGI,OAAO,uB;K;kFAGX,+B;MAGW,sB;;QAUP ,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,qBAAO,I;UAAP,uB;SACzB,cAAc,QAAS,O;QACvB,IAA I,CAAC,QAAS,UAAAd,C;UAAyB,qBAAO,O;UAAP,uB;SACzB,eAdmB,QAcJ,CAAS,OAAT,C;;UAEX,QAAQ,Q AAS,O;UACjB,QAjBe,QAiBP,CAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAJ,C;YACI,UAAU,C;YACV,W AAW,C;;QAED,QAAT,QAAS,W;QACIB,qBAAO,O;;MAvBP,yB;K;8FAGJ,+B;MAOI,eAAe,oB;MACf,IAAI,CA AC,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHc,cAAc,QAAS,O;MACvB,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,O AAO,O;MACHc,eAAe,SAAS,OAAT,C;;QAEX,QAAQ,QAAS,O;QACjB,QAAQ,SAAS,CAAT,C;QACR,IAAI,2B AAW,CAAX,KAJ,C;UACI,UAAU,C;UACV,WAAW,C;;MAED,QAAT,QAAS,W;MACIB,OAAO,O;K;mFAGX ,yB;MAAA,sE;MF14DA,iB;MEk4DA,sC;QAAI,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B ;QAC/B,eAAe,SAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QAAQ,SAAS,QAAS,OAAIB,C;U ACR,WF54DG,MAAO,KE44DO,QF54DP,EE44DiB,CF54DjB,C;;QE84Dd,OAAO,Q;O;KApBX,C;mFAuBA,yB; MAAA,sE;MFp6DA,iB;MEo6DA,sC;QAAI,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B;Q AC/B,eAAe,SAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QAAQ,SAAS,QAAS,OAAIB,C;UAC R,WF96DG,MAAO,KE86DO,QF96DP,EE86DiB,CF96DjB,C;;QEg7Dd,OAAO,Q;O;KApBX,C;mFAuBA,yB;MA AA,sE;MAAA,sC;QAWI,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B;QAC/B,eAAe,SAAS, QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QAAQ,SAAS,QAAS,OAAIB,C;UACR,IAAI,2BAAW,C AAX,KAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KApBX,C;+FAuBA,yB;MFv8DA,iB;MEu8DA,sC;QAWI,e AAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,OAAO,I;QACHc,eAAe,SAAS,QAAS,OAAIB,C;QACf,OA AO,QAAS,UAAhB,C;UACI,QAAQ,SAAS,QAAS,OAAIB,C;UACR,WF/8DG,MAAO,KE+8DO,QF/8DP,EE+8Di B,CF/8DjB,C;;QEi9Dd,OAAO,Q;O;KAIBX,C;+FAqBA,yB;MFv+DA,iB;MEu+DA,sC;QAWI,eAAe,oB;QACf,IA AI,CAAC,QAAS,UAAAd,C;UAAyB,OAAO,I;QACHc,eAAe,SAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAh B,C;UACI,QAAQ,SAAS,QAAS,OAAIB,C;UACR,WF/+DG,MAAO,KE++DO,QF/+DP,EE++DiB,CF/+DjB,C;;QE i/Dd,OAAO,Q;O;KAIBX,C;+FAqBA,+B;MASI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,OAAO,I; MACHc,eAAe,SAAS,QAAS,OAAIB,C;MACf,OAAO,QAAS,UAAhB,C;QACI,QAAQ,SAAS,QAAS,OAAIB,C;Q ACR,IAAI,2BAAW,CAAX,KAJ,C;UACI,WAAW,C;;MAGnB,OAAO,Q;K;0FAGX,yB;MAAA,sE;MAAA,kD;Q AWI,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B;QAC/B,eAAe,SAAS,QAAS,OAAIB,C;Q ACf,OAAO,QAAS,UAAhB,C;UACI,QAAQ,SAAS,QAAS,OAAIB,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB ,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KApBX,C;sGAuBA,2C;MASI,eAAe,o B;MACf,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHc,eAAe,SAAS,QAAS,OAAIB,C;MACf,OAAO,Q AAS,UAAhB,C;QACI,QAAQ,SAAS,QAAS,OAAIB,C;QACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAA X,GAakC,CAAtC,C;UACI,WAAW,C;;MAGnB,OAAO,Q;K;IAGX,gC;MAOI,eAAe,oB;MACf,IAAI,CAAC,QA A S,UAAAd,C;QAAyB,OAAO,I;MACHc,UAAU,QAAS,O;MACnB,OAAO,QAAS,UAAhB,C;QACI,QAAQ,QAAS,O ;QACjB,MFtjEG,MAAO,KEsjEE,GFtjEF,EEsjEO,CFtjEP,C;;MEwjEd,OAAO,G;K;IAGX,iC;MAOI,eAAe,oB;MA



Cf,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHC,UAAU,QAAS,O;MACnB,OAAO,QAAS,UAAhB,C;QACI,QAAQ,QAAS,O;QACjB,MFIIEG,MAAO,KEKIEE,GFIIIEF,EEkIEO,CFIIIEP,C;;MEoIEd,OAAO,G;K;IAGX,iC;MAKI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHC,UAAU,QAAS,O;MACnB,OAAO,QAAS,UAAhB,C;QACI,QAAQ,QAAS,O;QACjB,IAAI,sBAAM,CAAN,KA AJ,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAGX,0C;MAGI,OAAO,2BAAc,UAAAd,C;K;IAGX,gD;MAKI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHC,UAAU,QAAS,O;MACnB,OAAO,QAAS,UAAhB,C;QACI,QAAQ,QAAS,O;QACjB,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,4B;MAMI,IAAI,oCAAJ,C;QAAwB,OAAO,mB;MAC/B,OAAO,CAAC,oBAAW,U;K;iFAGvB,yB;MAAA,gD;MAAA,uC;QAOoB,Q;QADhB,IAAI,wCAAsB,mBAA1B,C;UAAqC,OAAO,I;QAC5B,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UAAAM,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,K;;QACrD,OAAO,I;O;KARX,C;oFAWA,6B;MAKmC,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QAAM,OAAO,OAAP,C;;MAArC,gB;K;kGAGJ,yB;MAAA,6B;MAAA,sC;MArnBA,wE;MAqnBA,2BAQiB,yB;QA7nBjB,wE;eA6nBiB,0B;UAAA,4B;YAAE,aAAe,c;YAtnBjB,gB;YADb,YAAY,C;YACC,2B;YAAb,OAAa,cAAb,C;cAAa,sB;cAAM,OAAO,oBAAM B,cAAnB,EAAmB,sBAAnB,UAAp,EAAoC,IAApC,C;;YAsnBmB,W;W;S;OAAzB,C;MARjB,oC;QA9mBiB,gB;QADb,YAAY,C;QACC,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UAAAM,OAAO,oBAAM B,cAAnB,EAAmB,sBAAnB,UAAp,EAAoC,IAApC,C;;QAsnBnB,gB;O;KARJ,C;oFAWA,yB;MAAA,4F;MAAA,uC;QAaI,eAAe,SAAK,W;QACpB,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,mCAA8B,oCAA9B,C;QAC/B,kBAAqB,QAAS,O;QAC9B,OAAO,QAAS,UAAhB,C;UACI,cAAc,UAAU,WAAV,EAAuB,QAAS,OAAhC,C;;QAEIB,OAAO,W;O;KAnBX,C;kGAsBA,yB;MAAA,4F;MAAA,wE;MAAA,uC;QAKBmD,Q;QAL/C,eAAe,SAAK,W;QACpB,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,mCAA8B,oCAA9B,C;QAC/B,YAAY,C;QACZ,kBAAqB,QAAS,O;QAC9B,OAAO,QAAS,UAAhB,C;UACI,cAAc,UAAU,oBAAM B,YAAnB,EAAmB,oBAAnB,QAAV,EAAuB,WAAvC,EAAoD,QAAS,OAA7D,C;;QAEIB,OAAO,W;O;KApBX,C;8GAuBA,yB;MAAA,wE;MAAA,uC;QAKBmD,Q;QAL/C,eAAe,SAAK,W;QACpB,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,OAAO,I;QACHC,YAAY,C;QACZ,kBAAqB,QAAS,O;QAC9B,OAAO,QAAS,UAAhB,C;UACI,cAAc,UAAU,oBAAM B,YAAnB,EAAmB,oBAAnB,QAAV,EAAuB,WAAvC,EAAoD,QAAS,OAA7D,C;;QAEIB,OAAO,W;O;KApBX,C;gGAuBA,gC;MAcI,eAAe,SAAK,W;MACpB,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHC,kBAAqB,QAAS,O;MAC9B,OAAO,QAAS,UAAhB,C;QACI,cAAc,UAAU,WAAV,EAAuB,QAAS,OAAhC,C;;MAEIB,OAAO,W;K;8FAGX,yB;MAAA,4F;MAAA,uC;QAaI,eAAe,+BAAa,cAAb,C;QACf,IAAI,CAAC,QAAS,cAAAd,C;UACI,MAAM,mCAA8B,8BAA9B,C;QACV,kBAAqB,QAAS,W;QAC9B,OAAO,QAAS,cAAhB,C;UACI,cAAc,UAAU,QAAS,WAAAnB,EAA+B,WAA/B,C;;QAEIB,OAAO,W;O;KApBX,C;4GAuBA,yB;MAAA,4F;MAAA,uC;QAaI,eAAe,+BAAa,cAAb,C;QACf,IAAI,CAAC,QAAS,cAAAd,C;UACI,MAAM,mCAA8B,8BAA9B,C;QACV,kBAAqB,QAAS,W;QAC9B,OAAO,QAAS,cAAhB,C;UACI,YAAY,QAAS,gB;UACrB,cAAc,UAAU,KAAV,EAAiB,QAAS,WAA1B,EAAc,WAAtC,C;;QAEIB,OAAO,W;O;KArBX,C;wHAWBA,gC;MAaI,eAAe,+BAAa,cAAb,C;MACf,IAAI,CAAC,QAAS,cAAAd,C;QACI,OAAO,I;MACX,kBAAqB,QAAS,W;MAC9B,OAAO,QAAS,cAAhB,C;QACI,YAAY,QAAS,gB;QACrB,cAAc,UAAU,KAAV,EAAiB,QAAS,WAA1B,EAAc,WAAtC,C;;MAEIB,OAAO,W;K;0GAGX,gC;MAcI,eAAe,+BAAa,cAAb,C;MACf,IAAI,CAAC,QAAS,cAAAd,C;QACI,OAAO,I;MACX,kBAAqB,QAAS,W;MAC9B,OAAO,QAAS,cAAhB,C;QACI,cAAc,UAAU,QAAS,WAAAnB,EAA+B,WAA/B,C;;MAEIB,OAAO,W;K;8FAGX,yB;MAAA,kF;MAAA,gD;MAAA,gE;MAAA,gD;QAIBoB,Q;QAJhB,oBAAoB,mCAAwB,CAAxB,C;QACpB,IAAI,kBAAiB,CAArB,C;UAAwB,OAAO,OAAO,OAAP,C;QACc,kBAAhC,eAAa,gBAAGB,CAAhB,IAAb,C;QAAwC,8B;QAArD,aHjjFO,W;QGkjFP,kBAk B,O;QACF,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,cAAc,UAAU,WAAV,EAAuB,OAAvB,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KArBX,C;4GAwBA,yB;MAAA,kF;MAAA,gD;MAAA,gE;MAAA,gD;QAmBoB,UACY,M;QAN5B,oBAAoB,mCAAwB,CAAxB,C;QACpB,IAAI,kBAAiB,CAArB,C;UAAwB,OAAO,OAAO,OAAP,C;QACc,kBAAhC,eAAa,gBAAGB,CAAhB,IAAb,C;QAAwC,8B;QAArD,aH1kFO,W;QG2kFP,YAAY,C;QACZ,kBAAkB,O;QACF,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,cAAc,WAAU,cAAV,EAAU,sBAAV,WAAmB,WAAAnB,EAAgC,OAAhC,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KAvBX,C;kGA0BA,yB;MAAA,qD;MAAA,kF;MAAA,gE;MAAA,uC;QAcl,eAAe,SAAK,W;QACpB,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,OAAO,W;QACHC,sBAAqB,QAAS,OAA9B,C;QACuD,kBAA1C,eAAa,mCAAwB,EAAxB,CAAb,C;QAAkD,sBAAL,aAAJ,C;QAA/D,aHrmFO,W;QGsmFP,OAAO,QAAS,UAAhB,C;UACI,gBAAc,UAAU,aAAV,

EAAuB,QAAS,OAAhC,C;UACd,MAAO,WAAI,aAAJ,C;;QAEX,OAAO,M;O;KAtBX,C;gHAyBA,yB;MAAA,qD ;MAAA,kF;MAAA,gE;MAAA,uC;QAOBgC,Q;QAN5B,eAAe,SAAK,W;QACpB,IAAI,CAAC,QAAS,UAAAd,C;U AAYB,OAAO,W;QAChC,sBAAqB,QAAS,OAA9B,C;QACuD,kBAA1C,eAAa,mCAAwB,EAAxB,CAAb,C;QAA kD,sBAAI,aAAJ,C;QAA/D,aH9nFO,W;QG+nFP,YAAAY,C;QACZ,OAAO,QAAS,UAAhB,C;UACI,gBAAc,WAA U,YAAV,EAAU,oBAAV,SAAmB,aAAnB,EAAgC,QAAS,OAAzC,C;UACd,MAAO,WAAI,aAAJ,C;;QAEX,OAA O,M;O;KAvBX,C;gFA0BA,yB;MArGA,kF;MAAA,gD;MAAA,gE;MAqGA,gD;QAcW,sB;;UAIGS,Q;UAJhB,oB AAoB,mCAAwB,CAAxB,C;UACpB,IAAI,kBAAiB,CAArB,C;YAAwB,qBAAO,OAqGZ,OAryG,C;YAAP,uB;W ACqB,kBAAhC,eAAa,gBAAgB,CAAhB,IAAb,C;UAAwC,sBAoGIC,OApgkC,C;UAArD,aHjjFO,W;UGkjFP,kB AmGmB,O;UAIGH,2B;UAAhB,OAAgB,cAAhB,C;YAAgB,yB;YACZ,cAiGwB,SAjGV,CAAU,WAAV,EAAuB, OAAvB,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,qBAAO,M;;;QA8FP,yB;O;KAdJ,C;8FAiBA,yB;MA9FA,kF;M AAA,gD;MAAA,gE;MA8FA,gD;QAeW,6B;;UA1FS,gB;UALhB,oBAAoB,mCAAwB,CAAxB,C;UACpB,IAAI,k BAAiB,CAArB,C;YAAwB,4BAAO,OA8FL,OA9FK,C;YAAP,8B;WACqB,kBAAhC,eAAa,gBAAgB,CAAhB,IA Ab,C;UAAwC,sBA6F3B,OA7F2B,C;UAArD,aH1kFO,W;UG2kFP,YAAAY,C;UACZ,kBA2F0B,O;UA1FV,2B;UA AhB,OAAgB,cAAhB,C;YAAgB,yB;YACZ,cAyF+B,SAzFjB,EAAU,cAAV,EAAU,sBAAV,WAAmB,WAAhB,EA AgC,OAAhC,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,4BAAO,M;;;QAsFP,gC;O;KAFJ,C;kFAkBA,+B;MAOoB, Q;MADhB,UAAe,C;MACC,2B;MAAhB,OAAgB,cAAhB,C;QAAGB,yB;QACZ,YAAO,SAAS,OAAT,CAAP,I;;M AEJ,OAAO,G;K;8FAGX,+B;MAOoB,Q;MADhB,UAAkG,G;MACF,2B;MAAhB,OAAgB,cAAhB,C;QAAGB,yB; QACZ,OAAO,SAAS,OAAT,C;;MAEX,OAAO,G;K;mFAGX,+B;MAUoB,Q;MADhB,UAAoB,C;MACJ,2B;MAA hB,OAAgB,cAAhB,C;QAAGB,yB;QACZ,OAAO,SAAS,OAAT,C;;MAEX,OAAO,G;K;mFAGX,+B;MAUoB,Q;M ADhB,UAAe,C;MACC,2B;MAAhB,OAAgB,cAAhB,C;QAAGB,yB;QACZ,YAAO,SAAS,OAAT,CAAP,I;;MAEJ, OAAO,G;K;mFAGX,yB;MAAA,SASoB,gB;MATpB,sC;QAUoB,Q;QADhB,Y;QACgB,2B;QAAhB,OAAgB,cAA hB,C;UAAgB,yB;UACZ,cAAO,SAAS,OAAT,CAAP,C;;QAEJ,OAAO,G;O;KAbX,C;mFAgBA,yB;MjB/7EA,6B; MiB+7EA,sC;QAWoB,Q;QADhB,UjB/7EmC,ciB+7EnB,CjB/7EmB,C;QiBg8EnB,2B;QAAhB,OAAgB,cAAhB,C; UAAgB,yB;UACZ,MjBnwFiD,ciBmwFjD,GjBnwF2D,KAAK,GiBmwFzD,SAAS,OAAT,CjBnwFoE,KAAx,IAAf ,C;;QiBqwFrD,OAAO,G;O;KAdX,C;mFAiBA,yB;MD78EA,+B;MC68EA,sC;QAWoB,Q;QADhB,UD58EqC,eAA W,oBC48E/B,CD58E+B,CAAX,C;QC68ErB,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,MDjxFmD,eCixF nD,GDjxF8D,KAAK,KCixF5D,SAAS,OAAT,CDjxFuE,KAAx,CAAhB,C;;QCmxFvD,OAAO,G;O;KAdX,C;IAiB A,qC;MAIoB,UAMT,M;MANS,2B;MAAhB,OAAgB,cAAhB,C;QAAGB,yB;QACZ,IAAI,eAAJ,C;UACI,MAAM, gCAAYB,2BAAwB,SAAXB,MAAZB,C;;MAId,OAAO,mE;K;IAGX,qC;MAIoB,UAMT,M;MANS,2B;MAAhB,O AAgB,cAAhB,C;QAAGB,yB;QACZ,IAAI,eAAJ,C;UACI,MAAM,gCAAYB,2BAAwB,SAAXB,MAAZB,C;;MAId, OAAO,+D;K;IAGX,kC;MAWI,OAAO,oBAAS,IAAT,EAAe,IAAf,EAAc,IAAtC,C;K;IAGX,+C;MAGBI,OAAO,s BAAS,IAAT,EAAe,IAAf,EAAc,IAAtC,EAAwD,SAAXD,C;K;IAGX,mC;MAII,aAAa,iBAAa,mCAAwB,EAAxB ,CAAb,C;MACb,kBAAc,KAAAd,C;MANlEgB,Q;MAAA,OAoLET,SAPLES,W;MAAhB,OAAgB,cAAhB,C;QAAGB, 2B;QAAU,oB;QAOIEK,IAAI,CAAC,SAAD,IAAY,OAplEX,SAoIEW,UAAhB,C;UAAiC,YAAU,I;UAA3C,mBAA iD,K;;UAAjD,mBAA8D,I;;QAplEvE,qB;UAoIED,MAplEqC,WAAI,SAAJ,C;;MAoIE1D,OAAqB,M;K;IAGzB,sC; MAQI,IAAI,QpB0yJG,YAAQ,CoB1yJf,C;QAAwB,OAAAY,SAAL,SAAK,C;MACpC,YAAqB,8BAAT,QAAS,C;M AtoEd,kBAAAY,gB;MA4BH,Q;MAAA,OA2mET,SA3mES,W;MAAhB,OAAgB,cAAhB,C;QAAGB,yB;QAAM,IA AI,CA2mEF,qBA3mEa,OA2mEb,CA3mEF,C;UAAyB,WAAAY,WAAI,OAAJ,C;;MA2mE3D,OA1mEO,W;K;IA6m EX,sC;MAQI,YAAqB,gCAAT,QAAS,EAAgC,SAAhC,C;MACrB,IAAI,KAAM,UAAV,C;QACI,OAAAY,SAAL,S AAK,C;MAppET,kBAAAY,gB;MA4BH,Q;MAAA,OAYnET,SAznES,W;MAAhB,OAAgB,cAAhB,C;QAAGB,yB;Q AAM,IAAI,CAynEF,qBAznEa,OAYnEb,CAznEF,C;UAAyB,WAAAY,WAAI,OAAJ,C;;MAynE3D,OAxnEO,W;K;I A2nEX,sC;MAQI,YAAqB,8BAAT,QAAS,C;MACrB,IAAI,KAAM,UAAV,C;QACI,OAAAY,SAAL,SAAK,C;MAI qET,kBAAAY,gB;MA4BH,Q;MAAA,OAuoET,SAvoES,W;MAAhB,OAAgB,cAAhB,C;QAAGB,yB;QAAM,IAAI, CAuoEF,qBAvoEa,OAuoEb,CAvoEF,C;UAAyB,WAAAY,WAAI,OAAJ,C;;MAuoE3D,OAtoEO,W;K;8FAyoEX,yB ;MAAA,8C;MAAA,qC;QAKI,OAAO,iBAAM,OAAN,C;O;KALX,C;0FAQA,yB;MAAA,+D;MAAA,6B;MAAA,u C;QAUoB,Q;QAFhB,YAAAY,gB;QACZ,aAAa,gB;QACG,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,IAAI ,UAAU,OAAV,CAAJ,C;YACI,KAAM,WAAI,OAAJ,C;;YAEN,MAAO,WAAI,OAAJ,C;;;QAGf,OAAO,cAAK,K AAL,EAAAY,MAAZ,C;O;KAjBX,C;IAoBA,kC;MAII,IAAI,oCAAJ,C;QAAwB,OAAAY,OAAL,SAAK,EAAK,OAA

L,C;MACpC,aAAa,gB;MACN,OAAP,MAAO,EAAO,SAAP,C;MACP,MAAO,WAAI,OAAJ,C;MACP,OAAO,M;  
K;IAGX,oC;MAII,aAAa,iBAAa,iBAAO,CAAP,IAAb,C;MACb,MAAO,gBAAO,SAAP,C;MACP,MAAO,WAAI,  
OAAJ,C;MACP,OAAO,M;K;IAGX,qC;MAII,IAAI,oCAAJ,C;QAAwB,OAAy,OAAL,SAAK,EAAK,QAAL,C;M  
ACpC,aAAa,gB;MACN,OAAP,MAAO,EAAO,SAAP,C;MACA,SAAP,MAAO,EAAO,QAAP,C;MACP,OAAO,M  
;K;IAGX,qC;MAII,aAAa,iBAAa,SAAK,KAAL,GAAY,QAAS,OAARb,IAAb,C;MACb,MAAO,gBAAO,SAAP,C;  
MACA,SAAP,MAAO,EAAO,QAAP,C;MACP,OAAO,M;K;IAGX,qC;MAII,IAAI,oCAAJ,C;QAAwB,OAAy,OA  
AL,SAAK,EAAK,QAAL,C;MACpC,aAAa,gB;MACN,OAAP,MAAO,EAAO,SAAP,C;MACA,OAAP,MAAO,EA  
AO,QAAP,C;MACP,OAAO,M;K;IAGX,qC;MAII,IAAI,mCAAJ,C;QACI,aAAa,iBAAa,SAAK,KAAL,GAAY,QA  
AS,KAARb,IAAb,C;QACb,MAAO,gBAAO,SAAP,C;QACP,MAAO,gBAAO,QAAP,C;QACP,OAAO,M;;QAEp,e  
AAa,iBAAa,SAAb,C;QACN,OAAP,QAAP,EAAO,QAAP,C;QACP,OAAO,Q;;K;IAIf,qC;MAII,aAAa,gB;MACN,  
OAAP,MAAO,EAAO,SAAP,C;MACA,SAAP,MAAO,EAAO,QAAP,C;MACP,OAAO,M;K;IAGX,qC;MAII,aAA  
a,iBAAa,SAAK,KAAL,GAAY,EAAZ,IAAb,C;MACb,MAAO,gBAAO,SAAP,C;MACA,SAAP,MAAO,EAAO,Q  
AAP,C;MACP,OAAO,M;K;4FAGX,yB;MAAA,4C;MAAA,qC;QAKI,OAAO,gBAAK,OAAL,C;O;KALX,C;8FA  
QA,yB;MAAA,4C;MAAA,qC;QAKI,OAAO,gBAAK,OAAL,C;O;KALX,C;IAQA,yD;MAGb+C,oB;QAAA,OAA  
Y,C;MAAG,8B;QAAA,iBAA0B,K;MAOzE,Q;MANX,oBAAoB,IAApB,EAA0B,IAA1B,C;MACA,IAAI,0CAAw  
B,8BAA5B,C;QACI,eAAe,SAAK,K;QACpB,qBAAqB,YAAW,IAAX,SAAsB,WAAW,IAAX,KAAMb,CAAvB,G  
AA0B,CAA1B,GAAiC,CAAnD,K;QACrB,aAAa,iBAAmB,cAAmB,C;QACb,gBAAy,CAAZ,C;QACA,Y;UAAO,c  
;UAAP,MAAgB,CAAT,mBAAiB,QAAXB,E;YAAA,K;UACI,iBAAsB,eAAL,IAAK,EAAa,WAAW,OAAx,IAAb,  
C;UACtB,IAAI,aAAa,IAAb,IAAqB,CAAC,cAA1B,C;YAA0C,K;Ud59FID,WAAW,iBc69Fa,Ud79Fb,C;UWCX,m  
BAAc,CAAd,YG49FwB,UH59FxB,Y;YXA6B,ec49FS,sBH39F3B,OG29FgC,GAAK,OAAL,IAAL,Cd59FT,C;;Uc  
49FrB,MAAO,Wd39FR,Ic29FQ,C;UACP,oBAAS,IAAT,I;;QAEJ,OAAO,M;OAEX,eAAa,gB;MACiE,kBAA9E,iB  
AAiB,oBAAjB,EAA6B,IAA7B,EAAmC,IAAnC,EAAyC,cAAzC,EAAuE,IAAvE,C;ME51GA,OAAgB,qBAAhB,  
C;QAAgB,gC;QF6lGL,mBE7lGqB,OF6lGrB,C;;MAEX,OAAO,Q;K;IAGX,sE;MAkBkD,oB;QAAA,OAAy,C;MA  
AG,8B;QAAA,iBAA0B,K;MACvF,oBAAoB,IAApB,EAA0B,IAA1B,C;MACA,IAAI,0CAAwB,8BAA5B,C;QACI  
,eAAe,SAAK,K;QACpB,qBAAqB,YAAW,IAAX,SAAsB,WAAW,IAAX,KAAMb,CAAvB,GAA0B,CAA1B,GAA  
iC,CAAnD,K;QACrB,aAAa,iBAAa,cAAb,C;QACb,eAAa,kBAAC,SAAd,C;QACb,YAAy,C;QACZ,OAAgB,CAA  
T,qBAAiB,QAAXB,C;UACI,iBAAsB,eAAL,IAAK,EAAa,WAAW,KAAX,IAAb,C;UACtB,IAAI,CAAC,cAAD,IA  
AmB,aAAa,IAApC,C;YAA0C,K;UAC1C,QAAP,cAAK,KAAL,EAAy,QAAP,UAAR,IAAZ,C;UACP,MAAO,W  
AAI,UAAU,QAAP,CAAJ,C;UACP,gBAAS,IAAT,I;;QAEJ,OAAO,M;OAEX,eAAa,gB;MACgE,kBAA7E,iBAAi  
B,oBAAjB,EAA6B,IAA7B,EAAmC,IAAnC,EAAyC,cAAzC,EAAuE,IAAvE,C;MEtoGA,OAAgB,qBAAhB,C;QA  
AgB,gC;QFuoGL,mBAAI,UEvoGiB,OFuoGjB,CAAJ,C;;MAEX,OAAO,Q;K;IAGX,kC;MAqBoB,gB;MAHhB,gB  
AXW,KAWW,O;MACtB,WAAW,iBF17FJ,MAAO,KE07FgB,mCAAwB,EAAxB,CF17FhB,EE07F6C,SF17F7C,C  
E07FH,C;MACX,QAAP,C;MACQ,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,IAAI,KAAK,SAAT,C;UA  
AoB,K;QACpB,IAAK,WAhBqB,GAgBP,OAhBO,EAAmB,KAgBqB,CAAM,UAAW,EAAM,kBAAN,SAhBF,CAG  
BrB,C;;MAhBT,OAKBO,I;K;+EafX,yB;MAAA,kF;MAAA,gE;MFv7FA,iB;MEu7FA,8C;QAWoB,UAESB,M;QA  
LtC,gBAAgB,KAAM,O;QACtB,WAAW,eF17FJ,MAAO,KE07FgB,mCAAwB,EAAxB,CF17FhB,EE07F6C,SF17  
F7C,CE07FH,C;QACX,QAAP,C;QACQ,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,IAAI,KAAK,SAAT,  
C;YAAoB,K;UACpB,IAAK,WAAI,UAAU,OAAV,EAAmB,MAAM,UAAW,EAAM,kBAAN,SAAnB,CAAJ,C;;Q  
AET,OAAO,I;O;KafX,C;IAkBA,kC;MAkBI,YAAy,oB;MACZ,aAZW,KAYQ,W;MACnB,WAAW,iBFv9FJ,MA  
AO,KEu9FgB,mCAAwB,EAAxB,CFv9FhB,EEu9FmD,wBAbtD,KAsD,EAAwB,EAAxB,CFv9FhB,CEu9FH,C;  
MACX,OAAO,KAAM,UAAW,IAAmB,MAAO,UAAjC,C;QACI,IAAK,WafqB,GAeP,KAAM,OafC,EAeO,MAA  
O,OafD,CAerB,C;;MAfT,OAIBo,I;K;+EAdX,yB;MAAA,kF;MAAA,gE;MFn9FA,iB;MEM9FA,8C;QAQI,YAAy,  
oB;QACZ,aAAa,KAAM,W;QACnB,WAAW,eFv9FJ,MAAO,KEu9FgB,mCAAwB,EAAxB,CFv9FhB,EEu9FmD,  
wBAAN,KAAM,EAAwB,EAAxB,CFv9FhB,CEu9FH,C;QACX,OAAO,KAAM,UAAW,IAAmB,MAAO,UAAjC,C  
;UACI,IAAK,WAAI,UAAU,KAAM,OAAhB,EAAwB,MAAO,OAA/B,CAAJ,C;;QAEt,OAAO,I;O;KAdX,C;IAiB  
A,gC;MASW,sB;;QAaP,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,qBAAO,W;UAAp,uB;SACzB,ad/  
pGoD,gB;QcggGpD,cAAc,QAAS,O;QACvB,OAAO,QAAS,UAAhB,C;UACI,WAAW,QAAS,O;UACpB,MAAO,  
WAnBkB,GAmBJ,OAnBI,EAmBK,IAAnBL,CAmBIB,C;UACP,UAAU,I;;QAEd,qBAAO,M;;;MAtBP,yB;K;8FAGJ,

yB;MAAA,qD;MdzpGA,+D;McypGA,uC;QAUI,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,OAAO,W  
;QACChC,ad/pGoD,gB;QcggqGpD,cAAc,QAAS,O;QACvB,OAAO,QAAS,UAAhB,C;UACI,WAAW,QAAS,O;UAC  
pB,MAAO,WAAI,UAAU,OAAV,EAAMb,IAAnB,CAAJ,C;UACP,UAAU,I;QAEd,OAAO,M;O;KANbX,C;IAsB  
A,8F;MAQ6D,yB;QAAA,YAA0B,I;MAAM,sB;QAAA,SAAuB,E;MAAI,uB;QAAA,UAAwB,E;MAAI,qB;QAAA  
,QAAa,E;MAAI,yB;QAAA,YAA0B,K;MAAO,yB;QAAA,YAAoC,I;MAGtN,Q;MAFhB,MAAO,gBAAO,MAAP,  
C;MACP,YAAy,C;MACI,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,IAAI,iCAAU,CAAd,C;UAAiB,MA  
AO,gBAAO,SAAP,C;QACxB,IAAI,QAAQ,CAAR,IAAa,SAAS,KAA1B,C;UACW,gBAAP,MAAO,EAAc,OAAd,  
EAAuB,SAAvB,C;UACJ,K;MAEX,IAAI,SAAS,CAAT,IAAc,QAAQ,KAA1B,C;QAAiC,MAAO,gBAAO,SAAP,  
C;MACxC,MAAO,gBAAO,OAAP,C;MACP,OAAO,M;K;IAGX,4F;MAQwC,yB;QAAA,YAA0B,I;MAAM,sB;Q  
AAA,SAAuB,E;MAAI,uB;QAAA,UAAwB,E;MAAI,qB;QAAA,QAAa,E;MAAI,yB;QAAA,YAA0B,K;MAAO,yB  
;QAAA,YAAoC,I;MACjN,OAAO,oBAAO,sBAAP,EAawB,SAAxB,EAAMC,MAAnC,EAA2C,OAA3C,EAAoD,  
KAApD,EAA2D,SAA3D,EAAeE,SAAtE,CAAiF,W;K;4FAG5F,qB;MAKI,OAAO,S;K;IASS,8C;MAAA,mB;QAA  
E,OAAA,eAAK,W;O;K;IAN3B,iC;MAMI,oCAAgB,8BAAhB,C;K;IAGJ,+B;MAOoB,Q;MAFhB,UAAkB,G;MAC  
IB,YAAiB,C;MACD,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,OAAO,O;QACP,oBAAMb,qBAAnB,EA  
AMb,KAAAnB,E;MAEJ,OAAW,UAAS,CAAb,GAAgB,wCAAO,IAAvB,GAAgC,MAAM,K;K;IAGjD,+B;MAOo  
B,Q;MAFhB,UAAkB,G;MACIB,YAAiB,C;MACD,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,OAAO,O;  
QACP,oBAAMb,qBAAnB,EAAMb,KAAAnB,E;MAEJ,OAAW,UAAS,CAAb,GAAgB,wCAAO,IAAvB,GAAgC,  
MAAM,K;K;IAGjD,+B;MAOoB,Q;MAFhB,UAAkB,G;MACIB,YAAiB,C;MACD,2B;MAAhB,OAAgB,cAAhB,C  
;QAAgB,yB;QACZ,OAAO,O;QACP,oBAAMb,qBAAnB,EAAMb,KAAAnB,E;MAEJ,OAAW,UAAS,CAAb,GAA  
gB,wCAAO,IAAvB,GAAgC,MAAM,K;K;IAGjD,+B;MAOoB,Q;MAFhB,UAAkB,G;MACIB,YAAiB,C;MACD,2  
B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,OAAO,O;QACP,oBAAMb,qBAAnB,EAAMb,KAAAnB,E;MAE  
J,OAAW,UAAS,CAAb,GAAgB,wCAAO,IAAvB,GAAgC,MAAM,K;K;IAGjD,+B;MAOoB,Q;MAFhB,UAAkB,G  
;MACIB,YAAiB,C;MACD,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,OAAO,O;QACP,oBAAMb,qBAA  
nB,EAAMb,KAAAnB,E;MAEJ,OAAW,UAAS,CAAb,GAAgB,wCAAO,IAAvB,GAAgC,MAAM,K;K;IAGjD,+B;  
MAOoB,Q;MAFhB,UAAkB,G;MACIB,YAAiB,C;MACD,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,OA  
AO,O;QACP,oBAAMb,qBAAnB,EAAMb,KAAAnB,E;MAEJ,OAAW,UAAS,CAAb,GAAgB,wCAAO,IAAvB,GA  
AgC,MAAM,K;K;IAGjD,2B;MAMoB,Q;MADhB,UAAe,C;MACC,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;Q  
ACZ,YAAO,O;MAEX,OAAO,G;K;IAGX,2B;MAMoB,Q;MADhB,UAAe,C;MACC,2B;MAAhB,OAAgB,cAAhB  
,C;QAAgB,yB;QACZ,YAAO,O;MAEX,OAAO,G;K;IAGX,2B;MAMoB,Q;MADhB,UAAe,C;MACC,2B;MAAhB  
,OAAgB,cAAhB,C;QAAgB,yB;QACZ,YAAO,OAAP,I;MAEJ,OAAO,G;K;IAGX,2B;MAMoB,Q;MADhB,Y;MA  
CgB,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,cAAO,OAAP,C;MAEJ,OAAO,G;K;IAGX,2B;MAMoB,  
Q;MADhB,UAAiB,G;MACD,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,OAAO,O;MAEX,OAAO,G;K;I  
AGX,2B;MAMoB,Q;MADhB,UAAkB,G;MACF,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,OAAO,O;M  
AEX,OAAO,G;K;IGn1GX,uC;MAOI,OAAO,SAAM,CAAN,EAAS,SAAM,CAAN,EAAS,CAAT,EAAY,UAAZ,C  
AAT,EAakC,UAAIC,C;K;IAGX,oC;MAOI,OAAW,UAAW,SAAQ,CAAR,EAaw,CAAX,CAAX,IAA4B,CAAh  
C,GAAmC,CAAnC,GAA0C,C;K;IAmDrD,wC;MAQc,Q;MADV,UAAU,C;MACV,wBAAU,KAAV,gB;QAAU,Q  
AAA,KAAV,M;QAAiB,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;  
MAC3D,OAAO,G;K;IA+GX,uC;MAOI,OAAO,SAAM,CAAN,EAAS,SAAM,CAAN,EAAS,CAAT,EAAY,UAAZ  
,CAAT,EAakC,UAAIC,C;K;IAGX,oC;MAOI,OAAW,UAAW,SAAQ,CAAR,EAaw,CAAX,CAAX,IAA4B,CAA  
hC,GAAmC,CAAnC,GAA0C,C;K;IAmDrD,wC;MAQc,Q;MADV,UAAU,C;MACV,wBAAU,KAAV,gB;QAAU,Q  
AAA,KAAV,M;QAAiB,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;  
MAC3D,OAAO,G;K;oGCnXX,yB;MAAA,iE;MAAA,uC;QASW,Q;QAAA,+B;;UAYS,U;UAAA,SjB4UoE,iBAA  
Q,W;UiB5U5F,OAAgB,gBAAhB,C;YAAgB,2B;YACZ,aAbwB,SAAx,CAAU,OAAV,C;YACb,IAAI,cAAJ,C;cAC  
L,8BAAO,M;cAAP,gC;;UAGR,8BAAO,I;;QAlBA,kC;QAAA,iB;UAAmC,MAAM,gCAAuB,4DAAvB,C;SAAhD,  
OAAO,I;O;KATX,C;gHAYA,gC;MASoB,Q;MAAA,OAAA,SjB4UoE,QAAQ,W;MiB5U5F,OAAgB,cAAhB,C;Q  
AAgB,yB;QACZ,aAAa,UAAU,OAAV,C;QACb,IAAI,cAAJ,C;UACI,OAAO,M;MAGf,OAAO,I;K;IAGX,6B;MA  
II,IAAI,mBAAQ,CAAZ,C;QACI,OAAO,W;MACX,eAAe,iBAAQ,W;MACvB,IAAI,CAAC,QAAS,UAAAd,C;QAC  
I,OAAO,W;MACX,YAAy,QAAS,O;MACrB,IAAI,CAAC,QAAS,UAAAd,C;QACI,OAAO,OjB8PiD,SiB9PiC,KjB

8P+C,IAAL,EiB9P1C,KjB8PoD,MAAV,CiB9PjD,C;OACX,aAAa,iBAAsB,cAAtB,C;MACb,MAAO,WjB4PqD,Si  
B5PjD,KjB4PsD,IAAL,EiB5PjD,KjB4P2D,MAAV,CiB5PrD,C;;QAEwB,kBAAhB,QAAS,O;QAAPB,MAAO,WjB  
0PiD,SAAK,eAAL,EAAU,iBAAV,CiB1PjD,C;;MACO,QAAT,QAAS,W;MACIB,OAAO,M;K;uFAGX,yB;MAAA  
,+D;MAsBA,gD;MatBA,uC;QAMW,kBAAU,gB;QAoBD,Q;QAAA,OjBqRoE,iBAAQ,W;QiBrR5F,OAAgB,cAA  
hB,C;UAAgB,yB;UACZ,WArB6B,SAqBIB,CAAU,OAAV,C;UACC,OAAZ,WAAy,EAAO,IAAP,C;;QAtBhB,OA  
wBO,W;O;KA9BX,C;uFASA,yB;MAAA,+D;MAwBA,gD;MAxBA,uC;QAUW,kBAAU,gB;QAsBD,Q;QAAA,Oj  
BsQoE,iBAAQ,W;QiBtQ5F,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WAvB6B,SAuBIB,CAAU,OAAV,C;UACC,O  
AAZ,WAAy,EAAO,IAAP,C;;QAxBhB,OA0BO,W;O;KApCX,C;2FAaA,yB;MAAA,gD;MAAA,oD;QAIoB,Q;QA  
AA,OAAA,SjBqRoE,QAAQ,W;QiBrR5F,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WAAW,UAAU,OAAV,C;UACC  
,OAAZ,WAAy,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KARX,C;2FAWA,yB;MAAA,gD;MAAA,oD;QAQoB,Q;Q  
AAA,OAAA,SjBsQoE,QAAQ,W;QiBtQ5F,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WAAW,UAAU,OAAV,C;UAC  
C,OAAZ,WAAy,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KAZX,C;8EAeA,yB;MAAA,gE;MAAA,uC;QAOW,kBA  
AM,eAAa,cAAb,C;QA2BA,Q;QAAA,OjB6NuE,iBAAQ,W;QiB7N5F,OAAa,cAAb,C;UAAa,sB;UACT,WAAy,W  
A5BiB,SA4Bb,CAAU,IAAV,CAAJ,C;;QA5BhB,OA6BO,W;O;KApCX,C;4FAUA,yB;MAAA,+D;MAAA,uC;QA  
OW,kBAaA,gB;QA4EJ,Q;QAAA,OjBkKoE,iBAAQ,W;QiBIK5F,OAAgB,cAAhB,C;UAAgB,yB;UApEK,U;UAA  
A,cARe,SAQf,CAoEQ,OApER,W;YAAsC,6B;;QAR3D,OASO,W;O;KAhBX,C;gGAUA,yB;MAAA,oD;QAYeOB,  
Q;QAAA,OjBkKoE,iBAAQ,W;QiBIK5F,OAAgB,cAAhB,C;UAAgB,yB;UApEK,U;UAAA,wBAoEQ,OApER,W;  
YAAsC,6B;;QAC3D,OAAO,W;O;KANX,C;kFASA,6C;MAKiB,Q;MAAA,OAAA,SjB6NuE,QAAQ,W;MiB7N5F,  
OAAa,cAAb,C;QAAa,sB;QACT,WAAy,WAAI,UAAU,IAAV,CAAJ,C;;MAChB,OAAO,W;K;8EAGX,gC;MAOo  
B,Q;MADhB,IAAI,mBAAJ,C;QAae,OAAO,I;MACN,OAAA,SjBiNoE,QAAQ,W;MiBjN5F,OAAgB,cAAhB,C;Q  
AAgB,yB;QAAM,IAAI,CAAC,UAAU,OAAV,CAAL,C;UAAyB,OAAO,K;;MACtD,OAAO,I;K;IAGX,2B;MAMI,  
OAAO,CAAC,mB;K;+EAGZ,gC;MAOoB,Q;MADhB,IAAI,mBAAJ,C;QAae,OAAO,K;MACN,OAAA,SjB6LoE,  
QAAQ,W;MiB7L5F,OAAgB,cAAhB,C;QAAGB,yB;QAAM,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,OAAO,I;;MA  
CrD,OAAO,K;K;mFAGX,qB;MAKI,OAAO,c;K;mFAGX,gC;MAMoB,Q;MAFhB,IAAI,mBAAJ,C;QAae,OAAO,  
C;MACtB,YAAy,C;MACI,OAAA,SjB2KoE,QAAQ,W;MiB3K5F,OAAgB,cAAhB,C;QAAGB,yB;QAAM,IAAI,U  
AAU,OAAV,CAAJ,C;UAAwB,qB;;MAC9C,OAAO,K;K;sFAGX,6B;MAKoB,Q;MAAA,OAAA,SjBkKoE,QAAQ  
,W;MiBIK5F,OAAgB,cAAhB,C;QAAGB,yB;QAAM,OAAO,OAAP,C;;K;kFAG1B,+B;MAemB,kBAAR,iB;MAA  
Q,sB;;QJkoDf,eAAe,sB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,qBAAO,I;UAAP,uB;SACzB,cAAc,QAAS,O  
;QACvB,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,qBAAO,O;UAAP,uB;SACzB,eIjpDmB,QJipDJ,CAAS,OAAT,C;;  
UAEX,QAAQ,QAAS,O;UACjB,QIppDe,QJopDP,CAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,  
UAAU,C;YACV,WAAW,C;;QAED,QAAT,QAAS,W;QACIB,qBAAO,O;;MI1pDP,yB;K;8FAGJ,+B;MAQmB,kB  
AAR,iB;MAAQ,sB;;QJkoDf,eAAe,sB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,qBAAO,I;UAAP,uB;SACzB,c  
AAc,QAAS,O;QACvB,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,qBAAO,O;UAAP,uB;SACzB,eItoD2B,QJsoDZ,CA  
AS,OAAT,C;;UAEX,QAAQ,QAAS,O;UACjB,QIzoDuB,QJyoDf,CAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,K  
AAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAED,QAAT,QAAS,W;QACIB,qBAAO,O;;MI/oDP,yB;K;mFAGJ,y  
B;MJ+oDA,sE;MF/yDA,iB;MMgKA,sC;QJ4pDI,eI/oDO,iBJ+oDQ,W;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAy  
B,MAAM,6B;QAC/B,eIjpDqB,QJipDN,CAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QInpDiB,  
QJmpDT,CAAS,QAAS,OAAIB,C;UACR,WFzzDG,MAAO,KEyzDO,QFzzDP,EEyzDiB,CFzzDjB,C;;QMqKd,OJ  
pDO,Q;O;KInqDX,C;mFAGBA,yB;MJspDA,sE;MFj1DA,iB;MM2LA,sC;QJmqDI,eItpDO,iBJspDQ,W;QACf,IAA  
I,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B;QAC/B,eIxpDqB,QJwpDN,CAAS,QAAS,OAAIB,C;QACf,OAAO,  
QAAS,UAAhB,C;UACI,QI1pDiB,QJ0pDT,CAAS,QAAS,OAAIB,C;UACR,WF31DG,MAAO,KE21DO,QF31DP,  
EE21DiB,CF31DjB,C;;QMgMd,OJ6pDO,Q;O;KI1qDX,C;mFAGBA,yB;MJ6pDA,sE;MI7pDA,sC;QJwqDI,eI7pDO  
,iBJ6pDQ,W;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B;QAC/B,eI/pDqB,QJ+pDN,CAAS,QAAS,O  
AAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QIjqDiB,QJiqDT,CAAS,QAAS,OAAIB,C;UACR,IAAI,2BAAW,  
CAAX,KAAJ,C;YACI,WAAW,C;;QInqDnB,OJsqDO,Q;O;KIjrDX,C;+FAcA,yB;MN9MA,iB;MM8MA,sC;QAW  
mB,kBAAR,iB;QAAQ,sB;;UJsqDf,eAAe,sB;UACf,IAAI,CAAC,QAAS,UAAAd,C;YAAyB,qBAAO,I;YAAP,uB;W  
ACzB,eIxd2B,QJwqDZ,CAAS,QAAS,OAAIB,C;UACf,OAAO,QAAS,UAAhB,C;YACI,QI1qDuB,QJ0qDf,CAA  
S,QAAS,OAAIB,C;YACR,WF53DG,MAAO,KE43DO,QF53DP,EE43DiB,CF53DjB,C;;UE83Dd,qBAAO,Q;;QI7

qDP,yB;O;KAXJ,C;+FAcA,yB;MNvOA,iB;MMuOA,sC;QAWmB,kBAAR,iB;QAAQ,sB;;UJ6qDf,eAAe,sB;UACf,IAAI,CAAC,QAAS,UAAAd,C;YAAyB,qBAAO,I;YAAP,uB;WACzB,eI/qD2B,QJ+qDZ,CAAS,QAAS,OAAIB,C;UACf,OAAO,QAAS,UAAhB,C;YACI,QIjrDuB,QJirDf,CAAS,QAAS,OAAIB,C;YACR,WF55DG,MAAO,KE45DO,QF55DP,EE45DiB,CF55DjB,C;;UE85Dd,qBAAO,Q;;QIprDP,yB;O;KAXJ,C;+FAcA,+B;MASmB,kBAAR,iB;MAAQ,sB;;QJorDf,eAAe,sB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,qBAAO,I;UAAP,uB;SACzB,eItrD2B,QJsrDZ,CAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QIxrDuB,QJwrDf,CAAS,QAAS,OAAIB,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,qBAAO,Q;;MI7rDP,yB;K;0FAGJ,yB;MJ6rDA,sE;MI7rDA,kD;QJwsDI,eI7rDO,iBJ6rDQ,W;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B;QAC/B,eI/rDqC,QJ+rDtB,CAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QIjsDiC,QJisDzB,CAAS,QAAS,OAAIB,C;UACR,IllsDqB,UJksDN,SAAQ,QAAR,EAakB,CAAlB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QIn sDnB,OJssDO,Q;O;KIjtDX,C;sGAcA,2C;MASmB,kBAAR,iB;MAAQ,0B;;QJssDf,eAAe,sB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,yBAAO,I;UAAP,2B;SACzB,eIxsD2C,QJwsD5B,CAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QI1sDuC,QJ0sD/B,CAAS,QAAS,OAAIB,C;UACR,II3sD2B,UJ2sDZ,SAAQ,QAAR,EAakB,CAAlB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,yBAAO,Q;;MI/sDP,6B;K;sFAGJ,yB;MAOA,8D;MAPA,wC;QAIL,OASe,cAAR,iBAAQ,EATM,UASN,C;O;KAbnB,C;kGAOA,yB;MAAA,8D;MAAA,wC;QAMI,OAAe,cAAR,iBAAQ,EAac,UAAAd,C;O;KANnB,C;kFASA,+B;MAcmB,kBAAR,iB;MAAQ,sB;;QJwxDf,eAAe,sB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,qBAAO,I;UAAP,uB;SACzB,cAAc,QAAS,O;QACvB,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,qBAAO,O;UAAP,uB;SACzB,eIvyDmB,QJuyDJ,CAAS,OAAT,C;;UAEX,QAAQ,QAAS,O;UACjB,QI1yDe,QJ0yDP,CAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAED,QAAT,QAAS,W;QACIB,qBAAO,O;;MIhzDP,yB;K;8FAGJ,+B;MAQmB,kBAAR,iB;MAAQ,sB;;QJwxDf,eAAe,sB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,qBAAO,I;UAAP,uB;SACzB,cAAc,QAAS,O;QACvB,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,qBAAO,O;UAAP,uB;SACzB,eI5xD2B,QJ4xDZ,CAAS,OAAT,C;;UAEX,QAAQ,QAAS,O;UACjB,QI/xDuB,QJ+xDf,CAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAED,QAAT,QAAS,W;QACIB,qBAAO,O;;MIryDP,yB;K;mFAGJ,yB;MJqyDA,sE;MFI4DA,iB;MM6FA,sC;QJkzDI,eIryDO,iBJqyDQ,W;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B;QAC/B,eIvyDqB,QJuyDN,CAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QIzyDiB,QJyyDT,CAAS,QAAS,OAAIB,C;UACR,WF54DG,MAAO,KE44DO,QF54DP,EE44DiB,CF54DjB,C;;QMkGd,OJ4yDO,Q;O;KlzzDX,C;mFAGBA,yB;MJ4yDA,sE;MFp6DA,iB;MMwHA,sC;QJyzDI,eI5yDO,iBJ4yDQ,W;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B;QAC/B,eI9yDqB,QJ8yDN,CAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QIhzDiB,QJgzDT,CAAS,QAAS,OAAIB,C;UACR,WF96DG,MAAO,KE86DO,QF96DP,EE86DiB,CF96DjB,C;;QM6Hd,OJmzDO,Q;O;Klh0DX,C;mFAGBA,yB;MJmzDA,sE;MIInzDA,sC;QJ8zDI,eInzDO,iBJmzDQ,W;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B;QAC/B,eIrzDqB,QJqzDN,CAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QIvzDiB,QJuzDT,CAAS,QAAS,OAAIB,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QIzzDnB,OJ4zDO,Q;O;KIv0DX,C;+FAcA,yB;MN3IA,iB;MM2IA,sC;QAWmB,kBAAR,iB;QAAQ,sB;;UJ4zDf,eAAe,sB;UACf,IAAI,CAAC,QAAS,UAAAd,C;YAAyB,qBAAO,I;YAAP,uB;WACzB,eI9zD2B,QJ8zDZ,CAAS,QAAS,OAAIB,C;UACf,OAAO,QAAS,UAAhB,C;YACI,QIh0DuB,QJg0Df,CAAS,QAAS,OAAIB,C;YACR,WF/8DG,MAAO,KE+8DO,QF/8DP,EE+8DiB,CF/8DjB,C;;UEi9Dd,qBAAO,Q;;QIn0DP,yB;O;KAXJ,C;+FAcA,yB;MNpKA,iB;MMoKA,sC;QAWmB,kBAAR,iB;QAAQ,sB;;UJm0Df,eAAe,sB;UACf,IAAI,CAAC,QAAS,UAAAd,C;YAAyB,qBAAO,I;YAAP,uB;WACzB,eIr0D2B,QJq0DZ,CAAS,QAAS,OAAIB,C;UACf,OAAO,QAAS,UAAhB,C;YACI,QIv0DuB,QJu0Df,CAAS,QAAS,OAAIB,C;YACR,WF/+DG,MAAO,KE++DO,QF/+DP,EE++DiB,CF/+DjB,C;;UEi/Dd,qBAAO,Q;;QI10DP,yB;O;KAXJ,C;+FAcA,+B;MASmB,kBAAR,iB;MAAQ,sB;;QJ00Df,eAAe,sB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,qBAAO,I;UAAP,uB;SACzB,eI50D2B,QJ40DZ,CAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QI90DuB,QJ80Df,CAAS,QAAS,OAAIB,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,qBAAO,Q;;MIIn1DP,yB;K;0FAGJ,yB;MJm1DA,sE;MIIn1DA,kD;QJ81DI,eIn1DO,iBJm1DQ,W;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B;QAC/B,eIrlDqC,QJqlDtB,CAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QIv1DiC,QJu1DzB,CAAS,QAAS,OAAIB,C;UACR,IxlDqB,UJw1DN,SAAQ,QAAR,EAakB,CAAlB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QIz1DnB,OJ41DO,Q;O;KIv2DX,C;sGAcA,2C;MASmB,kBAAR,iB;MAAQ,0B;;QJ41Df,eAAe,sB;QACf,IAAI,CAAC,QAAS,UAAAd,

C;UAAyB,yBAAO,I;UAAP,2B;SACzB,eI91D2C,QJ81D5B,CAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAh  
B,C;UACI,QIh2DuC,QJg2D/B,CAAS,QAAS,OAAIB,C;UACR,IJ2D2B,UJi2DZ,SAAQ,QAAR,EAakB,CAaIB,C  
AAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,yBAAO,Q;;MIr2DP,6B;K;IAGJ,0C;MAGI,OASe,gBAAR,iB  
AAQ,EATM,UASN,C;K;kGANnB,yB;MAAA,8D;MAAA,wC;QAMI,OAAe,cAAR,iBAAQ,EAAC,UAAAd,C;O;KA  
NnB,C;IASA,4B;MAMI,OAAO,mB;K;iFAGX,gC;MAOoB,Q;MADhB,IAAI,mBAAJ,C;QAAe,OAAO,I;MACN,O  
AAA,SjBnJoE,QAAQ,W;MiBmJ5F,OAAgB,cAAhB,C;QAAgB,yB;QAAM,IAAI,UAAU,OAAV,CAAJ,C;UAAw  
B,OAAO,K;;MACrD,OAAO,I;K;oFAGX,6B;MAKmC,Q;MAAA,OjB5JqD,iBAAQ,W;MiB4J7E,OAAgB,cAAhB,  
C;QAAgB,yB;QAAM,OAAO,OAAP,C;;MAArC,gB;K;kGAGJ,yB;MAAA,6B;MAAA,sC;MJwyCA,wE;MIxyCA,  
2BAQiB,yB;QJgyCjB,wE;elhyCiB,0B;UAAA,4B;YAAU,kBAAR,iB;YAAQ,aAAe,c;YJuyCzB,gB;YADb,YAAY,  
C;YACC,6B;YAAb,OAAa,cAAb,C;cAAa,sB;cAAM,OAAO,oBAAmB,cAAnB,EAAMB,sBAAnB,UAAP,EAAoC,  
IAAPc,C;;YIvyC2B,W;W;S;OAAjC,C;MARjB,oC;QJ+yCiB,gB;QADb,YAAY,C;QACC,OIvyCE,iBjuyCF,W;QA  
Ab,OAAa,cAAb,C;UAAa,sB;UAAM,OAAO,oBAAmB,cAAnB,EAAMB,sBAAnB,UAAP,EAAoC,IAAPc,C;;QIvy  
CnB,gB;O;KARJ,C;4FAWA,qB;MAKI,OAAO,iB;K;IAGX,iC;MAII,OAAe,aAAR,iBAAQ,C;K;IC9hBnB,kC;MA  
EI,gBCmE2D,8BAAY,c;MDIEvE,IAAI,SAAU,OAAV,GAAMB,CAAvB,C;QACW,Q;QAAA,IAAI,cAAQ,GAAZ,  
C;UAAA,OAAa,sB;;uBAAe,qBAAU,CAAV,C;UAAA,YAAe,SEiNc,WfjNM,CEiNN,CAff,c;UFIMnD,OG8MoD,  
2BAAL,GAakB,K;;QH9MxE,W;OAEJ,OAAuB,oBAAhB,wBAAGB,C;K;gFxB3B,yB;MAAA,mC;MAAA,2C;M  
AAA,4B;QAQI,OAAO,kBAAO,cAAP,C;O;KARX,C;gFAWA,yB;MAAA,mC;MAAA,2C;MAAA,4B;QAQI,OAA  
O,kBAAO,cAAP,C;O;KARX,C;gFAWA,yB;MAAA,mC;MAAA,2C;MAAA,4B;QAQI,OAAO,kBAAO,cAAP,C;O  
;KARX,C;IAWA,sC;;QAQQ,OAAc,QAAP,MAAO,EAAQ,SAAR,C;;QACHB,+C;UACE,MAAM,2BAAuB,CAAE  
,QAAzB,C;;UAHV,O;;K;IAOJ,sC;;QAQQ,OAAc,SAAP,MAAO,EAAS,SAAT,C;;QACHB,+C;UACE,MAAM,2B  
AAuB,CAAE,QAAzB,C;;UAHV,O;;K;IAOJ,sC;;QAQQ,OAAiD,OAAIC,MAAO,iBAAQ,e4BtCgB,I5BsCxB,EA  
AoB,CAAA,c4BtCI,I5BsCJ,IAAY,CAAZ,IAAPB,CAAMC,C;;QACnD,+C;UACE,MAAM,2BAAuB,CAAE,QAAz  
B,C;;UAHV,O;;K;4FAOJ,yB;MAAA,mC;MAAA,uD;MAAA,4B;QAOI,OAAO,wBAAa,cAAb,C;O;KAPX,C;4FA  
UA,yB;MAAA,mC;MAAA,uD;MAAA,4B;QAOI,OAAO,wBAAa,cAAb,C;O;KAPX,C;4FAUA,yB;MAAA,mC;M  
AAA,uD;MAAA,4B;QAOI,OAAO,wBAAa,cAAb,C;O;KAPX,C;IAUA,4C;MAMI,IAAI,mBAAJ,C;QACI,OAAO,  
I;MACX,OAAc,QAAP,MAAO,EAAQ,SAAR,C;K;IAGIB,4C;MAMI,IAAI,mBAAJ,C;QACI,OAAO,I;MACX,OA  
Ac,SAAP,MAAO,EAAS,SAAT,C;K;IAGIB,4C;MAMI,IAAI,mBAAJ,C;QACI,OAAO,I;MACX,OAAiD,OAAIC,  
MAAO,iBAAQ,e4BxGoB,I5BwG5B,EAAoB,CAAA,c4BxGQ,I5BwGR,IAAY,CAAZ,IAAPB,CAAMC,C;K;mFA  
GrD,8B;MAQI,OAAO,mBAAMB,2BAAS,OAAT,C;K;oFAG9B,8B;MAQI,OAAO,mBAAMB,2BAAS,OAAT,C;K  
;oFAG9B,8B;MAQI,OAAO,mBAAMB,2BAAS,OAAT,C;K;IAG9B,uC;MAKI,OAAO,2BAAE,KAAf,C;K;IAGX,u  
C;MAKI,OAAO,2BAAE,oBAAN,KAAM,CAAF,C;K;IAGX,uC;MAKI,OAAO,2BAAE,KAAf,C;K;IAGX,uC;MAO  
I,OAAO,2BAAE,KAAf,C;K;IAGX,uC;MAOI,OAAO,2BAAE,KAAf,C;K;IAGX,uC;MgBzHW,ShBgIM,mBAAN,  
KAAM,C;MAAb,OAA0C,UAAJ,GAAgB,2BAAS,EAAT,CAAhB,GAakC,K;K;IAG5E,uC;MgBnIW,ShB0IM,kB  
AAN,KAAM,C;MAAb,OAA2C,UAAJ,GAAgB,2BAAS,EAAT,CAAhB,GAakC,K;K;IAG7E,uC;MgB7IW,ShBoJ  
M,oBAAN,KAAM,C;MAAb,OAA2C,UAAJ,GAAgB,2BAAS,EAAT,CAAhB,GAakC,K;K;IAG7E,uC;MgBvJW,S  
hb8JM,qBAAN,KAAM,C;MAAb,OAA4C,UAAJ,GAAgB,2BAAS,EAAT,CAAhB,GAakC,K;K;IAG9E,uC;MAKI  
,OAAO,2BAAE,KAAf,C;K;IAGX,uC;MgBzKW,ShBgLM,mBAAN,KAAM,C;MAAb,OAA0C,UAAJ,GAAgB,2B  
AAS,EAAT,CAAhB,GAakC,K;K;IAG5E,uC;MgBnLW,ShB0LM,oBAAN,KAAM,C;MAAb,OAA2C,UAAJ,GAA  
gB,2BAAS,EAAT,CAAhB,GAakC,K;K;IAG7E,uC;MgB7LW,ShBoMM,oBAAN,KAAM,C;MAAb,OAA2C,UAA  
J,GAAgB,2BAAS,EAAT,CAAhB,GAakC,K;K;IAG7E,uC;MgBvMW,ShB8MM,qBAAN,KAAM,C;MAAb,OAA4  
C,UAAJ,GAAgB,2BAAS,EAAT,CAAhB,GAakC,K;K;IAG9E,uC;MAKI,OAAO,2BAAE,KAAf,C;K;IAGX,uC;M  
AKI,OAAO,2BAAE,oBAAN,KAAM,CAAF,C;K;IAGX,uC;MgBjOW,ShBsOM,kBAAN,KAAM,C;MAAb,OAA2C  
,UAAJ,GAAgB,2BAAS,EAAT,CAAhB,GAakC,K;K;IAG7E,uC;MgBzOW,ShB8OM,mBAAN,KAAM,C;MAAb,  
OAA4C,UAAJ,GAAgB,2BAAS,EAAT,CAAhB,GAakC,K;K;IAG9E,uC;MAOI,OAAO,2BAAE,KAAf,C;K;IAGX  
,uC;MAOI,OAAO,2BAAE,KAAf,C;K;IAGX,uC;MgBrQW,ShB0QM,iBAAN,KAAM,C;MAAb,OAA0C,UAAJ,G  
AAgB,2BAAS,EAAT,CAAhB,GAakC,K;K;IAG5E,uC;MgB7QW,ShBkRM,oBAAN,KAAM,C;MAAb,OAA2C,U  
AAJ,GAAgB,2BAAS,EAAT,CAAhB,GAakC,K;K;IAG7E,uC;MgBrRW,ShB0RM,qBAAN,KAAM,C;MAAb,OA  
A4C,UAAJ,GAAgB,2BAAS,EAAT,CAAhB,GAakC,K;K;IAG9E,uC;MAOI,OAAO,2BAAS,KAAM,WAAf,C;K;I

AGX,uC;MAOI,OAAO,2BAAS,KAAM,WAAf,C;K;IAGX,uC;MAKI,OAAO,2BA Ae,KA Af,C;K;IAGX,uC;MAKI ,OAAO,2BA Ae,oBAAN,KAAM,CA Af,C;K;IAGX,uC;MgBjUW,ShBsUM,oBAAN,KAAM,C;MAAb,OAA2C,UA AJ,GA AgB,2BAAS,EAAT,CA AhB,GA AkC,K;K;IAG7E,uC;MAOI,OAAO,2BA Ae,KA Af,C;K;IAGX,uC;MAOI, OAAO,2BA Ae,KA Af,C;K;IAGX,+B;MAOI,OAAO,sCA Ae,yBA AgB,SA AhB,EA AyB,EA AzB,EA AkC,EA AIC,C; K;IAG1B,iC;MAOI,OAAO,uCA AgB,yBA AgB,SA AhB,EA AyB,oBA AH,EA AG,CA AzB,M;K;IAG3B,iC;MAOI,O AAO,sCA Ae,yBA AqB,SA ArB,EA AiC,EA AjC,EA A0C,EA A1C,C;K;IAG1B,iC;MAOI,OAAO,sCA Ae,yBA AqB,S AArB,EA AiC,EA AjC,EA A0C,EA A1C,C;K;IAG1B,iC;MAOI,OAAO,uCA AgB,yBA AgB,SA AhB,EA AsB,EA AtB, EA A0B,EA A1B,C;K;IAG3B,iC;MAOI,OAAO,sCA Ae,yBA AgB,SA AhB,EA AsB,EA AtB,EA A0B,EA A1B,C;K;IA G1B,iC;MAOI,OAAO,uCA AgB,yBA AgB,SA AhB,EA AyB,oBA AH,EA AG,CA AzB,M;K;IAG3B,iC;MAOI,OAA O,sCA Ae,yBA AqB,SA ArB,EA A8B,EA A9B,EA AkC,EA AIC,C;K;IAG1B,iC;MAOI,OAAO,sCA Ae,yBA AqB,SA A rB,EA A8B,EA A9B,EA AkC,EA AIC,C;K;IAG1B,iC;MAOI,OAAO,uCA AgB,yBA AqB,oBA AL,SA AK,CA ArB,EA A+B,EA A/B,M;K;IAG3B,iC;MAOI,OAAO,uCA AgB,yBA AgB,SA AhB,EA AsB,EA AtB,M;K;IAG3B,kC;MAOI,O AAO,uCA AgB,yBA AqB,oBA AL,SA AK,CA ArB,EA A+B,EA A/B,M;K;IAG3B,kC;MAOI,OAAO,uCA AgB,yBA A qB,oBA AL,SA AK,CA ArB,EA A+B,EA A/B,M;K;IAG3B,kC;MAOI,OAAO,sCA Ae,yBA AgB,SA AhB,EA AyB,EA AzB,EA AkC,EA AIC,C;K;IAG1B,kC;MAOI,OAAO,uCA AgB,yBA AgB,SA AhB,EA AyB,oBA AH,EA AG,CA AzB, M;K;IAG3B,kC;MAOI,OAAO,sCA Ae,yBA AqB,SA ArB,EA AiC,EA AjC,EA A0C,EA A1C,C;K;IAG1B,kC;MAOI, OAAO,sCA Ae,yBA AqB,SA ArB,EA AiC,EA AjC,EA A0C,EA A1C,C;K;IAG1B,+B;MAII,OAAO,sCA Ae,yBA AgB, cA AhB,EA AsB,eA AtB,EA A6B,CA AC,cA AD,IA A7B,C;K;IAG1B,gC;MAII,OAAO,uCA AgB,yBA AgB,cA AhB,EA AsB,eA AtB,EA A6B,CA AC,cA AD,IA A7B,C;K;IAG3B,gC;MAII,OAAO,uCA AgB,yBA AgB,cA AhB,EA AsB,eA AtB,EA A6B,CA AC,cA AD,IA A7B,C;K;IAG3B,+B;MAII,oBA AoB,OAAO,CAA3B,EA A8B,IA A9B,C;MACA,OAAO,s CA Ae,yBA AgB,eA AhB,EA AuB,cA AvB,EA AiC,SA AK,KA AL,GA AY,CA AhB,GA AmB,IA AnB,GAA6B,CA AC, IA AD,IA A1D,C;K;IAG1B,iC;MAII,oBA AoB,kBA AO,CAA3B,EA A8B,IA A9B,C;MACA,OAAO,uCA AgB,yBA A gB,eA AhB,EA AuB,cA AvB,EA AiC,SA AK,KA AL,cA AY,CA AhB,GA AmB,IA AnB,GAA8B,IA AD,aA A1D,C;K;I AG3B,iC;MAII,oBA AoB,OAAO,CAA3B,EA A8B,IA A9B,C;MACA,OAAO,uCA AgB,yBA AgB,eA AhB,EA AuB,c A AvB,EA AiC,SA AK,KA AL,GA AY,CA AhB,GA AmB,IA AnB,GAA6B,CA AC,IA AD,IA A1D,C;K;IAG3B,sC;MA CI,OA AmB,IA AR,8BA AgC,GA ApC,GA AiE,OA AL,SA AK,CA AjE,GAA+E,I;K;IAG1F,wC;MACI,OAAW,mEA AJ,GA AmE,OA AL,SA AK,SA AnE,GA AiF,I;K;IAG5F,wC;MACI,OAAW,YAAQ,aAAA,sCA Ae,UAAf,EA A0B,s CA Ae,UAAzC,CA AR,YAAJ,GA AqE,OA AL,SA AK,CA ArE,GA AmF,I;K;IAG9F,wC;MACI,OA AmB,UAAA,sCA Ae,UAAf,EA A2B,sCA Ae,UAA1C,CA AR,4BA AJ,GAA+E,OA AR,YA AL,SA AK,CAAQ,CAA/E,GAA6F,I;K;IAG xG,wC;MACI,OA AmB,UAAA,sCA Ae,UAAf,EA A0B,sCA Ae,UAAzC,CA AR,4BA AJ,GAA6E,OA AR,YA AL,SA AK,CAAQ,CAA7E,GAA2F,I;K;IAGtG,qC;MACI,OAAW,iFAAJ,GAA4D,SA AK,QAAjE,GAA8E,I;K;IAGzF,uC; MACI,OA AmB,UAAc,WAA d,EA AwC,UAAx C,CA AR,4BA AJ,GA AqE,YA AL,SA AK,CA ArE,GA AKF,I;K;IAG7 F,uC;MACI,OA AmB,UAAc,WAA d,EA AuC,UAAvC,CA AR,4BA AJ,GA AmE,YA AL,SA AK,CA AnE,GA AgF,I;K; IAG3F,sC;MACI,OA AmB,UAAe,mCA Af,EA A0C,mCA A1C,CA AR,4BA AJ,GA AuE,uBA AL,SA AK,CAA vE,GA AqF,I;K;IAGhG,wC;MACI,OA AmB,UAAe,mCA Af,EA AyC,mCA AzC,CA AR,4BA AJ,GA AqE,uBA AL,SA AK,C AArE,GA AmF,I;K;IAG9F,uC;MACI,OA AmB,MA AR,8BA AiC,KA ArC,GA AmE,QA AL,SA AK,CA AnE,GA AKF, I;K;IAG7F,yC;MACI,OAAW,uEA AJ,GA AqE,QA AL,SA AK,SA ArE,GAAoF,I;K;IAG/F,yC;MACI,OA AmB,UAA A,uCA AgB,UAAhB,EA A4B,uCA AgB,UAA5C,CA AR,4BA AJ,GA AiF,QA AR,YA AL,SA AK,CAAQ,CAAjF,GAA gG,I;K;IAG3G,yC;MACI,OA AmB,UAAA,uCA AgB,UAAhB,EA A2B,uCA AgB,UAA3C,CA AR,4BA AJ,GAA+E, QA AR,YA AL,SA AK,CAAQ,CAA/E,GAA8F,I;K;IAGzG,8B;MAMI,OAAO,wBA AY,EA Aa,GA AH,CA AG,IA Az B,C;K;IAGX,gC;MAMI,OAAO,kBA AY,oBA AH,EA AG,CA Ac,8BA AH,CA AG,EA A1B,C;K;IAGX,gC;MAMI,O AAO,aAAK,SA AL,EA AoB,EA Aa,GA AH,CA AG,IA AjC,C;K;IAGX,gC;MAMI,OAAO,aAAK,SA AL,EA AoB,EA Aa,GA AH,CA AG,IA AjC,C;K;IAGX,gC;MAMI,IA AI,MA AM,CA AV,C;QAAoB,OAAO,iCA AU,M;MACrC,OAA O,yBA AiB,OA AR,EA AQ,GA AH,CA AG,CAAjB,C;K;IAGX,gC;MAMI,IA AI,MA AM,WAAV,C;QAAyB,OAAO, gCA AS,M;MACzC,OAAO,wBA AS,EA AQ,GA AH,CA AG,IA AjB,C;K;IAGX,gC;MAMI,OAAO,kBA AY,oBA AH, EA AG,CA Ac,8BA AH,CA AG,EA A1B,C;K;IAGX,gC;MAMI,IA AI,MA AM,WAAV,C;QAAyB,OAAO,gCA AS,M; MACzC,OAAO,aAAK,SA AL,EA AiB,EA AQ,GA AH,CA AG,IA AzB,C;K;IAGX,gC;MAMI,IA AI,MA AM,WAAV, C;QAAyB,OAAO,gCA AS,M;MACzC,OAAO,aAAK,SA AL,EA AiB,EA AQ,GA AH,CA AG,IA AzB,C;K;IAGX,gC;



MAMI,IAAI,iDAAJ,C;QAA0B,OAAO,iCAAU,M;MAC3C,OAAy,oBAAL,SAAK,CAAL,SAakB,EAAQ,8BAAH,CAAG,EAA1B,C;K;IAGX,gC;MAMI,IAAI,iDAAJ,C;QAA0B,OAAO,iCAAU,M;MAC3C,OAAO,kBAAS,EAAQ,8BAAH,CAAG,EAAjB,C;K;IAGX,iC;MAMI,IAAI,iDAAJ,C;QAA0B,OAAO,iCAAU,M;MAC3C,OAAy,oBAA L,SAAK,CAAL,SAakB,EAAQ,8BAAH,CAAG,EAA1B,C;K;IAGX,iC;MAMI,IAAI,iDAAJ,C;QAA0B,OAAO,iC AAU,M;MAC3C,OAAy,oBAAL,SAAK,CAAL,SAakB,EAAQ,8BAAH,CAAG,EAA1B,C;K;IAGX,iC;MAMI,O AAO,wBAAy,EAAa,GAaH,CAAG,IAAzB,C;K;IAGX,iC;MAMI,OAAO,kBAAY,oBAAH,EAAG,CAAc,8BAAH ,CAAG,EAA1B,C;K;IAGX,iC;MAMI,OAAO,aAAK,SAAL,EAAoB,EAAa,GAaH,CAAG,IAAjC,C;K;IAGX,iC; MAMI,OAAO,aAAK,SAAL,EAAoB,EAAa,GAaH,CAAG,IAAjC,C;K;IAGX,gD;MAQI,OAAW,4BAAO,YAAP, KAAJ,GAAyB,YAAzB,GAA2C,S;K;IAGtD,kD;MAQI,OAAW,YAAO,YAAX,GAAyB,YAAzB,GAA2C,S;K;IAG tD,kD;MAQI,OAAW,YAAO,YAAX,GAAyB,YAAzB,GAA2C,S;K;IAGtD,kD;MAQI,OAAW,YAAO,YAAX,GA AyB,YAAzB,GAA2C,S;K;IAGtD,kD;MAQI,OAAW,0BAAO,YAAP,KAAJ,GAAyB,YAAzB,GAA2C,S;K;IAGtD ,kD;MAQI,OAAW,YAAO,YAAX,GAAyB,YAAzB,GAA2C,S;K;IAGtD,kD;MAQI,OAAW,YAAO,YAAX,GA AyB,YAAzB,GAA2C,S;K;IAGtD,+C;MAQI,OAAW,4BAAO,YAAP,KAAJ,GAAyB,YAAzB,GAA2C,S;K;IAGtD,iD ;MAQI,OAAW,YAAO,YAAX,GAAyB,YAAzB,GAA2C,S;K;IAGtD,iD;MAQI,OAAW,YAAO,YAAX,GAAyB,Y AAzB,GAA2C,S;K;IAGtD,iD;MAQI,OAAW,YAAO,YAAX,GAAyB,YAAzB,GAA2C,S;K;IAGtD,iD;MAQI,OA AW,0BAAO,YAAP,KAAJ,GAAyB,YAAzB,GAA2C,S;K;IAGtD,iD;MAQI,OAAW,YAAO,YAAX,GAAyB,YAA zB,GAA2C,S;K;IAGtD,iD;MAQI,OAAW,YAAO,YAAX,GAAyB,YAAzB,GAA2C,S;K;IAGtD,yD;MAQI,IAAI,i BAAiB,IAAjB,IAAyB,iBAAiB,IAA9C,C;QACI,IAAI,+BAAe,YAAf,KAAJ,C;UAAiC,MAAM,gCAAyB,6DAAiD ,YAAjD,wCAAoF,YAApF,OAAzB,C;QACvC,IAAI,4BAAO,YAAP,KAAJ,C;UAAyB,OAAO,Y;QAChC,IAAI,4B AAO,YAAP,KAAJ,C;UAAyB,OAAO,Y;;QAGhC,IAAI,iBAAiB,IAAjB,IAAyB,4BAAO,YAAP,KAA7B,C;UAAk D,OAAO,Y;QACzD,IAAI,iBAAiB,IAAjB,IAAyB,4BAAO,YAAP,KAA7B,C;UAAkD,OAAO,Y;;MAE7D,OAAO, S;K;IAGX,2D;MAQI,IAAI,eAAe,YAAAnB,C;QAAiC,MAAM,gCAAyB,oDAAiD,YAAjD,8BAAoF,YAApF,MAA zB,C;MACvC,IAAI,YAAO,YAAX,C;QAAyB,OAAO,Y;MACHc,IAAI,YAAO,YAAX,C;QAAyB,OAAO,Y;MAC hC,OAAO,S;K;IAGX,2D;MAQI,IAAI,eAAe,YAAAnB,C;QAAiC,MAAM,gCAAyB,oDAAiD,YAAjD,8BAAoF,YA ApF,MAAzB,C;MACvC,IAAI,YAAO,YAAX,C;QAAyB,OAAO,Y;MACHc,IAAI,YAAO,YAAX,C;QAAyB,OAA O,Y;MACHc,OAAO,S;K;IAGX,2D;MAQI,IAAI,eAAe,YAAAnB,C;QAAiC,MAAM,gCAAyB,oDAAiD,YAAjD,8B AAoF,YAApF,MAAzB,C;MACvC,IAAI,YAAO,YAAX,C;QAAyB,OAAO,Y;MACHc,IAAI,YAAO,YAAX,C;QA AyB,OAAO,Y;MACHc,OAAO,S;K;IAGX,2D;MAQI,IAAI,6BAAe,YAAf,KAAJ,C;QAAiC,MAAM,gCAAyB,oD AAiD,YAAjD,yCAAoF,YAApF,iBAAzB,C;MACvC,IAAI,0BAAO,YAAP,KAAJ,C;QAAyB,OAAO,Y;MACHc,I AAI,0BAAO,YAAP,KAAJ,C;QAAyB,OAAO,Y;MACHc,OAAO,S;K;IAGX,2D;MAQI,IAAI,eAAe,YAAAnB,C;QA AiC,MAAM,gCAAyB,oDAAiD,YAAjD,8BAAoF,YAApF,MAAzB,C;MACvC,IAAI,YAAO,YAAX,C;QAAyB,O AAO,Y;MACHc,IAAI,YAAO,YAAX,C;QAAyB,OAAO,Y;MACHc,OAAO,S;K;IAGX,2D;MAQI,IAAI,eAAe,YA AnB,C;QAAiC,MAAM,gCAAyB,oDAAiD,YAAjD,8BAAoF,YAApF,MAAzB,C;MACvC,IAAI,YAAO,YAAX,C; QAAyB,OAAO,Y;MACHc,IAAI,YAAO,YAAX,C;QAAyB,OAAO,Y;MACHc,OAAO,S;K;IAGX,sC;MAUW,Q; MADP,IAAI,KAAM,UAAV,C;QAAqB,MAAM,gCAAyB,4CAAyC,KAAzC,MAAzB,C;MAGvB,IAAA,KAAM,0 BAAiB,SAAjB,EAAuB,KAAM,MAA7B,CAAN,IAA6C,CAAC,KAAM,0BAAiB,KAAM,MAAvB,EAA8B,SAA9 B,CAApD,C;QAAiG,OAAN,KAAM,M;WAEjG,IAAA,KAAM,0BAAiB,KAAM,aAAvB,EAAqC,SAArC,CAAN,IA AAO,CAAC,KAAM,0BAAiB,SAAjB,EAAuB,KAAM,aAA7B,CAA3D,C;QAA+G,OAAN,KAAM,a;;QACvG,gB ;MALZ,W;K;IASJ,sC;MAYW,Q;MAJP,IAAI,8CAAJ,C;QACI,OAAy,WAAL,SAAK,EAAY,KAAZ,C;OAEhB,IA AI,KAAM,UAAV,C;QAAqB,MAAM,gCAAyB,4CAAyC,KAAzC,MAAzB,C;MAEvB,gCAAO,KAAM,MAAb,M; QAA4B,OAAN,KAAM,M;WAC5B,gCAAO,KAAM,aAAb,M;QAAMC,OAAN,KAAM,a;;QAC3B,gB;MAHZ,W; K;IAOJ,sC;MAYW,Q;MAJP,IAAI,8CAAJ,C;QACI,OAAy,WAAL,SAAK,EAAC,KAAc,C;OAEhB,IAAI,KAAM, UAAV,C;QAAqB,MAAM,gCAAyB,4CAAyC,KAAzC,MAAzB,C;MAEvB,gBAAO,KAAM,MAAb,C;QAA4B,O AAN,KAAM,M;WAC5B,gBAAO,KAAM,aAAb,C;QAAMC,OAAN,KAAM,a;;QAC3B,gB;MAHZ,W;K;IAOJ,sC; MAYW,Q;MAJP,IAAI,8CAAJ,C;QACI,OAAy,WAAL,SAAK,EAAC,KAAf,C;OAEhB,IAAI,KAAM,UAAV,C;Q AAqB,MAAM,gCAAyB,4CAAyC,KAAzC,MAAzB,C;MAEvB,8BAAO,KAAM,MAAb,M;QAA4B,OAAN,KAA M,M;WAC5B,8BAAO,KAAM,aAAb,M;QAAMC,OAAN,KAAM,a;;QAC3B,gB;MAHZ,W;K;IW1rCJ,oD;MAMu F,wC;K;IANvF,8CAOI,Y;MAAuC,8B;K;IAP3C,gF;IkBQA,yC;MAMI,OAAO,sBAAQ,OAAR,KAAoB,C;K;IAW

G,2C;MAAA,qB;QAAE,MAAM,8BAA0B,+CAA4C,AA5C,MAA1B,C;O;K;IAR1C,uC;MAQI,OAAO,8BAAgB,KAAhB,EAAuB,yBAAvB,C;K;IAGX,4D;MACqB,Q;MANjB,IAAI,QAAQ,CAAZ,C;QACI,OAAO,aAAa,KAAb,C;MACX,eAAe,oB;MACf,YAAY,C;MACZ,OAAO,QAAS,UAAhB,C;QACI,cAAc,QAAS,O;QACvB,IAAI,WAAS,YAAT,EAAS,oBAAT,OAAJ,C;UACI,OAAO,O;;MAEf,OAAO,aAAa,KAAb,C;K;IAGX,8C;MACqB,Q;MANjB,IAAI,QAAQ,CAAZ,C;QACI,OAAO,I;MACX,eAAe,oB;MACf,YAAY,C;MACZ,OAAO,QAAS,UAAhB,C;QACI,cAAc,QAAS,O;QACvB,IAAI,WAAS,YAAT,EAAS,oBAAT,OAAJ,C;UACI,OAAO,O;;MAEf,OAAO,I;K;8EAGX,gC;MASW,sB;;QA2FS,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UAAM,IA3FH,SA2FO,CAAU,OAAV,CAAJ,C;YAAwB,qBAAO,O;YAAP,uB;;QAC9C,qBAAO,I;;;MA5FP,yB;K;uFAGJ,gC;MAkOoB,Q;MADhB,WAAe,I;MACC,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,IA1Nc,SA0NV,CAAU,OAAV,CAAJ,C;UACI,OAAO,O;;MA3Nf,OA8NO,I;K;IA3NX,6B;MAOI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAAc,C;QACI,MAAM,2BAAuB,oBAAvB,C;MACV,OAAO,QAAS,O;K;iFAGpB,yB;MAAA,iE;MAAA,uC;QAOoB,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UAAM,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QACrD,MAAM,gCAAuB,sDAAvB,C;O;KARV,C;kGAWA,yB;MAAA,iE;MAAA,uC;QAWW,Q;QAAA,+B;;UAcS,U;UAAA,6B;UAAhB,OAAgB,gBAAhB,C;YAAgB,2B;YACZ,aAfwB,SAeX,CAAU,OAAV,C;YACb,IAAI,cAAJ,C;cACI,8BAAO,M;cAAP,gC;;UAGR,8BAAO,I;;QApBA,kC;QAAA,iB;UAAmC,MAAM,gCAAuB,iEAAvB,C;SAAhD,OAAO,I;O;KAXX,C;8GAcA,gC;MAWoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,aAAa,UAAU,OAAV,C;QACb,IAAI,cAAJ,C;UACI,OAAO,M;;MAGf,OAAO,I;K;IAGX,mC;MAMI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAAc,C;QACI,OAAO,I;MACX,OAAO,QAAS,O;K;6FAGpB,gC;MAMoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QAAM,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,OAAO,O;;MACrD,OAAO,I;K;IAGX,wC;MAOiB,Q;MADb,YAAY,C;MACC,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QACT,mBAAmB,KAAmB,C;QACA,IAAI,gBAAW,IAAX,CAAJ,C;UACI,OAAO,K;QACX,qB;;MAEJ,OAAO,E;K;+FAGX,yB;MAAA,wE;MAAA,uC;QAOiB,Q;QADb,YAAY,C;QACC,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,mBAAmB,KAAmB,C;UACA,IAAI,UAAU,IAAV,CAAJ,C;YACI,OAAO,K;UACX,qB;;QAEJ,OAAO,E;O;KAbX,C;6FAGBA,yB;MAAA,wE;MAAA,uC;QAQiB,Q;QAFb,gBAAgB,E;QACHB,YAAY,C;QACC,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,mBAAmB,KAAmB,C;UACA,IAAI,UAAU,IAAV,CAAJ,C;YACI,YAAY,K;UACHB,qB;;QAEJ,OAAO,S;O;KAdX,C;IAiBA,4B;MAUI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAAc,C;QACI,MAAM,2BAAuB,oBAAvB,C;MACV,WAAW,QAAS,O;MACpB,OAAO,QAAS,UAAhB,C;QACI,OAAO,QAAS,O;MACpB,OAAO,I;K;+EAGX,yB;MAAA,iE;MAAA,gB;MAAA,8B;MAAA,uC;QAYoB,UAQT,M;QAVP,WAAe,I;QACf,YAAY,K;QACI,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,IAAI,UAAU,OAAV,CAAJ,C;YACI,OAAO,O;YACP,QAAQ,I;;QAGhB,IAAI,CAAC,KAAL,C;UAAy,MAAM,gCAAuB,sDAAvB,C;QAEiB,OAAO,2E;O;KApBX,C;IAuBA,4C;MAQiB,Q;MAFb,gBAAgB,E;MACHB,YAAY,C;MACC,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QACT,mBAAmB,KAAmB,C;QACA,IAAI,gBAAW,IAAX,CAAJ,C;UACI,YAAY,K;QACHB,qB;;MAEJ,OAAO,S;K;IAGX,kC;MAQI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAAc,C;QACI,OAAO,I;MACX,WAAW,QAAS,O;MACpB,OAAO,QAAS,UAAhB,C;QACI,OAAO,QAAS,O;MACpB,OAAO,I;K;2FAGX,gC;MASoB,Q;MADhB,WAAe,I;MACC,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,IAAI,UAAU,OAAV,CAAJ,C;UACI,OAAO,O;;MAGf,OAAO,I;K;IAGX,8B;MAMI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAAc,C;QACI,MAAM,2BAAuB,oBAAvB,C;MACV,aAAa,QAAS,O;MACTB,IAAI,QAAS,UAAb,C;QACI,MAAM,gCAAyB,qCAAzB,C;MACV,OAAO,M;K;mFAGX,yB;MAAA,kF;MAAA,iE;MAAA,gB;MAAA,8B;MAAA,uC;QAQoB,UAST,M;QAXP,aAAiB,I;QACjB,YAAY,K;QACI,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,IAAI,UAAU,OAAV,CAAJ,C;YACI,IAAI,KAJ,C;cAAW,MAAM,8BAAyB,mDAAzB,C;YACjB,SAAS,O;YACT,QAAQ,I;;QAGhB,IAAI,CAAC,KAAL,C;UAAy,MAAM,gCAAuB,sDAAvB,C;QAEiB,OAAO,6E;O;KAjBX,C;IAoBA,oC;MAMI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAAc,C;QACI,OAAO,I;MACX,aAAa,QAAS,O;MACTB,IAAI,QAAS,UAAb,C;QACI,OAAO,I;MACX,OAAO,M;K;+FAGX,gC;MAQoB,Q;MAFhB,aAAiB,I;MACjB,YAAY,K;MACI,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,IAAI,UAAU,OAAV,CAAJ,C;UACI,IAAI,KAJ,C;YAAW,OAAO,I;UACIB,SAAS,O;UACT,QAAQ,I;;MAGhB,IAAI,CAAC,KAAL,C;QAAy,OAAO,I;MACnB,OAAO,M;K;IAGX,8B;MAWW,Q;MhBhXP,IAAI,EgB+WI,KAAK,ChB/WT,CAAJ,C;QACI,cgB8Wc,sD;QhB7Wd,MAAM,gCAAyB,OAAQ,WAAjC,C;OgB+WN,UAAK,CAAL,C;QAAU,gB;WACV,+C;QAAiC,OAAAL,SAAK,cAAK,CAAL,C;;QACzB,wBAaA,SAAb,EAAmB,CAAnB,C;MAHZ,W;K;IAOJ,2C;MAQI,OAAO,sBAaKB,SAaIB,EAAwB,SAAxB,C;K;IAGX,wC;MAQI,OAAO,sBAaKB,SAaIB,EAAwB,IAAxB,EAA8B,SAa9

B,C;K;IAcqE,iD;MAAA,qB;QAAE,yBAAU,EAAG,MAAb,EAAoB,EAAG,MAAvB,C;O;K;IAAkC,oC;MAAE,O  
AAA,EAAG,M;K;IAXzH,+C;MAWI,OAAO,yBAAqB,sBAaKB,qBAaIB,SAAjB,CAAlB,EAA0C,IAA1C,EAAGD  
,+BAAhD,CAArB,EAAYG,sBAAZG,C;K;oGAGX,yB;MA80BA,wE;MA90BA,oD;QAU1BiB,gB;QADb,YAAY,C;  
QACC,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UA50BT,IAAI,UA40BkB,oBAAmB,cAAnB,EAAMb,sBAAnB,UA50  
BIB,EA40B+C,IA50B/C,CAAJ,C;YAA2C,sBA40BQ,IA50BR,C;;QAE/C,OAAO,W;O;KAbX,C;sGAgBA,yB;MA  
AA,8C;MAAA,0C;MAAA,8B;MASkB,qD;QAAA,qB;UAAE,c;S;O;MATpB,sC;QASW,Q;QAAP,OAAO,uCAA  
iCAAP,gC;O;KATX,C;OGAYA,4C;MAQoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QAAM,IAAI,  
YAAJ,C;UAAkB,WAAy,WAAI,OAAJ,C;;MACpD,OAAO,W;K;IAGX,2C;MAQI,OAAO,sBAaKB,SAAIB,EAA  
wB,KAAxB,EAA+B,SAA/B,C;K;IAYU,kC;MAAE,iB;K;IATvB,oC;MASW,Q;MAAP,OAAO,4CAAU,oBAAV,k  
C;K;IAGX,mD;MAQoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QAAM,IAAI,eAAJ,C;UAAqB,W  
AAy,WAAI,OAAJ,C;;MACvD,OAAO,W;K;4FAGX,6C;MAQoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAA  
gB,yB;QAAM,IAAI,CAAC,UAAU,OAAV,CAAL,C;UAAyB,WAAy,WAAI,OAAJ,C;;MAC3D,OAAO,W;K;sFA  
GX,6C;MAQoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QAAM,IAAI,UAAU,OAAV,CAAJ,C;UA  
AwB,WAAy,WAAI,OAAJ,C;;MAC1D,OAAO,W;K;IAGX,8B;MAWW,Q;MhBzgBP,IAAI,EgBwgBI,KAAK,Ch  
BxgBT,CAAJ,C;QACI,cgBugBc,sD;QhBtgBd,MAAM,gCAAYB,OAAQ,WAAjC,C;OgBwgBN,UAAK,CAAL,C;Q  
AAU,sB;WACV,+C;QAAiC,OAAI,SAAK,cAAK,CAAL,C;;QACzB,wBAaA,SAAb,EAAMb,CAAnB,C;MAHZ,  
W;K;IAOJ,2C;MAQI,OAAO,sBAaKB,SAAIB,EAAwB,SAAxB,C;K;IAWA,2C;MAAA,8B;K;8CACH,Y;MACI,i  
BAA6B,iBAAZ,gBAAy,C;MACIB,QAAX,UAAW,C;MACX,OAAO,UAAW,W;K;;IAZ9B,6B;MAQI,0C;K;sFAS  
J,yB;MAAA,sD;Mdjfa,sC;MAAA,oC;MAAA,uBAOe,yB;QArEf,8D;eAqEe,4B;UAAA,uB;YAAU,eAAsB,gB;YA  
AtB,OA5Dd,cAAc,SA4DgB,CA5DhB,CAAd,EAA2B,SA4DM,CA5DN,CAA3B,C;W;S;OA4DI,C;Mc0ef,sC;QAU  
I,OAAO,sBdpfP,eAAW,iBcofiB,QdpfjB,CAAX,CcofO,C;O;KAVX,C;OGAaA,yB;MAAA,sD;Md3eA,sC;MAAA,o  
C;MAAA,iCAOe,yB;QAxFf,8D;eAwFe,4B;UAAA,uB;YAAU,eAAsB,gB;YAAAtB,OA/Ed,cAAc,SA+EgB,CA/EhB  
,CAAd,EAA2B,SA+EM,CA/EN,CAA3B,C;W;S;OA+EI,C;Mcoef,sC;QAQI,OAAO,sBd5eP,eAAW,2Bc4e2B,Qd5e  
3B,CAAX,Cc4eO,C;O;KARX,C;IAWA,uC;MAQI,OAAO,wBAAW,cAAAX,C;K;IAWA,uE;MAAA,sC;MAAA,4C;  
K;kDACH,Y;MACI,iBAAiC,iBAAhB,oBAAGB,C;MACTB,WAAx,UAAW,EAAS,uBAAT,C;MACX,OAAO,UA  
AW,W;K;;IAZ9B,6C;MAQI,0D;K;wFASJ,yB;MAAA,wE;MAAA,uC;QAaW,kBAAY,oB;QAiFH,Q;QAAA,2B;Q  
AAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WAlFsC,SakFvB,CAAU,OAAV,C;UvBnEnB,wBAAL,IAAK,MAA  
T,EAAgB,IAAK,OAArB,C;;QuBfA,OAoFO,W;O;KAjGX,C;6FAGBA,yB;MAAA,wE;MAAA,yC;QAaW,kBAAc,  
oB;QA8BL,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WAAy,aA/B4B,WA+BxB,CAAY,OAA  
Z,CAAJ,EAA0B,OAA1B,C;;QA/BhB,OAiCO,W;O;KA9CX,C;6FAGBA,yB;MAAA,wE;MAAA,yD;QAYW,kBA  
Ac,oB;QAiCL,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WAAy,aAIC4B,WakCxB,CAAY,OA  
AZ,CAAJ,EAlCyC,cAkCf,CAAE,OAAf,CAA1B,C;;QAiChB,OAoCO,W;O;KAhDX,C;GAeA,+C;MAYoB,Q;MA  
AA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,WAAy,aAAI,YAAY,OAAZ,CAAJ,EAA0B,OAA1B,C;;M  
AEhB,OAAO,W;K;IGAGX,+D;MAYoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,WAAy,a  
AI,YAAY,OAAZ,CAAJ,EAA0B,eAAe,OAAf,CAA1B,C;;MAEhB,OAAO,W;K;4FAGX,6C;MAWOB,Q;MAAA,2  
B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,WAAe,UAAU,OAAV,C;QvBnEnB,wBAAL,IAAK,MAAT,EAA  
gB,IAAK,OAArB,C;;MuBqEA,OAAO,W;K;gGAGX,yB;MAAA,wE;MAAA,2C;QAcI,aAAa,oB;QAgBG,Q;QAA  
A,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UAFo,MAGBP,aAAI,OAAJ,EAhBe,aAgBF,CAAc,OAAAd,CAAb,C;;  
QAhBhB,OAAuB,M;O;Kaf3B,C;oGAKBA,iD;MAYoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;Q  
ACZ,WAAy,aAAI,OAAJ,EAAa,cAAc,OAAAd,CAAb,C;;MAEhB,OAAO,W;K;IAGX,gD;MAMiB,Q;MAAA,2B;M  
AAb,OAAa,cAAb,C;QAAa,sB;QACT,WAAy,WAAI,IAAJ,C;;MAEhB,OAAO,W;K;IAGX,gC;MAMI,OAAO,0B  
AAa,cAAb,C;K;IAGX,8B;MAMI,OAA4B,qBAAhB,iBAAL,SAAK,CAAgB,C;K;IAGhC,qC;MAMI,OAAO,0BAA  
a,gBAAb,C;K;IAGX,4B;MAQI,OAAwC,oBAAjC,0BAAa,sBAAb,CAAiC,C;K;IAG5C,0C;MAYI,OAAO,uBAAM  
B,SAAAnB,EAAYB,SAAzB,6BAAoC,qB;;OAApC,E;K;IAGX,0C;MAQI,OAAO,uBAAMB,SAAAnB,EAAYB,SAAz  
B,6BAAoC,qB;;OAApC,E;K;IAGX,iD;MAaI,OAAO,kBAAE,SAAf,EAAqB,SAArB,6BAAgC,qB;;OAAhC,E;K;I  
AGX,iD;MAaI,OAAO,kBAAE,SAAf,EAAqB,SAArB,6BAAgC,qB;;OAAhC,E;K;sGAGX,yB;MAAA,wE;MAAA,  
gD;MAAA,oD;QAaoB,UAC4B,M;QAF5C,YAAY,C;QACI,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,W  
AAW,UAAU,oBAAMb,cAAnB,EAAMb,sBAAnB,UAAV,EAAuC,OAAvC,C;UACC,OAAZ,WAAy,EAAO,IAA

P,C;;QAEhB,OAAO,W;O;KAjBX,C;uGAoBA,yB;MAAA,wE;MAAA,gD;MAAA,oD;QAaoB,UAC4B,M;QAF5C, YAAAY,C;QACI,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,WAAW,UAAU,oBAAmB,cAAAnB,EAAMb,sB AAnB,UAAV,EAaUc,OAAvC,C;UACC,OAAZ,WAAAY,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KAjBX,C;yFAoB A,yB;MAAA,gD;MAAA,oD;QAuOB,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,WAAW,UAA U,OAAV,C;UACC,OAAZ,WAAAY,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KAdX,C;yFAiBA,yB;MAAA,gD;MAA A,oD;QAMoB,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,WAAW,UAAU,OAAV,C;UACC,OA AZ,WAAAY,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KAVX,C;qFAaA,yB;MAAA,wE;MA6BA,+D;MA7BA,yC;QA WW,kBAAU,oB;QA6BD,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,UA9BiD,WA8BvC,CAAY ,OAAZ,C;UvBjoBP,U;UADP,YuBmoBe,WvBnoBH,WuBmoBwB,GvBnoBxB,C;UACL,IAAI,aAAJ,C;YACH,auB ioBuC,gB;YAA5B,WvBhoBX,auBgoBgC,GvBhoBhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UuB6nBA,iB;UACA,IA AK,WAAI,OAAJ,C;;QAhCT,OAKCO,W;O;KA7CX,C;qFAcA,yB;MAAA,wE;MAkCA,+D;MAiCA,yD;QAYW, kBAAU,oB;QAKCD,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,UAnCiD,WAmCvC,CAAY,OA AZ,C;UvBrpBP,U;UADP,YuBupBe,WvBvpBH,WuBupBwB,GvBvpBxB,C;UACL,IAAI,aAAJ,C;YACH,auBqpBu C,gB;YAA5B,WvBppBX,auBopBgC,GvBppBhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UuBipBA,iB;UACA,IAAK ,WArCyD,cAqCrD,CAAE,OAAf,CAAJ,C;;QArCT,OAuCO,W;O;KAnDX,C;yFAeA,yB;MAAA,+D;MAAA,sD;Q AWOB,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,UAAU,YAAAY,OAAZ,C;UvBjoBP,U;UADP, YuBmoBe,WvBnoBH,WuBmoBwB,GvBnoBxB,C;UACL,IAAI,aAAJ,C;YACH,auBioBuC,gB;YAA5B,WvBhoBX ,auBgoBgC,GvBhoBhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;UuB6nBA,iB;UACA,IAAK,WAAI,OAAJ,C;;QAEt, OAAO,W;O;KAhBX,C;yFAmBA,yB;MAAA,+D;MAAA,sE;QAYoB,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;U AAAGB,yB;UACZ,UAAU,YAAAY,OAAZ,C;UvBrpBP,U;UADP,YuBupBe,WvBvpBH,WuBupBwB,GvBvpBxB,C;U ACL,IAAI,aAAJ,C;YACH,auBqpBuC,gB;YAA5B,WvBppBX,auBopBgC,GvBppBhC,EAAS,MAAT,C;YACA,e;; YAEA,c;;UuBipBA,iB;UACA,IAAK,WAAI,eAAe,OAAf,CAAJ,C;;QAEt,OAAO,W;O;KAjBX,C;0FAoBA,yB;M AAA,kC;MAAA,4C;MAAA,wE;QAUW,sC;QAAA,8C;O;MAVX,oDAWQ,Y;QAA6C,OAAA,oBAAGB,W;O;MA XrE,iDAYQ,mB;QAAoC,gCAAY,OAAZ,C;O;MAZ5C,gF;MAAA,yC;QAUI,2D;O;KAVJ,C;IAGBA,sC;MASI,OA AO,yBAAqB,SAArB,EAA2B,SAA3B,C;K;IAGX,4C;MASI,OAAO,gCAA4B,SAA5B,EAakC,SAAIC,C;K;IAGX, mD;MASI,OAAoD,gBAA7C,gCAA4B,SAA5B,EAakC,SAAIC,CAA6C,C;K;4GAGxD,yB;MAuNA,wE;MAvNA, oD;QAGoiB,gB;QADb,YAAAY,C;QACC,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UAvNsB,U;UAAA,wBAuNT,oBAA mb,cAAAnB,EAAMb,sBAAnB,UAvNS,EAuNoB,IAvNpB,W;YAA6C,6B;;QACHF,OAAO,W;O;KAVX,C;8FAaA, yB;MAAA,wE;MAAA,oD;QAUiB,UACoC,M;QAFjD,YAAAY,C;QACC,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UAC T,WAAAY,WAAI,UAAU,oBAAMb,cAAAnB,EAAMb,sBAAnB,UAAV,EAaUc,IAAvC,CAAJ,C;;QACHB,OAAO, W;O;KAZX,C;IAeA,4C;MASI,OAA6C,gBAAtC,yBAAqB,SAArB,EAA2B,SAA3B,CAAsC,C;K;8FAGjD,yB;MA AA,oD;QA4KoB,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UArKK,U;UAAA,wBAqKQ,OArKR,W;Y AAsC,6B;;QAC3D,OAAO,W;O;KARX,C;iFAWA,6C;MAOiB,Q;MAAA,2B;MAAb,OAAa,cAAb,C;QAAa,sB;Q ACT,WAAAY,WAAI,UAAU,IAAV,CAAJ,C;;MACHB,OAAO,W;K;IAGX,gC;MAOI,OAAO,qBAAiB,SAAjB,C;K; IAcgB,6B;MAAE,S;K;IAX7B,+B;MAWI,OAAY,aAAL,SAAK,EAAW,eAAW,C;K;IAGhB,2C;MAYI,OAAO,qBA AiB,SAAjB,EAaUc,QAavB,C;K;IAGX,mC;MASiB,Q;MADb,UAAU,sB;MACG,2B;MAAb,OAAa,cAAb,C;QA Aa,sB;QAAM,GAAI,WAAI,IAAJ,C;;MACvB,OAAO,G;K;6EAGX,gC;MAQoB,Q;MAAA,2B;MAAhB,OAAGB,c AAhB,C;QAAGB,yB;QAAM,IAAI,CAAC,UAAU,OAAV,CAAL,C;UAAyB,OAAO,K;;MACTD,OAAO,I;K;IAGX, 2B;MAQI,OAAO,oBAAW,U;K;6EAGtB,gC;MAQoB,Q;MAAA,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QAA M,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,OAAO,I;;MACrD,OAAO,K;K;IAGX,6B;MAOoB,Q;MADhB,YAAAY,C ;MACI,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QAAM,oBAAMb,qBAAnB,EAAMb,KAAAnB,E;;MACTB,OA AO,K;K;iFAGX,yB;MAAA,wE;MAAA,uC;QAoOB,Q;QADhB,YAAAY,C;QACI,2B;QAAhB,OAAGB,cAAhB,C;U AAGB,yB;UAAM,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,oBAAMb,qBAAnB,EAAMb,KAAAnB,E;;QAC9C,OAA O,K;O;KARX,C;8EAWA,yC;MAYoB,Q;MADhB,kBAakB,O;MACF,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB ;QAAM,cAAc,UAAU,WAAV,EAaUc,QAavB,C;;MACpC,OAAO,W;K;4FAGX,yB;MAAA,wE;MAAA,gD;QAc oB,UAAiD,M;QAFjE,YAAAY,C;QACZ,kBAakB,O;QACF,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UAAM,cA Ac,UAAU,oBAAMb,cAAAnB,EAAMb,sBAAnB,UAAV,EAaUc,WAAvC,EAoD,OAAPD,C;;QACpC,OAAO,W; O;KafX,C;qFAkBA,6B;MAMoB,Q;MAAA,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QAAM,OAAO,OAAP,C;

;K;kGAG1B,yB;MAAA,wE;MAAA,oC;QASiB,UAAgC,M;QAD7C,YAAY,C;QACC,2B;QAAb,OAAa,cAAb,C;U  
AAa,sB;UAAM,OAAO,oBAAmB,cAAAnB,EAAMb,sBAAnB,UAAP,EAAoC,IAApC,C;;O;KATvB,C;IAYA,2B;M  
AII,OAAO,uB;K;IAGX,2B;MAII,OAAO,uB;K;IAGX,2B;MAGI,OAAO,uB;K;iFAGX,+B;MAGW,sB;;QAYP,eA  
Ae,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,qBAAO,I;UAAP,uB;SACzB,cAAc,QAAS,O;QACvB,IAAI,C  
AAC,QAAS,UAAAd,C;UAAyB,qBAAO,O;UAAP,uB;SACzB,eAhBmB,QAaBJ,CAAS,OAAT,C;;UAEX,QAAQ,Q  
AAS,O;UACjB,QAnBe,QAmBP,CAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,  
WAAW,C;;QAED,QAAT,QAAS,W;QACIB,qBAAO,O;;;MAzBP,yB;K;6FAGJ,+B;MASI,eAAe,oB;MACf,IAAI,C  
AAC,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHc,cAAc,QAAS,O;MACvB,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,  
OAAO,O;MACHc,eAAe,SAAS,OAAT,C;;QAEX,QAAQ,QAAS,O;QACjB,QAAQ,SAAS,CAAT,C;QACR,IAAI,2  
BAAW,CAAX,KAAJ,C;UACI,UAAU,C;UACV,WAAW,C;;MAED,QAAT,QAAS,W;MACIB,OAAO,O;K;iFAG  
X,yB;MAAA,sE;MZpwCA,iB;MYowCA,sC;QAeI,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM  
,6B;QAC/B,eAAe,SAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QAAQ,SAAS,QAAS,OAAIB,C  
;UACR,WZhxCG,MAAO,KYgxCO,QZhxCP,EYgxCiB,CZhxCjB,C;;QYkxCd,OAAO,Q;O;KATBX,C;iFAyBA,yB;  
MAAA,sE;MZxyCA,iB;MYwyCA,sC;QAeI,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B;Q  
AC/B,eAAe,SAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QAAQ,SAAS,QAAS,OAAIB,C;UAC  
R,WZpzCG,MAAO,KYozCO,QZpzCP,EYozCiB,CZpzCjB,C;;QYszCd,OAAO,Q;O;KATBX,C;iFAyBA,yB;MAA  
A,sE;MAAA,sC;QAaI,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B;QAC/B,eAAe,SAAS,Q  
AAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QAAQ,SAAS,QAAS,OAAIB,C;UACR,IAAI,2BAAW,CA  
AX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KATBX,C;6FAyBA,yB;MZ/0CA,iB;MY+0CA,sC;QAaI,eAA  
e,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,OAAO,I;QACHc,eAAe,SAAS,QAAS,OAAIB,C;QACf,OAAO,  
QAAS,UAAhB,C;UACI,QAAQ,SAAS,QAAS,OAAIB,C;UACR,WZz1CG,MAAO,KYy1CO,QZz1CP,EYy1CiB,C  
Zz1CjB,C;;QY21Cd,OAAO,Q;O;KApBX,C;6FAuBA,yB;MZj3CA,iB;MYi3CA,sC;QAaI,eAAe,oB;QACf,IAAI,C  
AAC,QAAS,UAAAd,C;UAAyB,OAAO,I;QACHc,eAAe,SAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;U  
ACI,QAAQ,SAAS,QAAS,OAAIB,C;UACR,WZ33CG,MAAO,KY23CO,QZ33CP,EY23CiB,CZ33CjB,C;;QY63Cd  
,OAAO,Q;O;KApBX,C;6FAuBA,+B;MAWI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,OAAO,I;MA  
ChC,eAAe,SAAS,QAAS,OAAIB,C;MACf,OAAO,QAAS,UAAhB,C;QACI,QAAQ,SAAS,QAAS,OAAIB,C;QAC  
R,IAAI,2BAAW,CAAX,KAAJ,C;UACI,WAAW,C;;MAGnB,OAAO,Q;K;yFAGX,yB;MAAA,sE;MAAA,kD;QAa  
I,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B;QAC/B,eAAe,SAAS,QAAS,OAAIB,C;QACf,  
OAAO,QAAS,UAAhB,C;UACI,QAAQ,SAAS,QAAS,OAAIB,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CA  
AIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KATBX,C;qGAyBA,2C;MAWI,eAAe,oB;  
MACf,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHc,eAAe,SAAS,QAAS,OAAIB,C;MACf,OAAO,QA  
AS,UAAhB,C;QACI,QAAQ,SAAS,QAAS,OAAIB,C;QACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,  
GAakC,CAAtC,C;UACI,WAAW,C;;MAGnB,OAAO,Q;K;IAGX,iC;MASI,eAAe,oB;MACf,IAAI,CAAC,QAAS,  
UAAAd,C;QAAyB,OAAO,I;MACHc,UAAU,QAAS,O;MACnB,OAAO,QAAS,UAAhB,C;QACI,QAAQ,QAAS,O;  
QACjB,MZ18CG,MAAO,KY08CE,GZ18CF,EY08CO,CZ18CP,C;;MY48Cd,OAAO,G;K;IAGX,iC;MASI,eAAe,o  
B;MACf,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHc,UAAU,QAAS,O;MACnB,OAAO,QAAS,UAAh  
B,C;QACI,QAAQ,QAAS,O;QACjB,MZx+CG,MAAO,KYw+CE,GZx+CF,EYw+CO,CZx+CP,C;;MY0+Cd,OAA  
O,G;K;IAGX,iC;MAOI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHc,UAAU,QAAS,  
O;MACnB,OAAO,QAAS,UAAhB,C;QACI,QAAQ,QAAS,O;QACjB,IAAI,sBAAM,CAAN,KAAJ,C;UAAa,MAA  
M,C;;MAEvB,OAAO,G;K;IAGX,2C;MAGI,OAAO,4BAAc,UAAAd,C;K;IAGX,iD;MAOI,eAAe,oB;MACf,IAAI,C  
AAC,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHc,UAAU,QAAS,O;MACnB,OAAO,QAAS,UAAhB,C;QACI,QAA  
Q,QAAS,O;QACjB,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;MA  
E9C,OAAO,G;K;IAGX,2B;MAII,OAAO,uB;K;IAGX,2B;MAII,OAAO,uB;K;IAGX,2B;MAGI,OAAO,uB;K;iFAG  
X,+B;MAGW,sB;;QAYP,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,qBAAO,I;UAAP,uB;SACzB,cA  
Ac,QAAS,O;QACvB,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,qBAAO,O;UAAP,uB;SACzB,eAhBmB,QAaBJ,CAA  
S,OAAT,C;;UAEX,QAAQ,QAAS,O;UACjB,QAnBe,QAmBP,CAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAA  
J,C;YACI,UAAU,C;YACV,WAAW,C;;QAED,QAAT,QAAS,W;QACIB,qBAAO,O;;;MAzBP,yB;K;6FAGJ,+B;M  
ASI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHc,cAAc,QAAS,O;MACvB,IAAI,CAA

C,QAAS,UAAAd,C;QAAyB,OAAO,O;MACHC,eAAe,SAAS,OAAT,C;;QAEX,QAAQ,QAAS,O;QACjB,QAAQ,SAAS,CAAT,C;QACR,IAAI,2BAAW,CAAX,KAAJ,C;UACI,UAAU,C;UACV,WAAW,C;;MAED,QAAT,QAAS,W;MACIB,OAAO,O;K;iFAGX,yB;MAAA,sE;MZj3CA,iB;MYi3CA,sC;QAEI,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B;QAC/B,eAAe,SAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QAAQ,SAAS,QAAS,OAAIB,C;UACR,WZ73CG,MAAO,KY63CO,QZ73CP,EY63CiB,CZ73CjB,C;;QY+3Cd,OAAO,Q;O;KAtBX,C;iFAyBA,yB;MAAA,sE;MZr5CA,iB;MYq5CA,sC;QAEI,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B;QAC/B,eAAe,SAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QAAQ,SAAS,QAAS,OAAIB,C;UACR,WZj6CG,MAAO,KYi6CO,QZj6CP,EYi6CiB,CZj6CjB,C;;QYm6Cd,OAAO,Q;O;KAtBX,C;iFAyBA,yB;MAAA,sE;MAAA,sC;QAaI,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B;QAC/B,eAAe,SAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QAAQ,SAAS,QAAS,OAAIB,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAtBX,C;6FAyBA,yB;MZ57CA,iB;MY47CA,sC;QAaI,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,OAAO,I;QACChC,eAAe,SAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QAAQ,SAAS,QAAS,OAAIB,C;UACR,WZi8CG,MAAO,KYs8CO,QZi8CP,EYs8CiB,CZi8CjB,C;;QYw8Cd,OAAO,Q;O;KApBX,C;6FAuBA,yB;MZ99CA,iB;MY89CA,sC;QAaI,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,OAAO,I;QACChC,eAAe,SAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QAAQ,SAAS,QAAS,OAAIB,C;UACR,WZx+CG,MAAO,KYw+CO,QZx+CP,EYw+CiB,CZx+CjB,C;;QY0+Cd,OAAO,Q;O;KApBX,C;6FAuBA,+B;MAWI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHC,eAAe,SAAS,QAAS,OAAIB,C;MACf,OAAO,QAAS,UAAhB,C;QACI,QAAQ,SAAS,QAAS,OAAIB,C;QACR,IAAI,2BAAW,CAAX,KAAJ,C;UACI,WAAW,C;;MAGnB,OAAO,Q;K;yFAGX,yB;MAAA,sE;MAAA,kD;QAaI,eAAe,oB;QACf,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,6B;QAC/B,eAAe,SAAS,QAAS,OAAIB,C;QACf,OAAO,QAAS,UAAhB,C;UACI,QAAQ,SAAS,QAAS,OAAIB,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAtBX,C;qGAyBA,2C;MAWI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHC,eAAe,SAAS,QAAS,OAAIB,C;MACf,OAAO,QAAS,UAAhB,C;QACI,QAAQ,SAAS,QAAS,OAAIB,C;QACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;UACI,WAAW,C;;MAGnB,OAAO,Q;K;IAGX,iC;MASI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHC,UAAU,QAAS,O;MACnB,OAAO,QAAS,UAAhB,C;QACI,QAAQ,QAAS,O;QACjB,MZvjDG,MAAO,KYujDE,GZvjDF,EYujDO,CZvjDP,C;;MYyjDd,OAAO,G;K;IAGX,iC;MASI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHC,UAAU,QAAS,O;MACnB,OAAO,QAAS,UAAhB,C;QACI,QAAQ,QAAS,O;QACjB,MZrIDG,MAAO,KYqlDE,GZrIDF,EYqlDO,CZrIDP,C;;MYulDd,OAAO,G;K;IAGX,iC;MAOI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHC,UAAU,QAAS,O;MACnB,OAAO,QAAS,UAAhB,C;QACI,QAAQ,QAAS,O;QACjB,IAAI,sBAAM,CAAN,KAAJ,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAGX,2C;MAGI,OAAO,4BAAc,UAAAd,C;K;IAGX,iD;MAOI,eAAe,oB;MACf,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,OAAO,I;MACHC,UAAU,QAAS,O;MACnB,OAAO,QAAS,UAAhB,C;QACI,QAAQ,QAAS,O;QACjB,IAAI,UAAW,SAAQ,GAAR,EAaA,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,4B;MAQI,OAAO,CAAC,oBAAW,U;K;+EAGvB,gC;MAQoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QAAM,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,OAAO,K;;MACrD,OAAO,I;K;IAUI,uC;MAAA,qB;QACP,eAAO,EAAP,C;QAAA,OACA,E;O;K;IATR,sC;MAOI,OAAO,kBAAL,qBAAL,C;K;IAeW,8C;MAAA,iC;QACd,eAAO,KAAP,EAAC,OAAd,C;QAAA,OACA,O;O;K;IAXR,6C;MASI,OAAO,wBAAW,4BAAX,C;K;kFAMX,yB;MAAA,4F;MAAA,uC;QAEI,eAAe,SAAK,W;QACpB,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,mCAA8B,kCAA9B,C;QAC/B,kBAaQb,QAAS,O;QAC9B,OAAO,QAAS,UAAhB,C;UACI,cAAc,UAAU,WAAV,EAAuB,QAAS,OAAhC,C;;QAEIB,OAAO,W;O;KArBX,C;gGAwBA,yB;MAAA,4F;MAAA,wE;MAAA,uC;QAoBmD,Q;QAL/C,eAAe,SAAK,W;QACpB,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,MAAM,mCAA8B,kCAA9B,C;QAC/B,YAAY,C;QACZ,kBAaQb,QAAS,O;QAC9B,OAAO,QAAS,UAAhB,C;UACI,cAAc,UAAU,oBAAmB,YAAnB,EAAMb,oBAAnB,QAAM,EAAMb,WAAvC,EAAoD,QAAS,OAA7D,C;;QAEIB,OAAO,W;O;KAtBX,C;4GAyBA,yB;MAAA,wE;MAAA,uC;QAoBmD,Q;QAL/C,eAAe,SAAK,W;QACpB,IAAI,CAAC,QAAS,UAAAd,C;UAAyB,OAAO,I;QACChC,YAAY,C;QACZ,kBAaQb,QAAS,O;QAC9B,OAAO,QAAS,UAAhB,C;UACI,cAAc,UAAU,oBAAmB,YAAnB,EAAMb,oBAAnB,QAAM,EAAMb,WAAvC,EAAoD,QAAS,OAA7D,C;;QAEIB,OAAO,W;O;KAtBX,C;8FAyBA,gC;MAGBI,eAAe,SAAK,W;MACpB,IAAI,CAAC,QAAS,UAAAd,C;QAAyB,OAAO,I

;MACHC,kBAAqB,QAAS,O;MAC9B,OAAO,QAAS,UAAhB,C;QACI,cAAc,UAAU,WAAV,EAAuB,QAAS,OAA  
hC,C;;MAEIB,OAAO,W;K;IAoBS,2I;MAAA,wC;MAAA,6B;MAAA,yB;MAAA,8C;MAAA,gD;MAAA,kD;MAA  
A,wB;MAAA,+B;MAAA,kC;K;;;sDAAA,Y;;;;cACZ,gB;8BAAA,iCAAM,0BAAN,O;kBAAA,2C;uBAAA,yB;cA  
AA,Q;;;uCAcKB,0B;cACF,wD;cAAhB,gB;;;cAAA,KAAgB,yBAhB,C;gBAAA,gB;;;cAAgB,oC;cACZ,yBAAc,  
6BAAU,sBAAV,EAAuB,OAAvB,C;cACd,gB;8BAAA,iCAAM,sBAAN,O;kBAAA,2C;uBAAA,yB;cAAA,Q;;cAF  
J,gB;;;cAIJ,W;;;;K;IAPgB,wF;MAAA,yD;uBAAA,+H;YAAA,S;iBAAA,Q;;iBAAA,uB;O;K;IAjBpB,sD;M  
AiBI,OAAO,SAAS,iDAAT,C;K;IA4BS,yJ;MAAA,wC;MAAA,6B;MAAA,yB;MAAA,8C;MAAA,8D;MAAA,kD;  
MAAA,wB;MAAA,yB;MAAA,+B;MAAA,kC;K;;;6DAAA,Y;;;;kBAKmC,I;cAJ/C,gB;8BAAA,iCAAM,0BAAN,  
O;kBAAA,2C;uBAAA,yB;cAAA,Q;;;iCACY,C;uCACM,0B;cACF,+D;cAAhB,gB;;;cAAA,KAAgB,yBAhB,C;g  
BAAA,gB;;;cAAgB,oC;cACZ,yBAAc,6BAAU,oBAAmB,uBAAnB,EAAMb,+BAAnB,QAaV,EAAuC,sBAAvC,E  
AAoD,OAApD,C;cACd,gB;8BAAA,iCAAM,sBAAN,O;kBAAA,2C;uBAAA,yB;cAAA,Q;;cAFJ,gB;;;cAIJ,W;;;;  
;K;IARgB,sG;MAAA,yD;uBAAA,6I;YAAA,S;iBAAA,Q;;iBAAA,uB;O;K;IALpB,6D;MAkBI,OAAO,SAAS,  
wDAAT,C;K;IA2BS,4H;MAAA,wC;MAAA,6B;MAAA,yB;MAAA,oD;MAAA,kD;MAAA,4B;MAAA,+B;MAA  
A,kC;K;;;wDAAA,Y;;;;oCACG,wC;cACf,IAAI,mBAAS,UAAb,C;yCACyB,mBAAS,O;gBAC9B,gB;gCAA,iC  
AAM,sBAAN,O;oBAAA,2C;yBAAA,yB;gBAAA,Q;;gBAFJ,gB;;;;cAGI,gB;;;cAAA,KAAO,mBAAS,UAAhB,C  
;gBAAA,gB;;;cACI,yBAAc,6BAAU,sBAAV,EAAuB,mBAAS,OAAhC,C;cACd,gB;8BAAA,iCAAM,sBAAN,O;k  
BAAA,2C;uBAAA,yB;cAAA,Q;;cAFJ,gB;;;cAHJ,gB;;;cAQJ,W;;;;K;IAVgB,yE;MAAA,yD;uBAAA,gH;Y  
AAA,S;iBAAA,Q;;iBAAA,uB;O;K;IAhBpB,+C;MAgBI,OAAO,SAAS,0CAAT,C;K;IA6BS,0I;MAAA,wC;MAAA  
,6B;MAAA,yB;MAAA,kE;MAAA,kD;MAAA,4B;MAAA,+B;MAAA,yB;MAAA,kC;K;;;+DAAA,Y;;;;cAOuC,Q  
;oCANpC,+C;cACf,IAAI,mBAAS,UAAb,C;yCACyB,mBAAS,O;gBAC9B,gB;gCAA,iCAAM,sBAAN,O;oBAA  
A,2C;yBAAA,yB;gBAAA,Q;;gBAFJ,gB;;;;iCAGgB,C;cACZ,gB;;;cAAA,KAAO,mBAAS,UAAhB,C;gBAAA,g  
B;;;cACI,yBAAc,6BAAU,oBAAmB,uBAAnB,EAAMb,+BAAnB,QAaV,EAAuC,sBAAvC,EAAoD,mBAAS,OA  
A7D,C;cACd,gB;8BAAA,iCAAM,sBAAN,O;kBAAA,2C;uBAAA,yB;cAAA,Q;;cAFJ,gB;;;cAJJ,gB;;;cASJ,W;;;;  
;K;IAXgB,uF;MAAA,yD;uBAAA,8H;YAAA,S;iBAAA,Q;;iBAAA,uB;O;K;IAhBpB,sD;MAgBI,OAAO,SAA  
S,iDAAT,C;K;IAcX,+C;MAkBI,OAAO,yBAAy,OAAZ,EAAqB,SAArB,C;K;IAGX,sD;MAmBI,OAAO,gCAAmB  
,OAAAnB,EAA4B,SAA5B,C;K;gFAGX,+B;MASoB,Q;MADhB,UAAe,C;MACC,2B;MAAhB,OAAGB,cAAhB,C;Q  
AAGB,yB;QACZ,YAAO,SAAS,OAAT,CAAP,I;;MAEJ,OAAO,G;K;4FAGX,+B;MASoB,Q;MADhB,UAAkB,G;  
MACF,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QACZ,OAAO,SAAS,OAAT,C;;MAEX,OAAO,G;K;iFAGX,+  
B;MAYoB,Q;MADhB,UAAoB,C;MACJ,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QACZ,OAAO,SAAS,OAAT  
,C;;MAEX,OAAO,G;K;iFAGX,+B;MAYoB,Q;MADhB,UAAe,C;MACC,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,  
yB;QACZ,YAAO,SAAS,OAAT,CAAP,I;;MAEJ,OAAO,G;K;iFAGX,yB;MAAA,SAWoB,gB;MAXpB,sC;QAYoB  
,Q;QADhB,Y;QACgB,2B;QAAhB,OAAGB,cAAhB,C;UAGB,yB;UACZ,cAAO,SAAS,OAAT,CAAP,C;;QAEJ,O  
AAO,G;O;KAfX,C;iFAkBA,yB;M3B15DA,6B;M2B05DA,sC;QAaoB,Q;QADhB,U3B55DmC,c2B45DnB,C3B55  
DmB,C;Q2B65DnB,2B;QAAhB,OAAGB,cAAhB,C;UAGB,yB;UACZ,M3BhuEiD,c2BguEjD,G3BhuE2D,KAAC,  
G2BguEzD,SAAS,OAAT,C3BhuEoE,KAAX,IAAf,C;;Q2BkuErD,OAAO,G;O;KAhBX,C;iFAMBA,yB;MX16DA,  
+B;MW06DA,sC;QAaoB,Q;QADhB,UX36DqC,eAAW,oBW26D/B,CX36D+B,CAAX,C;QW46DrB,2B;QAAhB,  
OAAGB,cAAhB,C;UAGB,yB;UACZ,MXhvEmD,eWgvEnD,GXhvE8D,KAAC,KWgvE5D,SAAS,OAAT,CXhvE  
uE,KAAX,cAAhB,C;;QWkvEvD,OAAO,G;O;KAhBX,C;IAyBe,oD;MAAA,qB;QAAE,e;UAAM,MAAM,gCAAY  
B,2BAAwB,mBAAXB,MAAZB,C;SAAZ,S;O;K;IANjB,qC;MAMI,OAAO,kBAAI,gCAAJ,C;K;IAGX,oC;MAAI,O  
AAO,sBAAS,IAAT,EAAe,IAAf,EAAc,IAAtC,C;K;IAGX,+C;MAkBI,OAAO,sBAAS,IAAT,EAAe,IAAf,EAAc  
,IAAtC,EAAwD,SAAXD,C;K;IASA,0D;MAAA,4B;MAAA,sC;K;IAG0B,+E;MAAA,qB;QAAE,IAAI,CAAC,iBA  
AD,IAAY,WAAM,eAAN,cAAhB,C;UAAiC,oBAAU,I;UAA3C,OAAiD,K;;UAAjD,OAA8D,I;O;K;6CAF7F,Y;M  
ACI,kBAAc,KAAd,C;MACA,OAaKB,SAAX,eAAW,EAAO,kEAAP,CAA8E,W;K;;IAT5G,qC;MAMI,kD;K;IASB  
O,6D;MAAA,wC;MAAA,4B;K;IAG6B,8D;MAAA,qB;QAAE,OAAM,aAAN,mB;O;K;+CAFIC,Y;MACI,YAAqB,  
8BAAT,qBAAS,C;MACrB,OAaKB,YAAX,eAAW,EAAU,4CAAV,CAA0B,W;K;;IAjBxD,sC;MAAI,IAAI,Q9B80  
KG,YAAQ,C8B90Kf,C;QAAwB,OAAO,S;MAC/B,qD;K;IAqBO,6D;MAAA,wC;MAAA,4B;K;IAMiC,8D;MAAA  
,qB;QAAE,OAAM,aAAN,mB;O;K;+CALtC,Y;MACI,YAAqB,4BAAT,qBAAS,C;MACrB,IAAI,KAAM,UAAV,C  
;QACI,OAAO,eAAW,W;;QAEIB,OAaKB,YAAX,eAAW,EAAU,4CAAV,CAA0B,W;K;;IANB5D,sC;MAAI,qD;K;

IAwBO,6D;MAAA,wC;MAAA,4B;K;IAMiC,8D;MAAA,qB;QAAE,OAAM,aAAN,mB;O;K;+CALtC,Y;MACI,Y  
AAqB,8BAAT,qBAAS,C;MACrB,IAAI,KAAM,UAAV,C;QACI,OAAO,eAAW,W;;QAEIB,OAAkB,YAAX,eAA  
W,EAAU,4CAAV,CAA0B,W;K;;IANB5D,sC;MAaI,qD;K;8FAWJ,yB;MAAA,4C;MAAA,qC;QAOI,OAAO,iBAA  
M,OAAAN,C;O;KAPX,C;wFAUA,yB;MAAA,+D;MAAA,6B;MAAA,uC;QAYoB,Q;QAFhB,YAAY,gB;QACZ,aA  
Aa,gB;QACG,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,IAAI,UAAU,OAAV,CAAJ,C;YACI,KAAM,W  
AAI,OAAJ,C;;YAEN,MAAO,WAAI,OAAJ,C;;QAGf,OAAO,cAAK,KAAL,EAA,Y,MAAZ,C;O;KANBX,C;IAsB  
A,oC;MAMI,OAA6C,UAAtC,YAAW,SAAX,EAAiB,YAAW,OAA,X,EAAjB,EAAc,C;K;IAGjD,qC;MASI,OAA  
Y,OAAAL,SAAK,EAAc,OAAT,QAAS,CAAd,C;K;IAGhB,qC;MASI,OAA+C,UAAxC,YAAW,SAAX,EAA0B,aA  
AT,QAAS,CAA1B,EAAwC,C;K;IAGnD,sC;MASI,OAAkC,UAA3B,YAAW,SAAX,EAAiB,QAAjB,EAA2B,C;K;  
4FAGtC,yB;MAAA,0C;MAAA,qC;QAOI,OAAO,gBAAK,OAAL,C;O;KAPX,C;IAUA,2D;MAGb+C,oB;QAAA,  
OAA,Y,C;MAAG,8B;QAAA,iBAA0B,K;MACpF,OAAO,8BAAiB,IAAjB,EAAuB,IAAvB,EAA6B,cAA7B,EAA2  
D,KAA3D,C;K;IAGX,sE;MAkBkD,oB;QAAA,OAA,Y,C;MAAG,8B;QAAA,iBAA0B,K;MACvF,OAAwE,OAAjE  
,8BAAiB,IAAjB,EAAuB,IAAvB,EAA6B,cAA7B,EAA2D,IAA3D,CAAiE,EAAI,SAAJ,C;K;IAYpC,4B;MAAY,c  
AAM,EAAAN,C;K;IATpD,kC;MASI,OAAO,oBAAGb,SAAhB,EAAcB,KAAtB,EAA6B,UAA7B,C;K;IAGX,6C;M  
AUI,OAAO,oBAAGb,SAAhB,EAAcB,KAAtB,EAA6B,SA7B,C;K;IAcY,kC;MAAU,aAAK,CAAL,C;K;IAXjC,k  
C;MAWI,OAAO,yBAAY,kBAAZ,C;K;IAeiB,wH;MAAA,wC;MAAA,6B;MAAA,yB;MAAA,gD;MAAA,kD;MA  
AA,4B;MAAA,2B;MAAA,wB;MAAA,kC;K;;;sDAAA,Y;;;;;oCACL,sC;cACf,IAAI,CAAC,mBAAS,UAAAd,C;gB  
AAyB,M;;gBAAzB,gB;;;;;mCACc,mBAAS,O;cACvB,gB;;;cAAA,KAAO,mBAAS,UAAhB,C;gBAAA,gB;;;gCA  
Ce,mBAAS,O;cACpB,gB;8BAAA,iCAAM,6BAAU,kBAAV,EAAMb,eAAAnB,CAAN,O;kBAAA,2C;uBAAA,yB;c  
AAA,Q;;cACA,qBAAU,e;cAHd,gB;;;cAKJ,W;;;;;K;IATwB,uE;MAAA,yD;uBAAA,4G;YAAA,S;iBAAA,Q;  
;iBAAA,uB;O;K;IAZ5B,6C;MAYI,OAAO,SAAS,0CAAT,C;K;IAYX,8F;MAU6D,yB;QAAA,YAA0B,I;MAAM,s  
B;QAAA,SAAuB,E;MAAI,uB;QAAA,UAAwB,E;MAAI,qB;QAAA,QAAa,E;MAAI,yB;QAAA,YAA0B,K;MAA  
O,yB;QAAA,YAAoC,I;MAGtN,Q;MAFhB,MAAO,gBAAO,MAAP,C;MACP,YAAY,C;MACI,2B;MAAhB,OAAg  
B,cAAhB,C;QAAgB,yB;QACZ,IAAI,iCAAU,CAAd,C;UAAiB,MAAO,gBAAO,SAAP,C;QACxB,IAAI,QAAQ,C  
AAR,IAAa,SAAS,KAA1B,C;UACW,gBAAP,MAAO,EAAc,OAAd,EAAuB,SAAvB,C;;UACJ,K;;MAEX,IAAI,S  
AAS,CAAT,IAAc,QAAQ,KAA1B,C;QAAiC,MAAO,gBAAO,SAAP,C;MACxC,MAAO,gBAAO,OAAP,C;MACP  
,OAAO,M;K;IAGX,4F;MAUwC,yB;QAAA,YAA0B,I;MAAM,sB;QAAA,SAAuB,E;MAAI,uB;QAAA,UAAwB,E  
;MAAI,qB;QAAA,QAAa,E;MAAI,yB;QAAA,YAA0B,K;MAAO,yB;QAAA,YAAoC,I;MACjN,OAAO,oBAAO,s  
BAAP,EAAwB,SAAxB,EAAMc,MAAnC,EAA2C,OAA3C,EAAoD,KAAPd,EAA2D,SAAS3D,EAAcE,SAAtE,CA  
AiF,W;K;IAOXe,8C;MAAA,mB;QAAE,OAAA,eAAK,W;O;K;IAJ3B,kC;MAII,oCAAgB,8BAAhB,C;K;2FAGJ,q  
B;MAKI,OAAO,S;K;IAGX,+B;MASoB,Q;MAFhB,UAAkB,G;MACIB,YAAiB,C;MACD,2B;MAAhB,OAAgB,c  
AAhB,C;QAAgB,yB;QACZ,OAAO,O;QACP,oBAAMb,qBAAnB,EAAMb,KAAAnB,E;;MAEJ,OAAW,UAAAS,CA  
Ab,GAAgB,wCAAO,IAAvB,GAAgC,MAAM,K;K;IAGjD,+B;MASoB,Q;MAFhB,UAAkB,G;MACIB,YAAiB,C;  
MACD,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,OAAO,O;QACP,oBAAMb,qBAAnB,EAAMb,KAAAnB  
,E;;MAEJ,OAAW,UAAAS,CAAb,GAAgB,wCAAO,IAAvB,GAAgC,MAAM,K;K;IAGjD,+B;MASoB,Q;MAFhB,U  
AAkB,G;MACIB,YAAiB,C;MACD,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,OAAO,O;QACP,oBAAMb  
,qBAAnB,EAAMb,KAAAnB,E;;MAEJ,OAAW,UAAAS,CAAb,GAAgB,wCAAO,IAAvB,GAAgC,MAAM,K;K;IA  
GjD,+B;MASoB,Q;MAFhB,UAAkB,G;MACIB,YAAiB,C;MACD,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QA  
CZ,OAAO,O;QACP,oBAAMb,qBAAnB,EAAMb,KAAAnB,E;;MAEJ,OAAW,UAAAS,CAAb,GAAgB,wCAAO,IAA  
vB,GAAgC,MAAM,K;K;IAGjD,+B;MASoB,Q;MAFhB,UAAkB,G;MACIB,YAAiB,C;MACD,2B;MAAhB,OAAg  
B,cAAhB,C;QAAgB,yB;QACZ,OAAO,O;QACP,oBAAMb,qBAAnB,EAAMb,KAAAnB,E;;MAEJ,OAAW,UAAAS,  
CAAb,GAAgB,wCAAO,IAAvB,GAAgC,MAAM,K;K;IAGjD,+B;MASoB,Q;MAFhB,UAAkB,G;MACIB,YAAiB,  
C;MACD,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,OAAO,O;QACP,oBAAMb,qBAAnB,EAAMb,KAA  
nB,E;;MAEJ,OAAW,UAAAS,CAAb,GAAgB,wCAAO,IAAvB,GAAgC,MAAM,K;K;IAGjD,2B;MAQoB,Q;MADh  
B,UAAe,C;MACC,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,YAAO,O;;MAEX,OAAO,G;K;IAGX,2B;M  
AQoB,Q;MADhB,UAAe,C;MACC,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,YAAO,O;;MAEX,OAAO,  
G;K;IAGX,2B;MAQoB,Q;MADhB,UAAe,C;MACC,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,YAAO,O  
AAP,I;;MAEJ,OAAO,G;K;IAGX,2B;MAQoB,Q;MADhB,Y;MACgB,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;



QACZ,cAAO,OAAP,C;;MAEJ,OAAO,G;K;IAGX,2B;MAQoB,Q;MADhB,UAAiB,G;MACD,2B;MAAhB,OAAG  
B,cAAhB,C;QAAgB,yB;QACZ,OAAO,O;;MAEX,OAAO,G;K;IAGX,2B;MAQoB,Q;MADhB,UAAkB,G;MACF,2  
B;MAAhB,OAAGB,cAAhB,C;QAAgB,yB;QACZ,OAAO,O;;MAEX,OAAO,G;K;IC71FX,qC;MAMI,aAAa,qBAA  
iB,YAAY,cAAZ,CAAjB,C;MACb,kBAAC,KAAd,C;MX4zBgB,Q;MAAA,OW3zBT,SX2zBS,W;MAAhB,OAAGB  
,cAAhB,C;QAAgB,2B;QAAU,oB;QW3zBK,IAAI,CAAC,SAAD,IAAY,OX2zBX,SW3zBW,UAAhB,C;UAAiC,Y  
AAU,I;UAA3C,mBAAiD,K;;UAAjD,mBAA8D,I;;QX2zBvE,qB;UW3zBD,MX2zBqC,WAAI,SAAJ,C;;MW3zB1  
D,OAAqB,M;K;IAGzB,sC;MAUI,aAAa,qBAAiB,SAAJ,B,C;MACN,YAAP,MAAO,EAAU,QAAV,C;MACP,OAA  
O,M;K;IAGX,sC;MAUI,YAAqB,gCAAT,QAAS,EAAgC,SAAhC,C;MACrB,IAAI,KAAM,UAAV,C;QACI,OAA  
Y,QAAL,SAAK,C;MACHB,IAAI,yBAAJ,C;QACgB,kBAAY,sB;QXixBZ,Q;QAAA,OWjxBL,SXixBK,W;QAAhB  
,OAAGB,cAAhB,C;UAAgB,yB;UAAM,IAAI,CWjxBwB,qBXixBb,OWjxBa,CXixB5B,C;YAAyB,WAAy,WAAI,  
OAAJ,C;;QWjxBvD,OXkxBG,W;OWjxBP,aAAa,qBAAiB,SAAJ,B,C;MACb,MAAO,mBAAU,KAAP,C;MACP,O  
AAO,M;K;IAGX,uC;MAUI,aAAa,qBAAiB,SAAJ,B,C;MACN,YAAP,MAAO,EAAU,QAAV,C;MACP,OAAO,M;  
K;gGAGX,yB;MAAA,8C;MAAA,qC;QAOI,OAAO,iBAAM,OAAN,C;O;KAPX,C;IAUA,qC;MAMI,aAAa,qBAAi  
B,YAAY,iBAAO,CAAP,IAAZ,CAAjB,C;MACb,MAAO,gBAAO,SAAP,C;MACP,MAAO,WAAI,OAAJ,C;MAC  
P,OAAO,M;K;IAGX,sC;MAOI,aAAa,qBAAiB,YAAY,SAAK,KAAL,GAAY,QAAS,OAArB,IAAZ,CAAjB,C;MA  
Cb,MAAO,gBAAO,SAAP,C;MACA,SAAP,MAAO,EAAO,QAAP,C;MACP,OAAO,M;K;IAGX,sC;MAMuD,UA  
AT,M;MAA1C,aAAa,qBAAiB,YAAY,WAAS,4BAAT,QAAS,CAAT,YAA4C,cAAL,WAAvC,4BAA2D,SAAK,K  
AAL,GAAY,CAAZ,IAAvE,CAAjB,C;MACb,MAAO,gBAAO,SAAP,C;MACA,OAAP,MAAO,EAAO,QAAP,C;  
MACP,OAAO,M;K;IAGX,sC;MAOI,aAAa,qBAAiB,YAAY,SAAK,KAAL,GAAY,CAAZ,IAAZ,CAAjB,C;MACb  
,MAAO,gBAAO,SAAP,C;MACA,SAAP,MAAO,EAAO,QAAP,C;MACP,OAAO,M;K;8FAGX,yB;MAAA,4C;M  
AAA,qC;QAOI,OAAO,gBAAK,OAAL,C;O;KAPX,C;InBnIA,oD;MAMuF,wC;K;IANvF,8CAOI,Y;MAAuC,8B;K  
;IAP3C,gF;ICGA,oD;MAQuF,wC;K;IARvF,8CASI,Y;MAAuC,8B;K;IAT3C,gF;gGmBYA,yB;MAAA,uD;MAAA,  
gC;MAAA,iD;QAOI,OAAW,SAAS,CAAT,IAAc,SAAS,wBAA3B,GAAsC,qBAAI,KA AJ,CAAtC,GAAsD,uBAA  
a,KAAb,E;O;KAPjE,C;gGAUA,yB;MAAA,+C;MAAA,mC;QAOI,OAAY,UAAL,SAAK,EAAU,KAAP,C;O;KAP  
hB,C;0EAUA,yB;MA4EA,6C;MAAA,oC;MAAA,gC;MA5EA,uC;QAOW,sB;;UAyES,Q;UAAA,0B;UAAhB,OA  
gB,cAAhB,C;YAAgB,oC;YAAM,IAzEH,SAyEO,CAAU,oBAAV,CAAJ,C;cAAwB,qBAAO,O;cAAP,uB;;UAC9C  
,qBAAO,I;;QA1EP,yB;O;KAPJ,C;kFAUA,yB;MAwJA,mD;MAAA,+C;MAAA,oC;MAxJA,uC;QAOW,qB;;UAUJ  
O,Q;UAAA,OAAa,SAAR,sBAAQ,CAAb,W;UAAd,OAAC,cAAd,C;YAAc,uB;YACV,cAAc,qBAAK,KAAL,C;YA  
Cd,IAzJc,SAyJV,CAAU,oBAAV,CAAJ,C;cAAwB,oBAAO,O;cAAP,sB;;UAE5B,oBAAO,I;;QA3JP,wB;O;KAPJ,  
C;IAUA,6B;MAKI,ICkOgD,qBAAU,CDIO1D,C;QACI,MAAM,2BAAuB,yBAAvB,C;MACV,OAAO,qBAAK,CA  
AL,C;K;4EAGX,yB;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,iE;MAAA,uC;QAKoB,Q;QAAA,0B;QAAhB,OA  
AgB,cAAhB,C;UAAgB,oC;UAAM,IAAI,UAAU,oBAAV,CAAJ,C;YAAwB,OAAO,O;;QACrD,MAAM,gCAAuB,  
6DAAvB,C;O;KANV,C;6FASA,yB;MAAA,iE;MAY A,6C;MAAA,oC;MAAA,gC;MAZA,uC;QASW,Q;QAAA,+B  
;;UAYS,U;UAAA,4B;UAAhB,OAAGB,gBAAhB,C;YAAgB,sC;YACZ,aAbwB,SAaX,CAAU,oBAAV,C;YACb,IA  
AI,cAAJ,C;cACI,8BAAO,M;cAAP,gC;;UAGR,8BAAO,I;;QAI BA,kC;QAAA,iB;UAAmC,MAAM,gCAAuB,sEA  
AvB,C;SAAhD,OAAO,I;O;KATX,C;yGAYA,yB;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,uC;QASoB,Q;QAAA  
,0B;QAAhB,OAAGB,cAAhB,C;UAAgB,oC;UACZ,aAAa,UAAU,oBAAV,C;UACb,IAAI,cAAJ,C;YACI,OAAO,M  
;;QAGf,OAAO,I;O;KAFX,C;IAkBA,mC;MAII,OckLgD,qBAAU,CDILnD,GA Ae,IAAf,GAAYB,qBAAK,CAAL,C  
;K;wFAGpC,yB;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,uC;QAIoB,Q;QAAA,0B;QAAhB,OAAGB,cAAhB,C;U  
AAgB,oC;UAAM,IAAI,UAAU,oBAAV,CAAJ,C;YAAwB,OAAO,O;;QACrD,OAAO,I;O;KALX,C;mFAQA,yB;  
MAAA,uD;MAAA,gC;MAAA,iD;QAKI,OA AW,SAAS,CAAT,IAAc,SAAS,wBAA3B,GAAsC,qBAAI,KA AJ,CA  
AtC,GAAsD,uBAAa,KAAb,E;O;KALjE,C;IAQA,uC;MAMI,OA AW,SAAS,CAAT,IAAc,SAAS,2BAA3B,GAAsC  
,qBAAI,KA AJ,CAAtC,GAAsD,I;K;0FAGjE,yB;MAAA,mD;MAAA,oC;MAAA,uC;QAIkB,gC;QAAA,6B;QAAA,  
mB;QAAA,kB;QAAA,kB;QAAd,0D;UACI,IAAI,UAAU,iCAAK,KAAL,EAAV,CAAJ,C;YACI,OAAO,K;;QAGf,  
OAAO,E;O;KATX,C;wFAYA,yB;MAAA,mD;MAAA,+C;MAAA,oC;MAAA,uC;QAIkB,Q;QAAA,OAAQ,SAAR  
,sBAAQ,CAAR,W;QAAd,OAAC,cAAd,C;UAAc,uB;UACV,IAAI,UAAU,iCAAK,KAAL,EAAV,CAAJ,C;YACI,O  
AAO,K;;QAGf,OAAO,E;O;KATX,C;IAYA,4B;MAQI,ICsHgD,qBAAU,CDtH1D,C;QACI,MAAM,2BAAuB,yB  
AvB,C;MACV,OAAO,qBAAK,2BAAL,C;K;0EAGX,yB;MAAA,mD;MAAA,+C;MAAA,oC;MAAA,iE;MAAA,u

C;QAQkB,Q;QAAA,OAAa,SAAR,YAAL,SAAK,CAAQ,CAAb,W;QAAd,OAAc,cAAd,C;UAAc,uB;UACV,cAAc,qBAAK,KAAL,C;UACd,IAAI,UAAU,oBAAV,CAAJ,C;YAAwB,OAAO,O;;QAEnC,MAAM,gCAAuB,6DAAvB,C;O;KAZV,C;IAeA,kC;MAMI,OC4FgD,qBAAU,CD5FnD,GAAe,IAAf,GAAyB,qBAAK,mBAAS,CAAT,IAAL,C;K;sFAGpC,yB;MAAA,mD;MAAA,+C;MAAA,oC;MAAA,uC;QAMkB,Q;QAAA,OAAa,SAAR,YAAL,SAAK,CAAQ,CAAb,W;QAAd,OAAc,cAAd,C;UAAc,uB;UACV,cAAc,qBAAK,KAAL,C;UACd,IAAI,UAAU,oBAAV,CAAJ,C;YAAwB,OAAO,O;;QAEnC,OAAO,I;O;KAVX,C;8EAaA,yB;MAAA,mC;MAAA,yC;MAAA,4B;QAQI,OA AO,kBAAO,cAAP,C;O;KARX,C;IAWA,sC;MAOI,IC0DgD,qBAAU,CD1D1D,C;QACI,MAAM,2BAAuB,yBAAvB,C;MACV,OAAO,qBAAl,MAAO,iBAAQ,gBAAR,CAAX,C;K;0FAGX,yB;MAAA,mC;MAAA,qD;MAAA,4B;QAQI,OAAO,wBAAa,cAAb,C;O;KAPX,C;IAUA,4C;MAMI,ICqCgD,qBAAU,CDrC1D,C;QACI,OAAO,I;MACX,OAAO,qBAAl,MAAO,iBAAQ,gBAAR,CAAX,C;K;IAGX,8B;MAliB,IAAN,I;MAAA,QAAM,gBAAN,C;aACH,C;UAAK,MAAM,2BAAuB,yBAAvB,C;aACX,C;UAAK,4BAAK,CAAL,C;UAAL,K;gBACQ,MAAM,gCAAyB,0CAAzB,C;;MAHIB,W;K;8EAOJ,yB;MAAA,6C;MAAA,oC;MAAA,kF;MAAA,gC;MAAA,iE;MAAA,8B;MAAA,uC;QAMoB,UAST,M;QAXP,aAAoB,I;QACpB,YAAY,K;QACI,0B;QAaHb,OAAgB,cAAhB,C;UAAgB,oC;UACZ,IAAI,UAAU,oBAAV,CAAJ,C;YACI,IAAI,KA AJ,C;cAAW,MAAM,8BAAyB,wDAAzB,C;YACjB,SAAS,O;YACT,QAAQ,I;;QAGhB,IAAI,CAAC,KAAL,C;UAAY,MAAM,gCAAuB,6DAAvB,C;QAEIB,OAAO,4E;O;KafX,C;IAkBA,oC;MAII,OAAW,qBAAU,CAAd,GAAiB,qBAAK,CAAL,CAAJB,GAA8B,I;K;0FAGzC,yB;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,uC;QAMoB,Q;QAFhB,aAAoB,I;QACpB,YAAY,K;QACI,0B;QAaHb,OAAgB,cAAhB,C;UAAgB,oC;UACZ,IAAI,UAAU,oBAAV,CAAJ,C;YACI,IAAI,KA AJ,C;cAAW,OAAO,I;YACIB,SAAS,O;YACT,QAAQ,I;;QAGhB,IAAI,CAAC,KAAL,C;UAAY,OAAO,I;QACnB,OAAO,M;O;KAdX,C;IAiBA,+B;MIBzRI,IAAI,EkBiSI,KAAK,CIBjST,CAAJ,C;QACI,ckBgSc,wD;QIB/Rd,MAAM,gCAAyB,OAAQ,WAAjC,C;OkBgSV,OAAO,8BAAc,eAAF,CAAE,EAAa,gBAAb,CAAd,EAAoC,gBAApC,C;K;IAGX,+B;MIBrSI,IAAI,EkB6SI,KAAK,CIB7ST,CAAJ,C;QACI,ckB4Sc,wD;QIB3Sd,MAAM,gCAAyB,OAAQ,WAAjC,C;OkB4SV,OLhH6E,oBKgH1D,eAAF,CAAE,EAAa,gBAAb,CLhH0D,C;K;IKmHjF,kC;MIBjTI,IAAI,EkByTI,KAAK,CIBzTT,CAAJ,C;QACI,ckBwTc,wD;QIBvTd,MAAM,gCAAyB,OAAQ,WAAjC,C;OkBwTV,OAAO,mBAAkB,gBAAZ,mBAAS,CAAT,IAAY,EAAc,CAAd,CAAIB,C;K;IAGX,mC;MIB7TI,IAAI,EkBqUI,KAAK,CIBrUT,CAAJ,C;QACI,ckBoUc,wD;QIBnUd,MAAM,gCAAyB,OAAQ,WAAjC,C;OkBoUV,OAAO,mBAAkB,gBAAZ,mBAAS,CAAT,IAAY,EAAc,CAAd,CAAIB,C;K;2FAGX,yB;MAAA,uD;MAAA,oC;MAAA,uC;QAMI,iBAAc,wBAAd,WAA+B,CAA/B,U;UACI,IAAI,CAAC,UAAU,iCAAK,KAAL,EAAV,CAAL,C;YACI,OAAO,8BAAy,CAAZ,EAAe,QAAQ,CAAR,IAAf,C;QACf,OAAO,E;O;KATX,C;4FAYA,yB;MAAA,uD;MAAA,oC;MAAA,uC;QAMI,iBAAc,wBAAd,WAA+B,CAA/B,U;UACI,IAAI,CAAC,UAAU,iCAAK,KAAL,EAAV,CAAL,C;YACI,OL5JoF,oBK4JnE,CL5JmE,Ek4JhE,QAAQ,CAAR,IL5JgE,C;WK6J5F,OAAO,E;O;KATX,C;oFAYA,yB;MAAA,mD;MAAA,oC;MAAA,uC;QAMuB,UAAL,MAAK,EAAL,MAAK,EAAL,M;QAAK,mBAAL,SAAK,C;QAAL,mB;QAAA,kB;QAAA,kB;QAAd,0D;UACI,IAAI,CAAC,UAAU,iCAAK,KAAL,EAAV,CAAL,C;YACI,OAAO,8BAAy,KAAZ,EAAmB,gBAAnB,C;QACf,OAAO,E;O;KATX,C;oFAYA,yB;MAAA,mD;MAAA,oC;MAAA,uC;QAMuB,UAAL,MAAK,EAAL,MAAK,EAAL,M;QAAK,mBAAL,SAAK,C;QAAL,mB;QAAA,kB;QAAA,kB;QAAd,0D;UACI,IAAI,CAAC,UAAU,iCAAK,KAAL,EAAV,CAAL,C;YACI,OLvLqE,oBKuLpD,KLvLoD,C;WKwL7E,OAAO,E;O;KATX,C;8EAYA,yB;MAAA,yD;MAkFA,oC;MAIFA,uC;QAMW,kBAAS,oB;QakFM,Q;QAAA,uB;QAAtB,iBAAc,CAAd,wB;UACI,cAAc,qBAAl,KA AJ,C;UACd,IApF6B,SAoFzB,CAAU,oBAAV,CAAJ,C;YAAwB,WAAy,gBAAO,OAAP,C;;QA pFxC,OAsFO,W;O;KA5FX,C;8EASA,yB;MAAA,yD;MAyEA,oC;MAzEA,uC;QAMW,kBAAS,oB;QAYEM,Q;QAAA,uB;QAAtB,iBAAc,CAAd,wB;UACI,cAAc,qBAAl,KA AJ,C;UACd,IA3E6B,SA2EzB,CAAU,oBAAV,CAAJ,C;YAAwB,WAAy,gBAAO,OAAP,C;;QA3ExC,OA6EO,WA7EqC,W;O;KANhD,C;4FASA,yB;MAAA,yD;MA sBA,gC;MA+sBA,6C;MAAA,oC;MARuBA,uC;QAQW,kBAAGB,oB;QAouBV,gB;QADb,YAAY,C;QACC,0B;QAAb,OAAa,cAAb,C;UAAa,iC;UAAM,eAAO,cAAP,EAAO,sBAAP,S;UAAA,cAAgB,iB;UA7sB/B,IAvBoC,SAuBhC,CAAU,OA AV,EAAiB,OAAjB,CAAJ,C;YAA2C,2BAAO,kBAAP,C;;QAvB/C,OAYBO,W;O;KAjCX,C;4FAWA,yB;MAAA,yD;MAWA,gC;MA+sBA,6C;MAAA,oC;MAItBA,uC;QAQW,kBAAGB,oB;QAYtBV,gB;QADb,YAAY,C;QACC,0B;QAAb,OAAa,cAAb,C;UAAa,iC;UAAM,eAAO,cAAP,EAAO,sBAAP,S;UAAA,cAAgB,iB;UA7sB/B,IAZoC,SAYhC,CAAU,OA AV,EAAiB,OAAjB,CAAJ,C;YAA2C,2BAAO,kBAAP,C;;QAZ/C,OAcO,WAd4C,W;O;KARvD,C;gGAWA,yB;MAAA,gC;MA+sBA,6C;MAAA,oC;MA/sBA,oD;QAstBiB,gB;QADb,YAAY,C;QACC,0B;QAAb,OA

Aa,cAAb,C;UAAa,iC;UAAM,eAAO,cAAP,EAAO,sBAAP,S;UAAA,cAAgB,iB;UA7sB/B,IAAI,UAAU,OAAV,E  
AAiB,OAAjB,CAAJ,C;YAA2C,2BAAO,kBAAP,C;;QAE/C,OAAO,W;O;KAXX,C;oFAcA,yB;MAAA,yD;MAkB  
A,6C;MAAA,oC;MAAA,gC;MAiBA,uC;QAMW,kBAAY,oB;QAKBH,Q;QAAA,0B;QAAhB,OAAgB,cAAhB,C;U  
AAgB,oC;UAAM,IAAI,CAIBU,SakBT,CAAU,oBAAV,CAAL,C;YAAyB,WAAy,gBAAO,OAAP,C;;QAIB3D,O  
AmBO,W;O;KAzBX,C;oFASA,yB;MAAA,yD;MASA,6C;MAAA,oC;MAAA,gC;MATA,uC;QAMW,kBAAY,oB;  
QASH,Q;QAAA,0B;QAAhB,OAAgB,cAAhB,C;UAAgB,oC;UAAM,IAAI,CATU,SAST,CAAU,oBAAV,CAAL,C  
;YAAyB,WAAy,gBAAO,OAAP,C;;QAT3D,OAUO,WAVwC,W;O;KANnD,C;wFASA,yB;MAAA,6C;MAAA,oC  
;MAAA,gC;MAAA,oD;QAMoB,Q;QAAA,0B;QAAhB,OAAgB,cAAhB,C;UAAgB,oC;UAAM,IAAI,CAAC,UAA  
U,oBAAV,CAAL,C;YAAyB,WAAy,gBAAO,OAAP,C;;QAC3D,OAAO,W;O;KAPX,C;kFAUA,yB;MAAA,oC;M  
AAA,oD;QAM0B,Q;QAAA,uB;QAAtB,iBAAc,CAAd,wB;UACi,cAAc,qBAAI,KAAJ,C;UACd,IAAI,UAAU,oBA  
AV,CAAJ,C;YAAwB,WAAy,gBAAO,OAAP,C;;QAExC,OAAO,W;O;KAVX,C;IAaA,sC;MAII,IAAI,OAAQ,UA  
AZ,C;QAAuB,OAAO,E;MAC9B,OAAO,yBAAY,OAAZ,C;K;IAGX,sC;MAII,IAAI,OAAQ,UAAZ,C;QAAuB,OA  
AO,E;MAC9B,OAAO,uBAAU,OAAV,C;K;IAGX,sC;MAOc,Q;MAHV,WAAmB,wBAAR,OAAQ,EAAwB,EAAx  
B,C;MACnB,IAAI,SAAQ,CAAZ,C;QAae,OAAO,E;MACtB,aAAa,mBAAc,IAAd,C;MACH,yB;MAAV,OAAU,c  
AAV,C;QAAU,mB;QACN,MAAO,gBAAO,qBAAI,CAAJ,CAAP,C;;MAEX,OAAO,M;K;4EAGX,yB;MAAA,8B;  
MAAA,uC;MAAA,qC;QAKY,Q;QAAR,OAA8B,MAAtB,2DAAsB,EAAM,OAAN,CAAE,W;O;KALjD,C;IAQA,+  
B;MIB7fI,IAAI,EkBqgBI,KAAK,CiBrgBT,CAAJ,C;QACI,ckBogBc,wD;QIBngBd,MAAM,gCAAYB,OAAQ,WA  
AjC,C;OkBogBV,OAAO,8BAAY,CAAZ,EAAiB,eAAF,CAAE,EAAa,gBAAb,CAAjB,C;K;IAGX,+B;MIBzgBI,IA  
AI,EkBihBI,KAAK,CiBjhBT,CAAJ,C;QACI,ckBghBc,wD;QIB/gBd,MAAM,gCAAYB,OAAQ,WAAjC,C;OkBgh  
BV,OLjV4F,oBKiv3E,CLjV2E,EkivtE,eAAF,CAAE,EAAa,gBAAb,CLjVsE,C;K;IKoVhG,kC;MIBrhBI,IAAI,Ek  
B6hBI,KAAK,CiB7hBT,CAAJ,C;QACI,ckB4hBc,wD;QIB3hBd,MAAM,gCAAYB,OAAQ,WAAjC,C;OkB4hBV,a  
AAa,gB;MACb,OAAO,8BAAY,SAAW,eAAF,CAAE,EAAa,MAAb,CAAX,IAAZ,EAA6C,MAA7C,C;K;IAGX,m  
C;MIBliBI,IAAI,EkB0iBI,KAAK,CiB1iBT,CAAJ,C;QACI,ckByiBc,wD;QIBxiBd,MAAM,gCAAYB,OAAQ,WAA  
jC,C;OkByiBV,aAAa,gB;MACb,OL9W6E,oBK8W5D,SAAW,eAAF,CAAE,EAAa,MAAb,CAAX,IL9W4D,C;K;2  
FKiXjF,yB;MAAA,uD;MAAA,oC;MAAA,uC;QAMI,iBAAc,wBAAd,WAA+B,CAA/B,U;UACI,IAAI,CAAC,UA  
AU,iCAAk,KAAL,EAAV,CAAL,C;YACI,OAAO,8BAAY,QAAQ,CAAR,IAAZ,EAAuB,gBAAvB,C;;QAGf,OA  
AO,8BAAY,CAAZ,EAAe,gBAAf,C;O;KAXX,C;4FAcA,yB;MAAA,uD;MAAA,oC;MAAA,uC;QAMI,iBAAc,wB  
AAd,WAA+B,CAA/B,U;UACI,IAAI,CAAC,UAAU,iCAAk,KAAL,EAAV,CAAL,C;YACI,OLvYqE,oBKuYpD,  
QAAQ,CAAR,ILvYoD,C;;QK0Y7E,OAAO,S;O;KAXX,C;oFAcA,yB;MAAA,oC;MAAA,uC;QAM0B,Q;QAAA,u  
B;QAAtB,iBAAc,CAAd,wB;UACI,IAAI,CAAC,UAAU,iCAAi,KAAJ,EAAV,CAAL,C;YACI,OAAO,8BAAY,CA  
AZ,EAAe,KAAf,C;WAEf,OAAO,8BAAY,CAAZ,EAAe,gBAAf,C;O;KAVX,C;oFAaA,yB;MAAA,oC;MAAA,uC;  
QAM0B,Q;QAAA,uB;QAAtB,iBAAc,CAAd,wB;UACI,IAAI,CAAC,UAAU,iCAAi,KAAJ,EAAV,CAAL,C;YACI  
,OL/ZoF,oBK+ZnE,CL/ZmE,Ek+ZhE,KL/ZgE,C;WKia5F,OAAO,S;O;KAVX,C;IAaA,gC;MAII,OAAO,qBAAc,S  
AAd,CAAoB,U;K;kFAG/B,yB;MAAA,8B;MAAA,6C;MAAA,4B;QAKY,Q;QAAR,OAA8B,SAAtB,2DAAsB,CA  
AW,W;O;KAL7C,C;oFAQA,yB;MAAA,0D;MAAA,yD;MAAA,uE;MA4EA,6C;MAAA,oC;MAAA,gC;MA5EA,u  
C;QAWI,eAAmC,cAApB,YAAY,gBAAZ,CAAoB,EAAC,EAAd,C;QAC5B,kBAAY,mBAAoB,QAAPB,C;QAYEH  
,Q;QAAA,0B;QAAhB,OAAgB,cAAhB,C;UAAgB,oC;UACZ,WA1E8C,SA0E/B,CAAU,oBAAV,C;UzB9EnB,wB  
AAI,IAAK,MAAT,EAAGB,IAAK,OAAR,C;;QyBIA,OA4EO,W;O;KAXFX,C;wFAeA,yB;MAAA,0D;MAAA,yD;  
MAAA,uE;MA6BA,6C;MAAA,oC;MAAA,gC;MA7BA,yC;QAWI,eAAmC,cAApB,YAAY,gBAAZ,CAAoB,EA  
Ac,EAAd,C;QAC5B,kBAAc,mBAAuB,QAAvB,C;QA2BL,Q;QAAA,0B;QAAhB,OAAgB,cAAhB,C;UAAgB,oC;U  
ACZ,WAAy,aA5BuC,WA4BnC,CAAY,oBAAZ,CAAJ,EAA0B,oBAA1B,C;;QA5BhB,OA8BO,W;O;KA1CX,C;w  
FAeA,yB;MAAA,0D;MAAA,yD;MAAA,uE;MA8BA,6C;MAAA,oC;MAAA,gC;MA9BA,yD;QAU,eAAmC,cAA  
pB,YAAY,gBAAZ,CAAoB,EAAC,EAAd,C;QAC5B,kBAAc,mBAAoB,QAAPB,C;QA6BL,Q;QAAA,0B;QAAhB,  
OAAgB,cAAhB,C;UAAgB,oC;UACZ,WAAy,aA9BoC,WA8BhC,CAAY,oBAAZ,CAAJ,EA9BiD,cA8BvB,CAAE  
,oBAAf,CAA1B,C;;QA9BhB,OA9CO,W;O;KA3CX,C;4FAcA,yB;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,sD;  
QAUoB,Q;QAAA,0B;QAAhB,OAAgB,cAAhB,C;UAAgB,oC;UACZ,WAAy,aAAI,YAAY,oBAAZ,CAAJ,EAA0  
B,oBAA1B,C;;QAEhB,OAAO,W;O;KAbX,C;4FAGBA,yB;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,sE;QAUoB,  
Q;QAAA,0B;QAAhB,OAAgB,cAAhB,C;UAAgB,oC;UACZ,WAAy,aAAI,YAAY,oBAAZ,CAAJ,EAA0B,eAAe,o

BAAf,CAA1B,C;;QAEhB,OAAO,W;O;KAbX,C;wFAGbA,yB;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,oD;QAS  
oB,Q;QAAA,0B;QAAhB,OAAgB,cAAhB,C;UAAgB,oC;UACZ,WAAe,UAAU,oBAAV,C;UzB9EnB,wBAAI,IAA  
K,MAAT,EAAGB,IAAK,OAARb,C;;QyBgFA,OAAO,W;O;KAZX,C;4FAeA,yB;MAAA,uD;MAAA,0D;MAAA,y  
D;MAAA,uE;MAgBA,6C;MAAA,oC;MAAA,gC;MAhBA,2C;QAYI,aAAa,mBAA6D,cAAtC,YAAmB,aAAP,gB  
AAO,EAAa,GAAb,CAAnB,CAAsC,EAAC,EAAd,CAA7D,C;QAcG,Q;QAAA,0B;QAAhB,OAAgB,cAAhB,C;UA  
AgB,oC;UAbO,MAcP,aAAI,oBAAJ,EAd,eAcF,CAAc,oBAAd,CAAb,C;;QAdhB,OAAuB,M;O;KAb3B,C;+FAGB  
A,yB;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,wD;QAUoB,Q;QAAA,0B;QAAhB,OAAgB,cAAhB,C;UAAgB,o  
C;UACZ,WAAy,aAAI,oBAAJ,EAAa,cAAc,oBAAd,CAAb,C;;QAEhB,OAAO,W;O;KAbX,C;IAGbA,iD;MALiB,  
Q;MAAA,4B;MAAb,OAAa,cAAb,C;QAAa,iC;QACT,WAAy,WAAI,iBAAJ,C;;MAEhB,OAAO,W;K;IAGX,iC;M  
AII,OAAO,2BAAa,eAAc,YAAmB,eAAP,gBAAO,EAAa,GAAb,CAAnB,CAAd,CAAb,C;K;IAGX,8B;MALiB,IAA  
N,I;MAAA,QAAM,gBAAN,C;aACH,C;UAAK,kB;UAAL,K;aACA,C;UAAK,cAAO,iCAAK,CAAL,EAAP,C;UA  
AL,K;gBACa,wBAAL,SAAK,C;UAHV,K;;MAAP,W;K;IAOJ,qC;MAII,OAAO,2BAAa,iBAAGb,gBAAhB,CAAb,  
C;K;IAGX,6B;MAMiB,IAAN,I;MAAA,QAAM,gBAAN,C;aACH,C;UAAK,iB;UAAL,K;aACA,C;UAAK,aAAM,i  
CAAK,CAAL,EAAN,C;UAAL,K;gBACQ,kCAAA,qBAAoB,YAAmB,eAAP,gBAAO,EAAa,GAAb,CAAnB,CAA  
pB,CAAb,C;UAHL,K;;MAAP,W;K;gFAOJ,yB;MAAA,+D;MA0CA,6C;MAAA,oC;MAAA,gD;MAAA,gC;MA1C  
A,uC;QAMW,kBAAU,gB;QAwCD,Q;QAAA,0B;QAAhB,OAAgB,cAAhB,C;UAAgB,oC;UACZ,WAZC6B,SAyCl  
B,CAAU,oBAAV,C;UACC,OAAZ,WAAy,EAAO,IAAP,C;;QA1ChB,OA4CO,W;O;KAIDX,C;8FASA,yB;MAAA  
,+D;MAeA,6C;MAAA,oC;MAAA,gD;MAAA,gC;MAfA,uC;QAYW,kBAAiB,gB;QAcR,gB;QADhB,YAAy,C;Q  
ACI,0B;QAAhB,OAAgB,cAAhB,C;UAAgB,oC;UACZ,WafoC,SAezB,EAAU,cAAV,EAAU,sBAAV,WAAmB,o  
BAAnB,C;UACC,OAAZ,WAAy,EAAO,IAAP,C;;QAhBhB,OAkBO,W;O;KA9BX,C;kGAeA,yB;MAAA,6C;MA  
AA,oC;MAAA,gD;MAAA,gC;MAAA,oD;QAWoB,UACS,M;QAFzB,YAAy,C;QACI,0B;QAAhB,OAAgB,cAAh  
B,C;UAAgB,oC;UACZ,WAAW,WAAU,cAAV,EAAU,sBAAV,WAAmB,oBAAnB,C;UACC,OAAZ,WAAy,EAA  
O,IAAP,C;;QAEhB,OAAO,W;O;KAFX,C;oFAkBA,yB;MAAA,6C;MAAA,oC;MAAA,gD;MAAA,gC;MAAA,oD;  
QAIoB,Q;QAAA,0B;QAAhB,OAAgB,cAAhB,C;UAAgB,oC;UACZ,WAAW,UAAU,oBAAV,C;UACC,OAAZ,W  
AAy,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KARX,C;gFAWA,yB;MAAA,wE;MAyBA,6C;MAAA,oC;MAAA,+D  
;MAAA,gC;MAzBA,yC;QASW,kBAAU,oB;QAYBD,Q;QAAA,0B;QAAhB,OAAgB,cAAhB,C;UAAgB,oC;UACZ  
,UA1BoD,WA0B1C,CAAY,oBAAZ,C;UzBrjBP,U;UADP,YyBujBe,WzBvjBH,WyBujBwB,GzBvjBxB,C;UACL,I  
AAI,aAAJ,C;YACH,ayBqjBuC,gB;YAA5B,WzBpjBX,ayBojBgC,GzBpjBhC,EAAS,MAAT,C;YACA,e;;YAEA,c;  
;UyBijBA,iB;UACA,IAAK,WAAI,oBAAJ,C;;QA5BT,OA8BO,W;O;KAvCX,C;gFAYA,yB;MAAA,wE;MA8BA,6  
C;MAAA,oC;MAAA,+D;MAAA,gC;MA9BA,yD;QAUW,kBAAU,oB;QA8BD,Q;QAAA,0B;QAAhB,OAAgB,cA  
AhB,C;UAAgB,oC;UACZ,UA/BiD,WA+BvC,CAAY,oBAAZ,C;UzBvkBP,U;UADP,YyBykBe,WzBzkBH,WyBy  
kBwB,GzBzkBxB,C;UACL,IAAI,aAAJ,C;YACH,ayBukBuC,gB;YAA5B,WzBtkBX,ayBskBgC,GzBtkBhC,EAAS  
,MAAT,C;YACA,e;;YAEA,c;;UyBmkBA,iB;UACA,IAAK,WAjCyD,cAiCrD,CAAe,oBAAf,CAAJ,C;;QAJCT,OA  
mCO,W;O;KA7CX,C;oFAaA,yB;MAAA,6C;MAAA,oC;MAAA,+D;MAAA,gC;MAAA,sD;QASoB,Q;QAAA,0B;  
QAAhB,OAAgB,cAAhB,C;UAAgB,oC;UACZ,UAAU,YAAy,oBAAZ,C;UzBrjBP,U;UADP,YyBujBe,WzBvjBH,  
WyBujBwB,GzBvjBxB,C;UACL,IAAI,aAAJ,C;YACH,ayBqjBuC,gB;YAA5B,WzBpjBX,ayBojBgC,GzBpjBhC,E  
AAS,MAAT,C;YACA,e;;YAEA,c;;UyBijBA,iB;UACA,IAAK,WAAI,oBAAJ,C;;QAET,OAAO,W;O;KAdX,C;oF  
AiBA,yB;MAAA,6C;MAAA,oC;MAAA,+D;MAAA,gC;MAAA,sE;QAUoB,Q;QAAA,0B;QAAhB,OAAgB,cAAh  
B,C;UAAgB,oC;UACZ,UAAU,YAAy,oBAAZ,C;UzBvkBP,U;UADP,YyBykBe,WzBzkBH,WyBykBwB,GzBzkB  
xB,C;UACL,IAAI,aAAJ,C;YACH,ayBukBuC,gB;YAA5B,WzBtkBX,ayBskBgC,GzBtkBhC,EAAS,MAAT,C;YA  
CA,e;;YAEA,c;;UyBmkBA,iB;UACA,IAAK,WAAI,eAAe,oBAAf,CAAJ,C;;QAET,OAAO,W;O;KAFX,C;qFAkB  
A,yB;MAAA,6C;MAAA,oC;MAAA,kC;MAAA,4C;MAAA,wE;QAQW,sC;QAAA,8C;O;MARX,oDASQ,Y;QAA  
gD,OAAgB,SAAhB,oBAAGb,C;O;MATxE,iDAUQ,mB;QAAuC,gCAAY,oBAAZ,C;O;MAV/C,gF;MAAA,yC;Q  
AQI,2D;O;KARJ,C;wEAeA,yB;MAAA,gE;MAyEA,6C;MAAA,oC;MAAA,gC;MAzEA,uC;QAOW,kBAAM,eAA  
a,gBAAb,C;QAUeA,Q;QAAA,0B;QAAb,OAAa,cAAb,C;UAAa,iC;UACT,WAAy,WAXEmB,SAwEf,CAAU,iBA  
AV,CAAJ,C;;QAXehB,OAYEO,W;O;KAhFX,C;sFAUA,yB;MAAA,gE;MA+BA,6C;MAAA,oC;MAAA,gC;MA/B  
A,uC;QAOW,kBAAa,eAAa,gBAAb,C;QAGCP,gB;QADb,YAAy,C;QACC,0B;QAAb,OAAa,cAAb,C;UAAa,iC;U  
ACT,WAAy,WAjC0B,SAiCtB,EAAU,cAAV,EAAU,sBAAV,WAAmB,iBAAnB,CAAJ,C;;QAJChB,OAkCO,W;O

;KAzCX,C;mGAUA,yB;MAAA,+D;MAUA,gC;MAoLA,6C;MAAA,oC;MA9LA,uC;QAOW,kBAAoB,gB;QA8Ld ,gB;QADb,YAAY,C;QACC,0B;QAAb,OAAa,cAAb,C;UAAa,iC;UApLsB,U;UAAA,cAVQ,SAUR,EAoLT,cApLS, EAoLT,sBApLS,WaOLA,iBApLA,W;YAA6C,6B;;QAVhF,OAWO,W;O;KAIBX,C;uGAUA,yB;MAAA,gC;MAo LA,6C;MAAA,oC;MApLA,oD;QA2LiB,gB;QADb,YAAY,C;QACC,0B;QAAb,OAAa,cAAb,C;UAAa,iC;UApLsB ,U;UAAA,yBAoLT,cApLS,EAoLT,sBApLS,WaOLA,iBApLA,W;YAA6C,6B;;QACHF,OAAO,W;O;KARX,C;0F AWA,yB;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,oD;QAQiB,UACiB,M;QAF9B,YAAY,C;QACC,0B;QAAb,O AAa,cAAb,C;UAAa,iC;UACT,WAA,Y,WAAI,WAAU,cAAV,EAAU,sBAAV,WAAmB,iBAAnB,CAAJ,C;;QACH B,OAAO,W;O;KAVX,C;qFAaA,yB;MAAA,+D;MAUA,gC;MA2IA,6C;MAAA,oC;MArJA,uC;QAOW,kBAAa,g B;QAKJJ,Q;QAAA,0B;QAAhB,OAAgB,cAAhB,C;UAAgB,oC;UA1IK,U;UAAA,cARe,SAQf,CA0IQ,oBA1IR,W; YAAsC,6B;;QAR3D,OASO,W;O;KAhBX,C;yFAUA,yB;MAAA,gC;MA2IA,6C;MAAA,oC;MA3IA,oD;QA+IoB, Q;QAAA,0B;QAAhB,OAAgB,cAAhB,C;UAAgB,oC;UA1IK,U;UAAA,wBA0IQ,oBA1IR,W;YAAsC,6B;;QAC3D ,OAAO,W;O;KANX,C;4EASA,yB;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,oD;QAKiB,Q;QAAA,0B;QAAb,O AAa,cAAb,C;UAAa,iC;UACT,WAA,Y,WAAI,UAAU,iBAAV,CAAJ,C;;QACHB,OAAO,W;O;KAPX,C;IAe4B,4C; MAAA,mB;QAAE,iC;O;K;IAL9B,iC;MAKI,OAAO,qBAaiB,6BAAjB,C;K;wEAGX,yB;MAAA,6C;MAAA,oC;M AAA,gC;MAAA,uC;QAMoB,Q;QAAA,0B;QAAhB,OAAgB,cAAhB,C;UAAgB,oC;UAAM,IAAI,CAAC,UAAU,o BAAV,CAAL,C;YAAyB,OAAO,K;;QACiD,OAAO,I;O;KAPX,C;IAUA,2B;MAMI,OAAO,ECrwByC,qBAAU,C DqwBnD,C;K;wEAGX,yB;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,uC;QAMoB,Q;QAAA,0B;QAAhB,OAAgB, cAAhB,C;UAAgB,oC;UAAM,IAAI,UAAU,oBAAV,CAAJ,C;YAAwB,OAAO,I;;QACrD,OAAO,K;O;KAPX,C;4E AUA,qB;MAKI,OAAO,gB;K;4EAGX,yB;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,uC;QAKoB,Q;QADhB,YAA Y,C;QACI,0B;QAAhB,OAAgB,cAAhB,C;UAAgB,oC;UAAM,IAAI,UAAU,oBAAV,CAAJ,C;YAAwB,qB;;QAC9 C,OAAO,K;O;KANX,C;0EASA,yB;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,gD;QAUoB,Q;QADhB,kBAAkB, O;QACF,0B;QAAhB,OAAgB,cAAhB,C;UAAgB,oC;UAAM,cAAc,UAAU,WAAV,EAAuB,oBAAvB,C;;QACpC, OAAO,W;O;KAXX,C;wFAcA,yB;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,gD;QAYoB,UAA8B,M;QAF9C,YA AY,C;QACZ,kBAAkB,O;QACF,0B;QAAhB,OAAgB,cAAhB,C;UAAgB,oC;UAAM,cAAc,WAAU,cAAV,EAAU, sBAAV,WAAmB,WAAAnB,EAAgC,oBAAhC,C;;QACpC,OAAO,W;O;KAbX,C;mFAgBA,yB;MAAA,uD;MAAA, oC;MAAA,gD;QAYoC,Q;QAHhC,YAAY,wB;QACZ,kBAAkB,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc, UAAU,kCAAI,YAAJ,EAAl,oBAAJ,SAAV,EAAwB,WAAxB,C;;QAEIB,OAAO,W;O;KAdX,C;iGaiBA,yB;MAA A,uD;MAAA,oC;MAAA,gD;QAUI,YAAY,wB;QACZ,kBAAkB,O;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc, UAAU,KAAV,EAAiB,iCAAI,KAAJ,EAAjB,EAA6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,W;O;KAhBX,C;gFam BA,yB;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,oC;QAIoB,Q;QAAA,0B;QAAhB,OAAgB,cAAhB,C;UAAgB,o C;UAAM,OAAO,oBAAP,C;;O;KAJ1B,C;8FAOA,yB;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,oC;QAOiB,UAA a,M;QAD1B,YAAY,C;QACC,0B;QAAb,OAAa,cAAb,C;UAAa,iC;UAAM,QAAO,cAAP,EAAO,sBAAP,WAAgB, iBAAhB,C;;O;KAPvB,C;IAUA,2B;MAGI,OAAO,uB;K;4EAGX,yB;MAMA,uD;MAAA,oC;MANA,sC;QAGW,s B;;UAUP,ICz4BgD,qBAAU,CDy4B1D,C;YAAe,qBAAO,I;YAAP,uB;WACf,cAAc,qBAAK,CAAL,C;UACd,gBA AqB,wB;UACrB,IAAI,cAAa,CAAjB,C;YAAoB,qBAAO,O;YAAP,uB;WACpB,eAdmB,QAcJ,CAAS,oBAAT,C;U ACf,aAAU,CAAV,OAAa,SAAb,M;YACI,QAAQ,qBAAK,CAAL,C;YACR,QAJBe,QAIbP,CAAS,cAAT,C;YACR ,IAAI,2BAAW,CAAX,KAAJ,C;cACI,UAAU,C;cACV,WAAW,C;;UAGnB,qBAAO,O;;;QAvBP,yB;O;KAHJ,C;w FAMA,yB;MAAA,uD;MAAA,oC;MAAA,sC;QAOI,ICz4BgD,qBAAU,CDy4B1D,C;UAAe,OAAO,I;QACTB,cAA c,qBAAK,CAAL,C;QACd,gBAAqB,cAAL,SAAK,C;QACrB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eA Ae,SAAS,oBAAT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,qBAAK,CAAL,C;UACR,QAAQ,SAAS, cAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KApBX, C;4EAuBA,yB;MAAA,sE;MAAA,oC;MAAA,uD;MdzncA,iB;McynCA,sC;QAEiB,Q;QAFb,ICt6BgD,qBAAU,CD s6B1D,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,iCAAK,CAAL,EAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UA CI,QAAQ,SAAS,iCAAK,CAAL,EAAT,C;UACR,WdloCG,MAAO,KckoCO,QdloCP,EckoCiB,CdloCjB,C;;QcooC d,OAAO,Q;O;KAnBX,C;4EAsBA,yB;MAAA,sE;MAAA,oC;MAAA,uD;Md1pCA,iB;McOpCA,sC;QAEiB,Q;QAF b,IC57BgD,qBAAU,CD47B1D,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,iCAAK,CAAL,EAAT,C;QACF,+B;QA Ab,aAAU,CAAV,iB;UACI,QAAQ,SAAS,iCAAK,CAAL,EAAT,C;UACR,WdnqCG,MAAO,KcmqCO,QdnqCP,Ec mqCiB,CdnqCjB,C;;QcqqCd,OAAO,Q;O;KAnBX,C;4EAsBA,yB;MAAA,sE;MAAA,oC;MAAA,uD;MAAA,sC;Q

AaiB,Q;QAFb,ICb9BgD,qBAAU,CDg9B1D,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,iCAAK,CAAL,EAAT,C;QACF,+B;QAAb,AAU,CAAV,iB;UACI,QAAQ,SAAS,iCAAK,CAAL,EAAT,C;UACR,IAAI,2BAAW,CAAX,KA AJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;wFAsBA,yB;MAAA,oC;MAAA,uD;Md3rCA,iB;Mc2rCA ,sC;QAaiB,Q;QAFb,ICt+BgD,qBAAU,CDs+B1D,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,iCAAK,CAAL,EAAT,C ;QACF,+B;QAAb,AAU,CAAV,iB;UACI,QAAQ,SAAS,iCAAK,CAAL,EAAT,C;UACR,WdlsCG,MAAO,KcksC O,QdlsCP,EcksCiB,CdlsCjB,C;;QcosCd,OAAO,Q;O;KAjBX,C;wFAoBA,yB;MAAA,oC;MAAA,uD;Md1tCA,iB; Mc0tCA,sC;QAaiB,Q;QAFb,IC1/BgD,qBAAU,CD0/B1D,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,iCAAK,CAAL, EAAT,C;QACF,+B;QAAb,AAU,CAAV,iB;UACI,QAAQ,SAAS,iCAAK,CAAL,EAAT,C;UACR,WdjuCG,MAA O,KciuCO,QdjuCP,EciuCiB,CdjuCjB,C;;QcmuCd,OAAO,Q;O;KAjBX,C;wFAoBA,yB;MAAA,oC;MAAA,uD;M AAA,sC;QAWiB,Q;QAFb,IC5gCgD,qBAAU,CD4gC1D,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,iCAAK,CAAL,E AAT,C;QACF,+B;QAAb,AAU,CAAV,iB;UACI,QAAQ,SAAS,iCAAK,CAAL,EAAT,C;UACR,IAAI,2BAAW,C AAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;oFAoBA,yB;MAAA,sE;MAAA,oC;MAAA,uD; MAAA,kD;QAaiB,Q;QAFb,ICliCgD,qBAAU,CDkiC1D,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,iCAAK,CAAL ,EAAT,C;QACF,+B;QAAb,AAU,CAAV,iB;UACI,QAAQ,SAAS,iCAAK,CAAL,EAAT,C;UACR,IAAI,UAAW,S AAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;gGAs BA,yB;MAAA,oC;MAAA,uD;MAAA,kD;QAWiB,Q;QAFb,ICtjCgD,qBAAU,CDsjC1D,C;UAAe,OAAO,I;QACt B,eAAe,SAAS,iCAAK,CAAL,EAAT,C;QACF,+B;QAAb,AAU,CAAV,iB;UACI,QAAQ,SAAS,iCAAK,CAAL,E AAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB ,OAAO,Q;O;KAjBX,C;IAoBA,iC;MAOiB,Q;MAFb,ICtkCgD,qBAAU,CDskC1D,C;QAae,OAAO,I;MAcTb,UAA U,qBAAK,CAAL,C;MACG,kC;MAAb,AAU,CAAV,iB;QACI,QAAQ,qBAAK,CAAL,C;QACR,IAAI,MAAM,C AAV,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAGX,2C;MAGI,OAAO,4BAAc,UAAc,C;K;IAGX,iD;MAOiB,Q; MAFb,IC11CgD,qBAAU,CD01C1D,C;QAae,OAAO,I;MAcTb,UAAU,qBAAK,CAAL,C;MACG,kC;MAAb,AAU ,CAAV,iB;QACI,QAAQ,qBAAK,CAAL,C;QACR,IAAI,UAAW,SAAQ,gBAAR,EAAa,cAAb,CAAX,GAA6B,CA AjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,2B;MAGI,OAAO,uB;K;4EAGX,yB;MAMA,uD;MAAA,o C;MANA,sC;QAGW,sB;;UAUP,ICtnCgD,qBAAU,CDsnC1D,C;YAAe,qBAAO,I;YAAP,uB;WACf,cAAc,qBAAK ,CAAL,C;UACd,gBAAqB,wB;UACrB,IAAI,cAAa,CAAjB,C;YAAoB,qBAAO,O;YAAP,uB;WACpB,eAdmB,QA cJ,CAAS,oBAAT,C;UACf,AAU,CAAV,OAAa,SAAb,M;YACI,QAAQ,qBAAK,CAAL,C;YACR,QAjBe,QAiBP, CAAS,cAAT,C;YACR,IAAI,2BAAW,CAAX,KAAJ,C;cACI,UAAU,C;cACV,WAAW,C;;UAGnB,qBAAO,O;;Q AvBP,yB;O;KAHJ,C;wFAMA,yB;MAAA,uD;MAAA,oC;MAAA,sC;QAOI,ICtnCgD,qBAAU,CDsnC1D,C;UAAe ,OAAO,I;QACtB,cAAc,qBAAK,CAAL,C;QACd,gBAAqB,cAAL,SAAK,C;QACrB,IAAI,cAAa,CAAjB,C;UAAo B,OAAO,O;QAC3B,eAAe,SAAS,oBAAT,C;QACf,AAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,qBAAK,CAAL, C;UACR,QAAQ,SAAS,cAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAG nB,OAAO,O;O;KApBX,C;4EAuBA,yB;MAAA,sE;MAAA,oC;MAAA,uD;Md1pCA,iB;MckpCA,sC;QAeiB,Q;QA Fb,ICnpCgD,qBAAU,CDmpC1D,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,iCAAK,CAAL,EAAT,C;QACF,+B;Q AAb,AAU,CAAV,iB;UACI,QAAQ,SAAS,iCAAK,CAAL,EAAT,C;UACR,Wd3pCG,MAAO,Kc2pCO,Qd3pCP,E c2pCiB,Cd3pCjB,C;;Qc6pCd,OAAO,Q;O;KAnBX,C;4EAsBA,yB;MAAA,sE;MAAA,oC;MAAA,uD;MdnrCA,iB; McmrCA,sC;QAeiB,Q;QAFb,ICzqCgD,qBAAU,CDyqC1D,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,iCAAK,CA AL,EAAT,C;QACF,+B;QAAb,AAU,CAAV,iB;UACI,QAAQ,SAAS,iCAAK,CAAL,EAAT,C;UACR,Wd5rCG,M AAO,Kc4rCO,Qd5rCP,Ec4rCiB,Cd5rCjB,C;;Qc8rCd,OAAO,Q;O;KAnBX,C;4EAsBA,yB;MAAA,sE;MAAA,oC; MAAA,uD;MAAA,sC;QAaiB,Q;QAFb,IC7rCgD,qBAAU,CD6rC1D,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,iC AAK,CAAL,EAAT,C;QACF,+B;QAAb,AAU,CAAV,iB;UACI,QAAQ,SAAS,iCAAK,CAAL,EAAT,C;UACR,IA AI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAnBX,C;wFAsBA,yB;MAAA,oC;MAAA,u D;MdptCA,iB;McotCA,sC;QAaiB,Q;QAFb,ICntCgD,qBAAU,CDmtC1D,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,i CAAK,CAAL,EAAT,C;QACF,+B;QAAb,AAU,CAAV,iB;UACI,QAAQ,SAAS,iCAAK,CAAL,EAAT,C;UACR, Wd3tCG,MAAO,Kc2tCO,Qd3tCP,Ec2tCiB,Cd3tCjB,C;;Qc6tCd,OAAO,Q;O;KAjBX,C;wFAoBA,yB;MAAA,oC; MAAA,uD;MdnvCA,iB;McmvCA,sC;QAaiB,Q;QAFb,ICvuCgD,qBAAU,CDuuC1D,C;UAAe,OAAO,I;QACtB,eA Ae,SAAS,iCAAK,CAAL,EAAT,C;QACF,+B;QAAb,AAU,CAAV,iB;UACI,QAAQ,SAAS,iCAAK,CAAL,EAAT ,C;UACR,Wd1vCG,MAAO,Kc0vCO,Qd1vCP,Ec0vCiB,Cd1vCjB,C;;Qc4vCd,OAAO,Q;O;KAjBX,C;wFAoBA,yB

;MAAA,oC;MAAA,uD;MAAA,sC;QAWiB,Q;QAFb,ICzvCgD,qBAAU,CDyvC1D,C;UAAe,OAAO,I;QACtB,eAA  
e,SAAS,iCAAK,CAAL,EAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,iCAAK,CAAL,EAAT,C  
;UACR,IAAI,2BAAW,CAAX,KAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;oFAoBA,yB;MAAA,sE;  
MAAA,oC;MAAA,uD;MAAA,kD;QAaiB,Q;QAFb,IC/wCgD,qBAAU,CD+wC1D,C;UAAe,MAAM,6B;QACrB,e  
AAe,SAAS,iCAAK,CAAL,EAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,QAAQ,SAAS,iCAAK,CAAL,EA  
T,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,O  
AAO,Q;O;KAnBX,C;gGAsBA,yB;MAAA,oC;MAAA,uD;MAAA,kD;QAWiB,Q;QAFb,ICnyCgD,qBAAU,CDmy  
C1D,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,iCAAK,CAAL,EAAT,C;QACF,+B;QAAb,aAAU,CAAV,iB;UACI,Q  
AAQ,SAAS,iCAAK,CAAL,EAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC  
,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAjBX,C;IAoBA,iC;MAOiB,Q;MAFb,ICnzCgD,qBAAU,CDmzC1D,C  
;QAAe,OAAO,I;MACtB,UAAU,qBAAK,CAAL,C;MACG,kC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,qBAAK,CA  
AL,C;QACR,IAAI,MAAM,CAAV,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAGX,2C;MAGI,OAAO,4BAAc,UA  
Ad,C;K;IAGX,iD;MAOiB,Q;MAFb,ICv0CgD,qBAAU,CDu0C1D,C;QAAe,OAAO,I;MACtB,UAAU,qBAAK,CA  
AL,C;MACG,kC;MAAb,aAAU,CAAV,iB;QACI,QAAQ,qBAAK,CAAL,C;QACR,IAAI,UAAW,SAAQ,gBAAR,E  
AAa,cAAb,CAAX,GAA6B,CAAJ,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,4B;MAMI,OCt1CgD,qBA  
AU,C;K;0EDy1C9D,yB;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,uC;QAMoB,Q;QAAA,0B;QAAhB,OAAGB,cA  
AhB,C;UAAgB,oC;UAAM,IAAI,UAAU,oBAAV,CAAJ,C;YAAwB,OAAO,K;;QACrD,OAAO,I;O;KAPX,C;8EA  
UA,yB;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,oC;QAKmC,Q;QAAA,0B;QAAhB,OAAGB,cAAhB,C;UAAgB,  
oC;UAAM,OAAO,oBAAP,C;;QAAR,C,gB;O;KALJ,C;4FAQA,yB;MAAA,6B;MAAA,sC;MA/fA,6C;MAAA,oC;M  
AAA,gC;MA+fA,2BAQiB,yB;QAvGbjB,6C;QAAA,oC;QAAA,gC;eAugBiB,0B;UAAA,4B;YAAE,aAAe,c;YAhg  
BjB,gB;YADb,YAAY,C;YACC,0B;YAAb,OAAa,cAAb,C;cAAa,iC;cAAM,QAAO,cAAP,EAAO,sBAAP,WAAgB  
,iBAAhB,C;;YAggBmB,W;W;S;OAAzB,C;MARjB,oC;QAxfiB,gB;QADb,YAAY,C;QACC,0B;QAAb,OAAa,cA  
Ab,C;UAAa,iC;UAAM,QAAO,cAAP,EAAO,sBAAP,WAAgB,iBAAhB,C;;QAggBnB,gB;O;KARJ,C;8EAWA,yB;  
MAAA,4F;MAAA,uD;MAAA,oC;MAAA,gC;MAAA,uC;QAgBqB,Q;QAHjB,ICn4CgD,qBAAU,CDm4C1D,C;U  
ACI,MAAM,mCAA8B,uCAA9B,C;QACV,kBAakB,qBAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UAC  
I,cAAc,oBAAU,wBAAV,EAAuB,iCAAK,KAAL,EAAvB,E;;QAEIB,OAAO,W;O;KAnBX,C;4FAsBA,yB;MAAA,  
4F;MAAA,uD;MAAA,oC;MAAA,gC;MAAA,uC;QAgBqB,Q;QAHjB,ICz5CgD,qBAAU,CDy5C1D,C;UACI,MA  
AM,mCAA8B,uCAA9B,C;QACV,kBAakB,qBAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,  
oBAAU,KA AV,EAAiB,wBAAjB,EAA8B,iCAAK,KAAL,EAA9B,E;;QAEIB,OAAO,W;O;KAnBX,C;wGAsBA,y  
B;MAAA,uD;MAAA,oC;MAAA,gC;MAAA,uC;QAgBqB,Q;QAHjB,IC/6CgD,qBAAU,CD+6C1D,C;UACI,OAA  
O,I;QACX,kBAakB,qBAAK,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,oBAAU,KA AV,EAAiB,  
wBAAjB,EAA8B,iCAAK,KAAL,EAA9B,E;;QAEIB,OAAO,W;O;KAnBX,C;0FAsBA,yB;MAAA,uD;MAAA,oC;  
MAAA,gC;MAAA,uC;QAIbqB,Q;QAHjB,ICt8CgD,qBAAU,CDs8C1D,C;UACI,OAAO,I;QACX,kBAakB,qBAA  
K,CAAL,C;QACD,+B;QAAjB,iBAAc,CAAd,yB;UACI,cAAc,oBAAU,wBAAV,EAAuB,iCAAK,KAAL,EAAvB,  
E;;QAEIB,OAAO,W;O;KApBX,C;uFAuBA,yB;MAAA,uD;MAAA,4F;MAAA,oC;MAAA,gC;MAAA,uC;QAE0B,  
UAEU,M;QAJhC,YAAY,wB;QACZ,IAAI,QAAQ,CAAZ,C;UAAe,MAAM,mCAA8B,uCAA9B,C;QACrB,kBAak  
B,sBAAI,YAAJ,EAAI,oBAAJ,Q;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,oBAAU,kCAAI,cAAJ,EAAI,sBA  
AJ,WAAV,EAAwB,wBAAxB,E;;QAEIB,OAAO,W;O;KAnBX,C;qGAsBA,yB;MAAA,uD;MAAA,4F;MAAA,oC;  
MAAA,gC;MAAA,uC;QAE0B,Q;QAFtB,YAAY,wB;QACZ,IAAI,QAAQ,CAAZ,C;UAAe,MAAM,mCAA8B,uCA  
A9B,C;QACrB,kBAakB,sBAAI,YAAJ,EAAI,oBAAJ,Q;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,oBAAU,K  
AAV,EAAiB,iCAAI,KA AJ,EAAjB,EAA6B,wBAA7B,E;UACd,qB;;QAEJ,OAAO,W;O;KApBX,C;iHAuBA,yB;M  
AAA,uD;MAAA,oC;MAAA,gC;MAAA,uC;QAE0B,Q;QAFtB,YAAY,wB;QACZ,IAAI,QAAQ,CAAZ,C;UAAe,O  
AAO,I;QACtB,kBAakB,sBAAI,YAAJ,EAAI,oBAAJ,Q;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,oBAAU,K  
AAV,EAAiB,iCAAI,KA AJ,EAAjB,EAA6B,wBAA7B,E;UACd,qB;;QAEJ,OAAO,W;O;KApBX,C;mGAuBA,yB;  
MAAA,uD;MAAA,oC;MAAA,gC;MAAA,uC;QAgB0B,UAEU,M;QAJhC,YAAY,wB;QACZ,IAAI,QAAQ,CAAZ,  
C;UAAe,OAAO,I;QACtB,kBAakB,sBAAI,YAAJ,EAAI,oBAAJ,Q;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,  
oBAAU,kCAAI,cAAJ,EAAI,sBAAJ,WAAV,EAAwB,wBAAxB,E;;QAEIB,OAAO,W;O;KApBX,C;wFAuBA,yB;  
MAAA,gD;MAAA,gE;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,gD;QAgBoB,Q;QAHhB,ICvjDgD,qBAAU,CDu

jD1D,C;UAAe,OAAO,OAAO,OAAP,C;QACgB,kBAAzB,eAAa,mBAAS,CAAT,IAAb,C;QAAiC,8B;QAA9C,af5  
wDO,W;Qe6wDP,kBAAkB,O;QACF,0B;QAAhB,OAAGB,cAAhB,C;UAAgB,oC;UACZ,cAAc,UAAU,WAAV,EA  
AuB,oBAAvB,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KApBX,C;sGAuBA,yB;MAAA,gD;MAAA  
,gE;MAAA,mD;MAAA,oC;MAAA,gD;QAIbKb,gC;QAHd,IC/kDgD,qBAAU,CD+kD1D,C;UAAe,OAAO,OAAO,  
OAAP,C;QACgB,kBAAzB,eAAa,mBAAS,CAAT,IAAb,C;QAAiC,8B;QAA9C,afpyDO,W;QeqyDP,kBAAkB,O;Q  
ACJ,6B;QAAA,mB;QAAA,kB;QAAA,kB;QAAAd,0D;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,iCAA  
K,KAAL,EAA9B,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KArBX,C;4FAwBA,yB;MAAA,qD;MA  
AA,gE;MAAA,oC;MAAA,gC;MAAA,uC;QAgB0B,Q;QAHtB,ICtmDgD,qBAAU,CDsmD1D,C;UAAe,OAAO,W;  
QACtB,sBAAkB,qBAAK,CAAL,CAAIB,C;QACqC,kBAAxB,eAAgB,gBAAhB,C;QAAgC,sBAAI,0BAAJ,C;QA  
A7C,af5zDO,W;Qe6zDe,uB;QAAtB,iBAAc,CAAd,wB;UACI,gBAAc,oBAAU,0BAAV,EAAuB,iCAAk,KAAL,E  
AAvB,E;UACd,MAAO,WAAI,0BAAJ,C;;QAEX,OAAO,M;O;KApBX,C;0GAuBA,yB;MAAA,qD;MAAA,gE;M  
AAA,oC;MAAA,gC;MAAA,uC;QAIb0B,Q;QAHtB,IC9nDgD,qBAAU,CD8nD1D,C;UAAe,OAAO,W;QACtB,sB  
AAkB,qBAAK,CAAL,CAAIB,C;QACqC,kBAAxB,eAAgB,gBAAhB,C;QAAgC,sBAAI,0BAAJ,C;QAA7C,afp1D  
O,W;Qeq1De,uB;QAAtB,iBAAc,CAAd,wB;UACI,gBAAc,oBAAU,KAAV,EAAiB,0BAAjB,EAA8B,iCAAk,KA  
AL,EAA9B,E;UACd,MAAO,WAAI,0BAAJ,C;;QAEX,OAAO,M;O;KArBX,C;0EAwBA,yB;MA9FA,gD;MAAA,  
gE;MAAA,6C;MAAA,oC;MAAA,gC;MA8FA,gD;QAcW,sB;;UA5FS,Q;UAHhB,ICvjDgD,qBAAU,CDujD1D,C;  
YAAe,qBAAO,OA+FH,OA/FG,C;YAAP,uB;WACuB,kBAAzB,eAAa,mBAAS,CAAT,IAAb,C;UAAiC,sBA8F3B,  
OA9F2B,C;UAA9C,af5wDO,W;Ue6wDP,kBA6FmB,O;UA5FH,0B;UAAhB,OAAGB,cAAhB,C;YAAgB,oC;YAC  
Z,cA2FwB,SA3FV,CAAU,WAAV,EAAuB,oBAAvB,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,qBAAO,M;;QA  
wFP,yB;O;KAdJ,C;wFAiBA,yB;MAxFA,gD;MAAA,gE;MAAA,mD;MAAA,oC;MAwFA,gD;QAcW,6B;;UAtFO,  
gC;UAHd,IC/kDgD,qBAAU,CD+kD1D,C;YAAe,4BAAO,OAYFI,OAzFJ,C;YAAP,8B;WACuB,kBAAzB,eAAa,m  
BAAS,CAAT,IAAb,C;UAAiC,sBAwFpB,OAxFoB,C;UAA9C,afpyDO,W;UeqyDP,kBAuF0B,O;UAtFZ,6B;UAA  
A,mB;UAAA,kB;UAAA,kB;UAAAd,0D;YACI,cAqF+B,SArFjB,CAAU,KAAV,EAAiB,WAAjB,EAA8B,iCAAk,K  
AAL,EAA9B,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,4BAAO,M;;QAKFP,gC;O;KAFj,C;4EAKBA,yB;MAAA,6  
C;MAAA,oC;MAAA,gC;MAAA,sC;QAOoB,Q;QADhB,UAAe,C;QACC,0B;QAAhB,OAAGB,cAAhB,C;UAAgB,  
oC;UACZ,YAAO,SAAS,oBAAT,CAAP,I;;QAEJ,OAAO,G;O;KAVX,C;wFAaA,yB;MAAA,6C;MAAA,oC;MAA  
A,gC;MAAA,sC;QAOoB,Q;QADhB,UAAkB,G;QACF,0B;QAAhB,OAAGB,cAAhB,C;UAAgB,oC;UACZ,OAAO,  
SAAS,oBAAT,C;;QAEX,OAAO,G;O;KAVX,C;4EAaA,yB;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,sC;QAUoB  
,Q;QADhB,UAAoB,C;QACJ,0B;QAAhB,OAAGB,cAAhB,C;UAAgB,oC;UACZ,OAAO,SAAS,oBAAT,C;;QAEX,  
OAAO,G;O;KAbX,C;4EAgBA,yB;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,sC;QAUoB,Q;QADhB,UAAe,C;QA  
CC,0B;QAAhB,OAAGB,cAAhB,C;UAAgB,oC;UACZ,YAAO,SAAS,oBAAT,CAAP,I;;QAEJ,OAAO,G;O;KAbX,  
C;4EAgBA,yB;MAAA,SASoB,gB;MATpB,6C;MAAA,oC;MAAA,gC;MAAA,sC;QAUoB,Q;QADhB,Y;QACgB,0  
B;QAAhB,OAAGB,cAAhB,C;UAAgB,oC;UACZ,cAAO,SAAS,oBAAT,CAAP,C;;QAEJ,OAAO,G;O;KAbX,C;4E  
AgBA,yB;MAAA,6C;MAAA,oC;MAAA,gC;M7BppDA,6B;M6BopDA,sC;QAWoB,Q;QADhB,U7BppDmC,c6Bo  
pDnB,C7BppDmB,C;Q6BqpDnB,0B;QAAhB,OAAGB,cAAhB,C;UAAgB,oC;UACZ,M7Bx9DiD,c6Bw9DjD,G7B  
x9D2D,KAAX,G6Bw9DzD,SAAS,oBAAT,C7Bx9DoE,KAAX,IAAf,C;;Q6B09DrD,OAAO,G;O;KAdX,C;4EAI  
A,yB;MAAA,6C;MAAA,oC;MAAA,gC;MblqDA,+B;MakqDA,sC;QAWoB,Q;QADhB,UbjqDqC,eAAW,oBaiqD/  
B,CbjqD+B,CAAX,C;QakqDrB,0B;QAAhB,OAAGB,cAAhB,C;UAAgB,oC;UACZ,Mbt+DmD,eas+DnD,Gbt+D8  
D,KAAX,Kas+D5D,SAAS,oBAAT,Cbt+DuE,KAAX,CAAhB,C;;Qaw+DvD,OAAO,G;O;KAdX,C;IAiBA,oC;MA  
WI,OAAO,sBAAS,IAAT,EAAe,IAAf,EAAcC,IAAtC,C;K;IAGX,+C;MAGBI,OAAO,sBAAS,IAAT,EAAe,IAAf,E  
AAsC,IAAtC,EAAwD,SAAxD,C;K;IAcsB,oC;MAAE,OAAA,EAAG,W;K;IAXiC,0C;MAWI,OAAO,6BAAgB,IA  
AhB,EAAcB,sBAAtB,C;K;IAGX,uD;MAGBI,OAAO,8BAAiB,IAAjB,EAAuB,IAAvB,EAA8C,IAA9C,EAAgE,SA  
AhE,C;K;oFAGX,yB;MAAA,yD;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,6B;MAAA,uC;QAUoB,Q;QAFhB,Y  
AAY,oB;QACZ,aAAa,oB;QACG,0B;QAAhB,OAAGB,cAAhB,C;UAAgB,oC;UACZ,IAAI,UAAU,oBAAV,CAAJ,  
C;YACI,KAAM,gBAAO,OAAP,C;;YAEN,MAAO,gBAAO,OAAP,C;;;QAGf,OAAO,cAAK,KAAL,EAAy,MAA  
Z,C;O;KAjBX,C;oFAoBA,yB;MAAA,yD;MAAA,6C;MAAA,oC;MAAA,gC;MAAA,6B;MAAA,uC;QAUoB,Q;Q  
AFhB,YAAY,oB;QACZ,aAAa,oB;QACG,0B;QAAhB,OAAGB,cAAhB,C;UAAgB,oC;UACZ,IAAI,UAAU,oBAA  
V,CAAJ,C;YACI,KAAM,gBAAO,OAAP,C;;YAEN,MAAO,gBAAO,OAAP,C;;;QAGf,OAAO,cAAK,KAAM,WA



AX,EAAuB,MAAO,WAA9B,C;O;KAjBX,C;IAqCgD,6B;MAAE,OAAA,EAAG,W;K;IAjBrD,2D;MAgB4C,oB;Q  
AAA,OAAy,C;MAAG,8B;QAAA,iBAA0B,K;MACjF,OAAO,sBAAS,IAAT,EAAe,IAAf,EAAqB,cAARb,EAAqC  
,eAArC,C;K;IAGX,sE;MAkBgD,oB;QAAA,OAAy,C;MAAG,8B;QAAA,iBAA0B,K;MAQhE,Q;MAPrB,oBAAo  
B,IAApB,EAA0B,IAA1B,C;MACA,eAAe,SAAK,O;MACpB,qBAAqB,YAAW,IAAX,SAAsB,WAAW,IAAX,KA  
AmB,CAAvB,GAA0B,CAA1B,GAAiC,CAAnD,K;MACrB,aAAa,iBAAa,cAAb,C;MACb,YAAy,C;MACZ,OAAg  
B,CAAT,qBAAiB,QAAxB,C;QACI,UAAU,QAAQ,IAAR,I;QACO,IAAI,MAAM,CAAN,IAAW,MAAM,QAArB,  
C;UAAiC,IAAI,cAAJ,C;YAAoB,e;;YAAc,K;;UAAa,U;QAAjG,qB;QACA,MAAO,WAAI,UAAU,8BAAy,KAAZ,  
EAAmB,UAAAnB,CAAV,CAAJ,C;QACP,gBAAS,IAAT,I;MAEJ,OAAO,M;K;IAoB6C,qC;MAAE,OAAA,EAAG,  
W;K;IAjB7D,iE;MAgBoD,oB;QAAA,OAAy,C;MAAG,8B;QAAA,iBAA0B,K;MACzF,OAAO,8BAAiB,IAAjB,E  
AAuB,IAAvB,EAA6B,cAA7B,EAA6C,uBAA7C,C;K;IAwByB,2F;MAAA,wB;QAC5B,UAAU,QAAQ,YAAR,I;Q  
ACV,iBAAqB,MAAM,CAAN,IAAW,MAAM,4BAArB,GAA6B,4BAA7B,GAAyC,G;QAD1D,OAEA,kBAAU,0C  
AAy,KAAZ,EAAmB,UAAAnB,CAAV,C;O;K;IAxBR,gF;MAkBwD,sB;QAAA,SAAY,C;MAAG,8B;QAAA,iBAA  
0B,K;MAC7F,oBAAoB,IAApB,EAA0B,MAA1B,C;MACA,cAAc,KAAK,cAAJ,GAAoB,yBAApB,GAAiC,WAA  
Q,mBAAS,IAAT,GAAgB,CAAhB,IAAR,CAAI,EAAkE,MAAlE,C;MACd,OAA4B,OAAb,aAAR,OAAQ,CAAA,  
EAAI,qDAAJ,C;K;IAOhC,kC;MAkBI,ad3hEO,MAAO,Kc2hEU,gBd3hEV,EcghEH,KAW2B,Od3hExB,C;Mc4hE  
d,WAAW,iBAAa,MAAb,C;MACX,aAAU,CAAV,MAAkB,MAAlB,M;QACI,IAAK,WAdqB,GAcP,iCAAK,CAA  
L,EAdO,EAcE,YAdrB,KAcqB,YAAM,CAAN,EAdF,CACrB,C;;MAdT,OAgBO,I;K;wEAbX,yB;MAAA,gE;MAA  
A,oC;MdzHEA,iB;McyHEA,8C;QAQI,ad3hEO,MAAO,Kc2hEK,SAAK,Od3hEV,Ec2hEkB,KAAM,Od3hExB,C;Qc  
4hEd,WAAW,eAAa,MAAb,C;QACX,aAAU,CAAV,MAAkB,MAAlB,M;UACI,IAAK,WAAI,UAAU,iCAAK,CA  
AL,EAAV,EAAmB,6BAAM,CAAN,EAAAnB,CAAJ,C;;QAET,OAAO,I;O;KAbX,C;IAgBA,kC;MASW,sB;;QAAp,  
WAAW,mBAAS,CAAT,I;QACX,IAAI,OAAO,CAAX,C;UAAc,qBAAO,W;UAAP,uB;SACd,aAAa,iBAAa,IAAb,  
C;QACb,iBAAc,CAAd,UAAsB,IAAtB,U;UACI,MAAO,WAjBkB,GaiBJ,iCAAK,KAAL,EAjBI,EaiBS,iCAAK,Q  
AAQ,CAAR,IAAL,EAjBT,CAiBIB,C;;QAEX,qBAAO,M;;MAnBP,yB;K;uFAGJ,yB;MAAA,qD;MAAA,gE;MAA  
A,oC;MAAA,uC;QAUI,WAAW,mBAAS,CAAT,I;QACX,IAAI,OAAO,CAAX,C;UAAc,OAAO,W;QACrB,aAAa,  
eAAa,IAAb,C;QACb,iBAAc,CAAd,UAAsB,IAAtB,U;UACI,MAAO,WAAI,UAAU,iCAAK,KAAL,EAAV,EAAu  
B,iCAAK,QAAQ,CAAR,IAAL,EAAvB,CAAJ,C;;QAEX,OAAO,M;O;KAhBX,C;IAwBoB,8C;MAAA,mB;QAAE,  
OAAK,WAAI,eAAK,C;O;K;IAL3B,kC;MAIQ,wC;MAAA,S;QAaKB,OCniE0B,qBAAU,C;ODmiE1D,S;QAAiC,  
OAAO,W;MACxC,oCAAgB,8BAAhB,C;K;IAQgB,8C;MAAA,mB;QAAE,OAAK,WAAI,eAAK,C;O;K;IAL3B,k  
C;MAIQ,wC;MAAA,S;QAaKB,OC3iE0B,qBAAU,C;OD2iE1D,S;QAAiC,OAAO,e;MACxC,oCAAgB,8BAAhB,C  
;K;IEpwEkC,yC;MAAA,wB;QAAW,OAAA,aAAK,KAAL,ChCsLV,K;O;K;liClH,wC;MAAA,wB;QAAW,OAA  
A,aAAK,KAAL,ChC8NV,K;O;K;liC9NC,yC;MAAA,wB;QAAW,OAAA,aAAK,KAAL,CjByOV,K;O;K;IkBzOC,  
0C;MAAA,wB;QAAW,OAAA,aAAK,KAAL,CjCiMV,K;O;K;4FkC5PzC,qB;MAUI,OAAO,sBAAI,CAAJ,C;K;6F  
AGX,qB;MAUI,OAAO,sBAAI,CAAJ,C;K;6FAGX,qB;MAUI,OAAO,sBAAI,CAAJ,C;K;6FAGX,qB;MAUI,OAA  
O,sBAAI,CAAJ,C;K;4FAGX,qB;MAUI,OAAO,sBAAI,CAAJ,C;K;6FAGX,qB;MAUI,OAAO,sBAAI,CAAJ,C;K;  
6FAGX,qB;MAUI,OAAO,sBAAI,CAAJ,C;K;6FAGX,qB;MAUI,OAAO,sBAAI,CAAJ,C;K;4FAGX,qB;MAUI,OA  
AO,sBAAI,CAAJ,C;K;6FAGX,qB;MAUI,OAAO,sBAAI,CAAJ,C;K;6FAGX,qB;MAUI,OAAO,sBAAI,CAAJ,C;K  
;6FAGX,qB;MAUI,OAAO,sBAAI,CAAJ,C;K;4FAGX,qB;MAUI,OAAO,sBAAI,CAAJ,C;K;6FAGX,qB;MAUI,O  
AAO,sBAAI,CAAJ,C;K;6FAGX,qB;MAUI,OAAO,sBAAI,CAAJ,C;K;6FAGX,qB;MAUI,OAAO,sBAAI,CAAJ,C;  
K;4FAGX,qB;MAUI,OAAO,sBAAI,CAAJ,C;K;6FAGX,qB;MAUI,OAAO,sBAAI,CAAJ,C;K;6FAGX,qB;MAUI,  
OAAO,sBAAI,CAAJ,C;K;6FAGX,qB;MAUI,OAAO,sBAAI,CAAJ,C;K;uGAuCX,yB;MA8gHI,8D;MA9gHJ,iD;Q  
ASe,oBAAS,C;QAAT,S;UAAc,gBAqgHT,cAAR,iBAAQ,C;SArgHhB,OAAO,OAAsC,sBAAI,KAAJ,CAATC,GA  
AsD,aAAa,KAAb,C;O;KATjE,C;uGAYa,yB;MA0gHI,8D;MA1gHJ,iD;QASe,oBAAS,C;QAAT,S;UAAc,gBAigH  
T,cAAR,iBAAQ,C;SAjgHhB,OAAO,OAAsC,sBAAI,KAAJ,CAATC,GAAsD,aAAa,KAAb,C;O;KATjE,C;uGAYa,  
yB;MASgHI,8D;MATgHJ,iD;QASe,oBAAS,C;QAAT,S;UAAc,gBA6/GT,cAAR,iBAAQ,C;SA7/GhB,OAAO,OAA  
sC,sBAAI,KAAJ,CAATC,GAAsD,aAAa,KAAb,C;O;KATjE,C;uGAYa,yB;MAkgHI,8D;MAlgHJ,iD;QASe,oBAA  
S,C;QAAT,S;UAAc,gBAy/GT,cAAR,iBAAQ,C;SAz/GhB,OAAO,OAAsC,sBAAI,KAAJ,CAATC,GAAsD,aAAa,K  
AAb,C;O;KATjE,C;uGAYa,yB;MAAA,sD;MAAA,mC;QASI,OAAy,UAAL,SAAK,EAAU,KAAV,C;O;KAThB,  
C;uGAYa,yB;MAAA,sD;MAAA,mC;QASI,OAAy,UAAL,SAAK,EAAU,KAAV,C;O;KAThB,C;uGAYa,yB;MA

AA,sD;MAAA,mC;QASI,OAAY,UAAL,SAAK,EAAU,KAAV,C;O;KATHB,C;uGAYA,yB;MAAA,sD;MAAA,mC;QASI,OAAY,UAAL,SAAK,EAAU,KAAV,C;O;KATHB,C;IFAYA,gC;MASW,sB;;QA8NS,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UAAM,IA9NH,SA8NO,CAAU,OAAY,CAAJ,C;YAAwB,qBAAO,O;YAAP,uB;;QAC9C,qBAAO,I;;;MA/NP,yB;K;IFAGJ,gC;MASW,sB;;QA6NS,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UAAM,IA7NH,SA6NO,CAAU,OAAY,CAAJ,C;YAAwB,qBAAO,O;YAAP,uB;;QAC9C,qBAAO,I;;;MA9NP,yB;K;IFAGJ,gC;MASW,sB;;QA4NS,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UAAM,IA5NH,SA4NO,CAAU,OAAY,CAAJ,C;YAAwB,qBAAO,O;YAAP,uB;;QAC9C,qBAAO,I;;;MA7NP,yB;K;IFAGJ,gC;MASW,sB;;QA2NS,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UAAM,IA3NH,SA2NO,CAAU,OAAY,CAAJ,C;YAAwB,qBAAO,O;YAAP,uB;;QAC9C,qBAAO,I;;;MA5NP,yB;K;yFAGJ,yB;MA4nBA,+C;MAkuFI,0D;MA91GJ,uC;QASW,qB;;UA4nBO,Q;UAAA,OAAa,SAYtFX,YAAR,iBAAQ,CAZtFW,CAAb,W;UAAAd,OAAc,cAAAd,C;YAAc,uB;YACV,cAAc,sBAAK,KAAL,C;YACd,IA9nBc,SA8nBV,CAAU,OAAY,CAAJ,C;cAAwB,oBAAO,O;cAAP,sB;;UAE5B,oBAAO,I;;;QahoBP,wB;O;KATJ,C;yFAYA,yB;MAgoBA,+C;MA0tFI,0D;MA11GJ,uC;QASW,qB;;UAgoBO,Q;UAAA,OAAa,SAitFX,YAAR,iBAAQ,CAjtFW,CAAb,W;UAAAd,OAAc,cAAAd,C;YAAc,uB;YACV,cAAc,sBAAK,KAAL,C;YACd,IAloBc,SAkoBV,CAAU,OAAY,CAAJ,C;cAAwB,oBAAO,O;cAAP,sB;;UAE5B,oBAAO,I;;;QApoBP,wB;O;KATJ,C;yFAYA,yB;MAooBA,+C;MAktFI,0D;MA11GJ,uC;QASW,qB;;UAooBO,Q;UAAA,OAAa,SAYsFX,YAAR,iBAAQ,CAzsFW,CAAb,W;UAAAd,OAAc,cAAAd,C;YAAc,uB;YACV,cAAc,sBAAK,KAAL,C;YACd,IAtoBc,SAsoBV,CAAU,OAAY,CAAJ,C;cAAwB,oBAAO,O;cAAP,sB;;UAE5B,oBAAO,I;;;QAxoBP,wB;O;KATJ,C;yFAYA,yB;MAwoBA,+C;MA0sFI,0D;MA11GJ,uC;QASW,qB;;UAwoBO,Q;UAAA,OAAa,SAYsFX,YAAR,iBAAQ,CAjsFW,CAAb,W;UAAAd,OAAc,cAAAd,C;YAAc,uB;YACV,cAAc,sBAAK,KAAL,C;YACd,IA1oBc,SA0oBV,CAAU,OAAY,CAAJ,C;cAAwB,oBAAO,O;cAAP,sB;;UAE5B,oBAAO,I;;;QA5oBP,wB;O;KATJ,C;mFAYA,yB;MAAA,8C;MnCpHA,6B;MmCoHA,4B;QAQI,OnCIHmC,cmCkHpB,MAAR,iBAAQ,CnCIHoB,C;O;KmC0GvC,C;mFAWA,yB;MAAA,8C;MnBhHA,+B;MmBgHA,4B;QAQI,OnB9GsC,emB8GvB,MAAR,iBAAQ,CnB9GuB,C;O;KmBsG1C,C;mFAWA,yB;MAAA,8C;MpCxLA,+B;MoCwLA,4B;QAQI,OpCtLsC,eoCsLvB,MAAR,iBAAQ,CpCtLuB,C;O;KoC8K1C,C;mFAWA,yB;MAAA,8C;MICtLA,iC;MkCsLA,4B;QAQI,OiCpLyC,gBkCoL1B,MAAR,iBAAQ,CiCpL0B,C;O;KkC4K7C,C;mFAWA,yB;MAAA,iE;MAAA,uC;QAQoB,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UAAM,IAAI,UAAU,OAAY,CAAJ,C;YAAwB,OAAO,O;;QACrD,MAAM,gCAAuB,mDAAvB,C;O;KATV,C;mFAYA,yB;MAAA,iE;MAAA,uC;QAQoB,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UAAM,IAAI,UAAU,OAAY,CAAJ,C;YAAwB,OAAO,O;;QACrD,MAAM,gCAAuB,mDAAvB,C;O;KATV,C;mFAYA,yB;MAAA,iE;MAAA,uC;QAQoB,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UAAM,IAAI,UAAU,OAAY,CAAJ,C;YAAwB,OAAO,O;;QACrD,MAAM,gCAAuB,mDAAvB,C;O;KATV,C;mFAYA,yB;MAAA,iE;MAAA,uC;QAQoB,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UAAM,IAAI,UAAU,OAAY,CAAJ,C;YAAwB,OAAO,O;;QACrD,MAAM,gCAAuB,mDAAvB,C;O;KATV,C;IAYA,mC;MAMI,OAAW,mBAAJ,GAAe,IAAf,GAAYB,sBAAK,CAAL,C;K;IAGpC,mC;MAMI,OAAW,mBAAJ,GAAe,IAAf,GAAYB,sBAAK,CAAL,C;K;IAGpC,mC;MAMI,OAAW,mBAAJ,GAAe,IAAf,GAAYB,sBAAK,CAAL,C;K;+FAGpC,gC;MAOoB,Q;MAAA,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QAAM,IAAI,UAAU,OAAY,CAAJ,C;UAAwB,OAAO,O;;MACrD,OAAO,I;K;+FAGX,gC;MAOoB,Q;MAAA,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QAAM,IAAI,UAAU,OAAY,CAAJ,C;UAAwB,OAAO,O;;MACrD,OAAO,I;K;+FAGX,gC;MAOoB,Q;MAAA,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QAAM,IAAI,UAAU,OAAY,CAAJ,C;UAAwB,OAAO,O;;MACrD,OAAO,I;K;2FAGX,yB;MAkqGI,8D;MA1qGJ,iD;QAOe,oBAAS,C;QAAT,S;UAAc,gBA2pGT,cAAR,iBAAQ,C;SA3pGhB,OAAO,OAAc,sBAAI,KAAJ,CAAtC,GAAsD,aAAa,KAAb,C;O;KAPjE,C;2FAUA,yB;MAgqGI,8D;MAhGJ,iD;QAOe,oBAAS,C;QAAT,S;UAAc,gBAypGT,cAAR,iBAAQ,C;SAzpGhB,OAAO,OAAc,sBAAI,KAAJ,CAAtC,GAAsD,aAAa,KAAb,C;O;KAPjE,C;2FAUA,yB;MA8pGI,8D;MA9pGJ,iD;QAOe,oBAAS,C;QAAT,S;UAAc,gBAupGT,cAAR,iBAAQ,C;SAvpGhB,OAAO,OAAc,sBAAI,KAAJ,CAAtC,GAAsD,aAAa,KAAb,C;O;KAPjE,C;2FAUA,yB;MA4pGI,8D;MA5pGJ,iD;QAOe,oBAAS,C;QAAT,S;UAAc,gBAqpGT,cAAR,iBAAQ,C;SArpGhB,OAAO,OAAc,sBAAI,KAAJ,CAAtC,GAAsD,aAAa,KAAb,C;O;KAPjE,C;IAUA,wC;MAQe,oBAAS,C;MAAT,S;QAAC,gBAknGT,gBAAR,iBAAQ,C;OAlnGhB,OAAO,OAAc,sBAAI,KAAJ,CAAtC,GAAsD,I;K;IAGjE,wC;MAQe,oBA

AS,C;MAAT,S;QAAC,gBA+mGT,gBAAR,iBAAQ,C;OA/mGhB,OAAO,OAAcC,sBAAI,KAAJ,CAAtC,GAAsD,I;K;IAGjE,wC;MAQe,oBAAS,C;MAAT,S;QAAC,gBA4mGT,gBAAR,iBAAQ,C;OA5mGhB,OAAO,OAAcC,sBAAI,KAAJ,CAAtC,GAAsD,I;K;IAGjE,wC;MAQe,oBAAS,C;MAAT,S;QAAC,gBAYmGT,gBAAR,iBAAQ,C;OAZmGhB,OAAO,OAAcC,sBAAI,KAAJ,CAAtC,GAAsD,I;K;uFAGjE,yB;MAAA,kD;MAAA,qC;QAOI,OAAe,QAAR,iBAAQ,EAAQ,OnCtdU,KmCsdIB,C;O;KAPnB,C;uFAUA,yB;MAAA,kD;MAAA,qC;QAOI,OAAe,QAAR,iBAAQ,EAAQ,OnBrdY,KmBqdpB,C;O;KAPnB,C;uFAUA,yB;MAAA,kD;MAAA,qC;QAOI,OAAe,QAAR,iBAAQ,EAAQ,OpClhBY,KoCkhBpB,C;O;KAPnB,C;uFAUA,yB;MAAA,kD;MAAA,qC;QAOI,OAAe,QAAR,iBAAQ,EAAQ,OI CjhBc,KkCihBtB,C;O;KAPnB,C;uFAUA,yB;MAAA,sC;MnC5ZA,6B;MmC4ZA,0BAOGC,yB;QnCnahC,6B;emCmagC,6B;UAAA,qB;YAAE,yBnCzZK,cmCyZK,EnCzZL,CmCyZL,C;W;S;OAAF,C;MAPhC,uC;QAOMB,kBAAR,iB;QAAQ,uB;;UtC40Bf,0D;YACI,IsC70B0B,UnCzZK,cHsuCjB,YAAK,KAAL,CGtuCiB,CmCyZL,CtC60B1B,C;cACI,sBAAO,K;cAAP,wB;;UAGR,sBAAO,E;;;QsCj1BP,0B;O;KAPJ,C;iGAUA,yB;MAAA,sC;MnBvZA,+B;MmBuZA,0BAOGC,yB;QnB9ZhC,+B;emB8ZgC,6B;UAAA,qB;YAAE,yBnBpZQ,emBoZE,EnBpZF,CmBoZR,C;W;S;OAAF,C;MAPhC,uC;QAOMB,kBAAR,iB;QAAQ,uB;;UtC80Bf,0D;YACI,IsC/0B0B,UnBpZQ,enBmuCpB,YAAK,KAAL,CmBnuCoB,CmBoZR,CtC+0B1B,C;cACI,sBAAO,K;cAAP,wB;;UAGR,sBAAO,E;;;QsCn1BP,0B;O;KAPJ,C;iGAUA,yB;MAAA,sC;MpC9dA,+B;MoC8dA,0BAOGC,yB;QpCrehC,+B;eoCqegC,6B;UAAA,qB;YAAE,yBpC3dQ,eoC2dE,EpC3dF,CoC2dR,C;W;S;OAAF,C;MAPhC,uC;QAOMB,kBAAR,iB;QAAQ,uB;;UtCgyBf,0D;YACI,IsCjyB0B,UpC3dQ,eF4vCpB,YAAK,KAAL,CE5vCoB,CoC2dR,CtCiyB1B,C;cACI,sBAAO,K;cAAP,wB;;UAGR,sBAAO,E;;;QsCryBP,0B;O;KAPJ,C;iGAUA,yB;MAAA,sC;MIC3dA,iC;MkC2dA,0BAOGC,yB;QIClehC,iC;ekCkegC,6B;UAAA,qB;YAAE,yBICxdW,gBkCwdD,ElCxdC,CkCwdX,C;W;S;OAAF,C;MAPhC,uC;QAOMB,kBAAR,iB;QAAQ,uB;;UtCkyBf,0D;YACI,IsCnyB0B,UICxdW,gBJ2vCvB,YAAK,KAAL,CI3vCuB,CkCwdX,CtCmyB1B,C;cACI,sBAAO,K;cAAP,wB;;UAGR,sBAAO,E;;;QsCvyBP,0B;O;KAPJ,C;+FAUA,yB;MAAA,sC;MtCm5BA,0D;MAAA,+C;MGv1CA,6B;MmCocA,yBAO+B,yB;QnC3c/B,6B;emC2c+B,6B;UAAA,qB;YAAE,yBnCjcm,cmCicI,EnCjC,CmCicN,C;W;S;OAAF,C;MAP/B,uC;QAOMB,kBAAR,iB;QAAQ,sB;;UtCg5BD,Q;UAAA,OAAQ,SAAR,wBAAQ,CAAR,W;UAAAd,OAAc,cAAAd,C;YAAc,uB;YACV,IsCj5ByB,UnCjcm,cHk1CjB,YAAK,KAAL,CGI1CiB,CmCicN,CtCi5BzB,C;cACI,qBAAO,K;cAAP,uB;;UAGR,qBAAO,E;;;QsCr5BP,yB;O;KAPJ,C;+FAUA,yB;MAAA,sC;MtCq5BA,0D;MAAA,+C;MmBp1CA,+B;MmB+bA,yBAO+B,yB;QnBtc/B,+B;emBsc+B,6B;UAAA,qB;YAAE,yBnB5bS,emB4bC,EnB5bD,CmB4bT,C;W;S;OAAF,C;MAP/B,uC;QAOMB,kBAAR,iB;QAAQ,sB;;UtCk5BD,Q;UAAA,OAAQ,SAAR,wBAAQ,CAAR,W;UAAAd,OAAc,cAAAd,C;YAAc,uB;YACV,IsCn5ByB,UnB5bS,enB+0CpB,YAAK,KAAL,CmB/0CoB,CmB4bT,CtCm5BzB,C;cACI,qBAAO,K;cAAP,uB;;UAGR,qBAAO,E;;;QsCv5BP,yB;O;KAPJ,C;+FAUA,yB;MAAA,sC;MtCu2BA,0D;MAAA,+C;ME72CA,+B;MoCsgBA,yBAO+B,yB;QpC7gB/B,+B;eoC6gB+B,6B;UAAA,qB;YAAE,yBpCngBS,eoCmgBC,EpCngBD,CoCmgBT,C;W;S;OAAF,C;MAP/B,uC;QAOMB,kBAAR,iB;QAAQ,sB;;UtCo2BD,Q;UAAA,OAAQ,SAAR,wBAAQ,CAAR,W;UAAAd,OAAc,cAAAd,C;YAAc,uB;YACV,IsCr2ByB,UpCngBS,eFw2CpB,YAAK,KAAL,CEx2CoB,CoCmgBT,CtCq2BzB,C;cACI,qBAAO,K;cAAP,uB;;UAGR,qBAAO,E;;;QsCz2BP,yB;O;KAPJ,C;+FAUA,yB;MAAA,sC;MtCy2BA,0D;MAAA,+C;MI52CA,iC;MkCmgBA,yBAO+B,yB;QIC1gB/B,iC;ekC0gB+B,6B;UAAA,qB;YAAE,yBIChgBY,gBkCggBF,ElChgBE,CkCggBZ,C;W;S;OAAF,C;MAP/B,uC;QAOMB,kBAAR,iB;QAAQ,sB;;UtCs2BD,Q;UAAA,OAAQ,SAAR,wBAAQ,CAAR,W;UAAAd,OAAc,cAAAd,C;YAAc,uB;YACV,IsCv2ByB,UIChgBY,gBJu2CvB,YAAK,KAAL,Civ2CuB,CkCggBZ,CtCu2BzB,C;cACI,qBAAO,K;cAAP,uB;;UAGR,qBAAO,E;;;QsC32BP,yB;O;KAPJ,C;+FAUA,yB;MAAA,4C;MnC5eA,6B;MmC4eA,4B;QAWI,OnC7emC,cmC6epB,KAAR,iBAAQ,CnC7eoB,C;O;KmCkevC,C;iFACa,yB;MAAA,4C;MnB3eA,+B;MmB2eA,4B;QAWI,OnB5esC,emB4evB,KAAR,iBAAQ,CnB5euB,C;O;Kmbie1C,C;iFACa,yB;MAAA,4C;MpCtjBA,+B;MoCsjBA,4B;QAWI,OpCvjBsC,eoCujBvB,KAAR,iBAAQ,CpCvjBuB,C;O;KoC4iB1C,C;iFACa,yB;MAAA,4C;MICvjBA,iC;MkCujBA,4B;QAWI,OICxjByC,gBkCwjB1B,KAAR,iBAAQ,CICxjB0B,C;O;KkC6iB7C,C;iFACa,yB;MAAA,+C;MAAA,iE;MA83FI,0D;MA93FJ,uC;QAWkB,Q;QAAA,OAAa,SAm3FX,YAn3FF,SAm3FN,QAAQ,CAn3FW,CAAb,W;QAAAd,OAAc,cAAAd,C;UAAc,uB;UACV,cAAc,sBAAK,KAAL,C;UACd,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QAEnC,MAAM,gCAAuB,mDAAvB,C;O;KafV,C;iFakBA,yB;MAAA,+C;MAAA,iE;MAo3FI,0D;MAP3FJ,uC;QAWkB,Q;QAAA,OAAa,SAy2FX,YAz2FF,SAy2FN,QAAQ,CAz2FW,CAAb,W;QAAAd,OAAc,cAAAd,C;UAAc,uB;UACV,cAAc,sBAAK,KAAL,C;UACd,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QAEnC,MAAM,gCAAuB,mDAAvB,C;O;KafV,C;iFakBA,yB;MAAA

,+C;MAAA,iE;MA02FI,0D;MA12FJ,uC;QAWkB,Q;QAAA,OAAa,SA+1FX,YA/1FF,SA+1FN,QAAQ,CA/1FW,C  
AAb,W;QAAd,OAAc,cAAd,C;UAAc,uB;UACV,cAAc,sBAAK,KAAL,C;UACd,IAAI,UAAU,OAAV,CAAJ,C;Y  
AAwB,OAAO,O;;QAEnC,MAAM,gCAAuB,mDAAvB,C;O;KafV,C;iFakBA,yB;MAAA,+C;MAAA,iE;MAG2FI,  
0D;MAh2FJ,uC;QAWkB,Q;QAAA,OAAa,SAq1FX,YAr1FF,SAq1FN,QAAQ,CAr1FW,CAAb,W;QAAd,OAAc,c  
AAd,C;UAAc,uB;UACV,cAAc,sBAAK,KAAL,C;UACd,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QAEnC,  
MAAM,gCAAuB,mDAAvB,C;O;KafV,C;+FAkBA,yB;MAAA,0D;MAAA,qC;QAOI,OAAe,YAAR,iBAAQ,EA  
AY,OnC9sBM,KmC8sBIB,C;O;KAPnB,C;+FAUA,yB;MAAA,0D;MAAA,qC;QAOI,OAAe,YAAR,iBAAQ,EAA  
Y,OnB7sBQ,KmB6sBpB,C;O;KAPnB,C;+FAUA,yB;MAAA,0D;MAAA,qC;QAOI,OAAe,YAAR,iBAAQ,EAA  
Y,OpC1wBQ,KoC0wBpB,C;O;KAPnB,C;+FAUA,yB;MAAA,0D;MAAA,qC;QAOI,OAAe,YAAR,iBAAQ,EAA  
Y,OICzwBU,KkCywBtB,C;O;KAPnB,C;IAUA,kC;MAQI,OAAW,mBAAJ,GAAe,IAAf,GAAyB,sBAAK,iBAAO,CAA  
P,IAAL,C;K;IAGpC,kC;MAQI,OAAW,mBAAJ,GAAe,IAAf,GAAyB,sBAAK,iBAAO,CAAP,IAAL,C;K;IAGpC,k  
C;MAQI,OAAW,mBAAJ,GAAe,IAAf,GAAyB,sBAAK,iBAAO,CAAP,IAAL,C;K;IAGpC,kC;MAQI,OAAW,mB  
AAJ,GAAe,IAAf,GAAyB,sBAAK,iBAAO,CAAP,IAAL,C;K;6FAGpC,yB;MAAA,+C;MAkuFI,0D;MALuFJ,uC;Q  
ASkB,Q;QAAA,OAAa,SAytFX,YAZtFF,SAytFN,QAAQ,CAZtFW,CAAb,W;QAAd,OAAc,cAAd,C;UAAc,uB;UA  
CV,cAAc,sBAAK,KAAL,C;UACd,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QAEnC,OAAO,I;O;KAbX,  
C;6FAGBA,yB;MAAA,+C;MA0tFI,0D;MA1tFJ,uC;QASKB,Q;QAAA,OAAa,SAitFX,YAjtFF,SAitFN,QAAQ,CAjt  
FW,CAAb,W;QAAd,OAAc,cAAd,C;UAAc,uB;UACV,cAAc,sBAAK,KAAL,C;UACd,IAAI,UAAU,OAAV,CAAJ  
,C;YAAwB,OAAO,O;;QAEnC,OAAO,I;O;KAbX,C;6FAGBA,yB;MAAA,+C;MAktFI,0D;MAItFJ,uC;QASKB,Q;Q  
AAA,OAAa,SAYSFX,YAZsFF,SAysFN,QAAQ,CAZsFW,CAAb,W;QAAd,OAAc,cAAd,C;UAAc,uB;UACV,cAAc  
,sBAAK,KAAL,C;UACd,IAAI,UAAU,OAAV,CAAJ,C;YAAwB,OAAO,O;;QAEnC,OAAO,I;O;KAbX,C;6FAGB  
A,yB;MAAA,+C;MA0sFI,0D;MA1sFJ,uC;QASKB,Q;QAAA,OAAa,SAisFX,YAjsFF,SAisFN,QAAQ,CAjsFW,CA  
Ab,W;QAAd,OAAc,cAAd,C;UAAc,uB;UACV,cAAc,sBAAK,KAAL,C;UACd,IAAI,UAAU,OAAV,CAAJ,C;YA  
AwB,OAAO,O;;QAEnC,OAAO,I;O;KAbX,C;qFAGBA,yB;MAAA,mC;MAAA,gD;MAAA,4B;QASI,OAAO,kBA  
AO,cAAP,C;O;KATX,C;qFAYA,yB;MAAA,mC;MAAA,gD;MAAA,4B;QASI,OAAO,kBAAO,cAAP,C;O;KATX,  
C;qFAYA,yB;MAAA,mC;MAAA,gD;MAAA,4B;QASI,OAAO,kBAAO,cAAP,C;O;KATX,C;qFAYA,yB;MAAA,  
mC;MAAA,gD;MAAA,4B;QASI,OAAO,kBAAO,cAAP,C;O;KATX,C;IAYA,sC;MAQI,IAAI,mBAAJ,C;QACI,M  
AAM,2BAAuB,iBAAvB,C;MACV,OAAO,sBAAL,MAAO,iBAAQ,cAAR,CAAX,C;K;IAGX,sC;MAQI,IAAI,mB  
AAJ,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,sBAAL,MAAO,iBAAQ,cAAR,CAAX,C;K;IAGX,sC;  
MAQI,IAAI,mBAAJ,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,sBAAL,MAAO,iBAAQ,cAAR,CAAX,  
C;K;IAGX,sC;MAQI,IAAI,mBAAJ,C;QACI,MAAM,2BAAuB,iBAAvB,C;MACV,OAAO,sBAAL,MAAO,iBAAQ  
,cAAR,CAAX,C;K;iGAGX,yB;MAAA,mC;MAAA,4D;MAAA,4B;QAQI,OAAO,wBAAa,cAAb,C;O;KARX,C;iG  
AWA,yB;MAAA,mC;MAAA,4D;MAAA,4B;QAQI,OAAO,wBAAa,cAAb,C;O;KARX,C;iGAWA,yB;MAAA,mC;MAAA,4D;MAAA,4  
B;QAQI,OAAO,wBAAa,cAAb,C;O;KARX,C;IAWA,4C;MAOI,IAAI,mBAAJ,C;QACI,OAAO,I;MACX,OAAO,s  
BAAL,MAAO,iBAAQ,cAAR,CAAX,C;K;IAGX,4C;MAOI,IAAI,mBAAJ,C;QACI,OAAO,I;MACX,OAAO,sBAAL  
MAAO,iBAAQ,cAAR,CAAX,C;K;IAGX,4C;MAOI,IAAI,mBAAJ,C;QACI,OAAO,I;MACX,OAAO,sBAAL,MAAO,i  
BAAQ,cAAR,CAAX,C;K;qFAGX,yB;MAAA,gD;MnCh8BA,6B;MmCg8BA,4B;QAOI,OnC77BmC,cmC67BpB,  
OAAr,iBAAQ,CnC77BoB,C;O;KmCs7BvC,C;qFAUA,yB;MAAA,gD;MnB37BA,+B;MmB27BA,4B;QAOI,OnB  
x7BsC,emBw7BvB,OAAr,iBAAQ,CnBx7BuB,C;O;Kmbi7B1C,C;qFAUA,yB;MAAA,gD;MPClGCA,+B;MoCkg  
CA,4B;QAOI,OpC//BsC,eoC+/BvB,OAAr,iBAAQ,CpC//BuB,C;O;KoCw/B1C,C;qFAUA,yB;MAAA,gD;MIC//B  
A,iC;MkC+/BA,4B;QAOI,OIC5/ByC,gBkC4/B1B,OAAr,iBAAQ,CIC5/B0B,C;O;KkCq/B7C,C;qFAUA,yB;MAA  
A,kF;MAAA,iE;MAAA,wB;MAAA,8B;MAAA,uC;QASoB,UAST,M;QAXP,aAAoB,I;QACpB,YAAY,K;QACI,2  
B;QAaHb,OAAgB,cAAhB,C;UAAgB,yB;UACZ,IAAI,UAAU,OAAV,CAAJ,C;YACI,IAAI,KAJ,C;cAAW,MA  
AM,8BAAYB,gDAAzB,C;YACjB,SAAS,O;YACT,QAAQ,I;;QAGhB,IAAI,CAAC,KAAL,C;UAAy,MAAM,gCA  
AuB,mDAAvB,C;QAEIB,OAAO,0D;O;KAIBX,C;qFAqBA,yB;MAAA,kF;MAAA,iE;MAAA,0B;MAAA,8B;MA  
AA,uC;QASoB,UAST,M;QAXP,aAAqB,I;QACrB,YAAY,K;QACI,2B;QAaHb,OAAgB,cAAhB,C;UAAgB,yB;U  
ACZ,IAAI,UAAU,OAAV,CAAJ,C;YACI,IAAI,KAJ,C;cAAW,MAAM,8BAAYB,gDAAzB,C;YACjB,SAAS,O;Y

ACT,QAAQ,I;;QAGhB,IAAI,CAAC,KAAL,C;UAAy,MAAM,gCAAuB,mDAAvB,C;QAEIB,OAAO,2D;O;KAIB  
X,C;qFAqBA,yB;MAAA,kF;MAAA,iE;MAAA,0B;MAAA,8B;MAAA,uC;QASoB,UAST,M;QAXP,aAAqB,I;QA  
CrB,YAAy,K;QACI,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,IAAI,UAAU,OAAV,CAAJ,C;YACI,IAAI  
,KAAJ,C;cAAW,MAAM,8BAAyB,gDAAzB,C;YACjB,SAAS,O;YACT,QAAQ,I;;QAGhB,IAAI,CAAC,KAAL,C;  
UAAy,MAAM,gCAAuB,mDAAvB,C;QAEIB,OAAO,2D;O;KAIBX,C;qFAqBA,yB;MAAA,kF;MAAA,iE;MAAA  
,4B;MAAA,8B;MAAA,uC;QASoB,UAST,M;QAXP,aAAyB,I;QACtB,YAAy,K;QACI,2B;QAAhB,OAAgB,cAAh  
B,C;UAAgB,yB;UACZ,IAAI,UAAU,OAAV,CAAJ,C;YACI,IAAI,KAAJ,C;cAAW,MAAM,8BAAyB,gDAAzB,C;  
YACjB,SAAS,O;YACT,QAAQ,I;;QAGhB,IAAI,CAAC,KAAL,C;UAAy,MAAM,gCAAuB,mDAAvB,C;QAEIB,  
OAAO,4D;O;KAIBX,C;IAqBA,oC;MAMI,OAAW,mBAAQ,CAAZ,GAAe,sBAAK,CAAL,CAAf,GAA4B,I;K;IA  
GvC,oC;MAMI,OAAW,mBAAQ,CAAZ,GAAe,sBAAK,CAAL,CAAf,GAA4B,I;K;IAGvC,oC;MAMI,OAAW,mB  
AAQ,CAAZ,GAAe,sBAAK,CAAL,CAAf,GAA4B,I;K;IAGvC,oC;MAMI,OAAW,mBAAQ,CAAZ,GAAe,sBAAK  
,CAAL,CAAf,GAA4B,I;K;IAGvC,gC;MASoB,Q;MAFhB,aAAoB,I;MACpB,YAAy,K;MACI,2B;MAAhB,OAA  
gB,cAAhB,C;QAAgB,yB;QACZ,IAAI,UAAU,OAAV,CAAJ,C;UACI,IAAI,KAAJ,C;YAAW,OAAO,I;UACIB,SA  
AS,O;UACT,QAAQ,I;;MAGhB,IAAI,CAAC,KAAL,C;QAAy,OAAO,I;MACnB,OAAO,M;K;IAGX,gC;MASoB  
,Q;MAFhB,aAAqB,I;MACrB,YAAy,K;MACI,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,IAAI,UAAU,O  
AAV,CAAJ,C;UACI,IAAI,KAAJ,C;YAAW,OAAO,I;UACIB,SAAS,O;UACT,QAAQ,I;;MAGhB,IAAI,CAAC,KA  
AL,C;QAAy,OAAO,I;MACnB,OAAO,M;K;IAGX,gC;MASoB,Q;MAFhB,aAAqB,I;MACrB,YAAy,K;MACI,2  
B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,IAAI,UAAU,OAAV,CAAJ,C;UACI,IAAI,KAAJ,C;YAAW,OA  
AO,I;UACIB,SAAS,O;UACT,QAAQ,I;;MAGhB,IAAI,CAAC,KAAL,C;QAAy,OAAO,I;MACnB,OAAO,M;K;I  
AGX,gC;MASoB,Q;MAFhB,aAAyB,I;MACtB,YAAy,K;MACI,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QAC  
Z,IAAI,UAAU,OAAV,CAAJ,C;UACI,IAAI,KAAJ,C;YAAW,OAAO,I;UACIB,SAAS,O;UACT,QAAQ,I;;MAGhB  
,IAAI,CAAC,KAAL,C;QAAy,OAAO,I;MACnB,OAAO,M;K;IAGX,+B;MxBrhDI,IAAI,EwB+hDI,KAAK,CxB/h  
DT,CAAJ,C;QACI,cwB8hDc,sD;QxB7hDd,MAAM,gCAAyB,OAAQ,WAAjC,C;OwB8hDV,OAAO,uBAAoB,gB  
AAV,iBAAO,CAAP,IAAU,EAAC,CAAd,CAApB,C;K;IAGX,+B;MxBniDI,IAAI,EwB6iDI,KAAK,CxB7iDT,CA  
AJ,C;QACI,cwB4iDc,sD;QxB3iDd,MAAM,gCAAyB,OAAQ,WAAjC,C;OwB4iDV,OAAO,uBAAoB,gBAAV,iBA  
AO,CAAP,IAAU,EAAC,CAAd,CAApB,C;K;IAGX,+B;MxBjDI,IAAI,EwB2jDI,KAAK,CxB3jDT,CAAJ,C;QACI,  
cwB0jDc,sD;QxBzjDd,MAAM,gCAAyB,OAAQ,WAAjC,C;OwB0jDV,OAAO,uBAAoB,gBAAV,iBAAO,CAAP,I  
AAU,EAAC,CAAd,CAApB,C;K;IAGX,+B;MxBjDI,IAAI,EwBykDI,KAAK,CxBzkDT,CAAJ,C;QACI,cwBwkDc,  
sD;QxBvkDd,MAAM,gCAAyB,OAAQ,WAAjC,C;OwBwkDV,OAAO,uBAAoB,gBAAV,iBAAO,CAAP,IAAU,EA  
AC,CAAd,CAApB,C;K;IAGX,mC;MxB7kDI,IAAI,EwBulDI,KAAK,CxBvlDT,CAAJ,C;QACI,cwBslDc,sD;QxB  
rlDd,MAAM,gCAAyB,OAAQ,WAAjC,C;OwBslDV,OAAO,mBAAgB,gBAAV,iBAAO,CAAP,IAAU,EAAC,CAA  
d,CAAhB,C;K;IAGX,mC;MxB3lDI,IAAI,EwBqmDI,KAAK,CxBrmDT,CAAJ,C;QACI,cwBomDc,sD;QxBnmDd,  
MAAM,gCAAyB,OAAQ,WAAjC,C;OwBomDV,OAAO,mBAAgB,gBAAV,iBAAO,CAAP,IAAU,EAAC,CAAd,CA  
AhB,C;K;IAGX,mC;MxBzmDI,IAAI,EwBmnDI,KAAK,CxBnnDT,CAAJ,C;QACI,cwBknDc,sD;QxBjnDd,MA  
AM,gCAAyB,OAAQ,WAAjC,C;OwBknDV,OAAO,mBAAgB,gBAAV,iBAAO,CAAP,IAAU,EAAC,CAAd,CAAh  
B,C;K;IAGX,mC;MxBvnDI,IAAI,EwBioDI,KAAK,CxBjoDT,CAAJ,C;QACI,cwBgoDc,sD;QxB/nDd,MAAM,gC  
AAyB,OAAQ,WAAjC,C;OwBgoDV,OAAO,mBAAgB,gBAAV,iBAAO,CAAP,IAAU,EAAC,CAAd,CAAhB,C;K;  
mGAGX,yB;MAAA,4C;MAAA,qD;MAkqEI,8D;MAIqEJ,uC;QASI,iBAypEgB,cAAR,iBAAQ,CAzpEhB,WAA+B  
,CAA/B,U;UACI,IAAI,CAAC,UAAU,sBAAK,KAAL,CAAV,CAAL,C;YACI,OAAO,gBAAK,QAAQ,CAAR,IAA  
L,C;;QAGf,OAAO,W;O;KAdX,C;mGaiBA,yB;MAAA,4C;MAAA,qD;MAypEI,8D;MAzpEJ,uC;QASI,iBAgpEgB  
,cAAR,iBAAQ,CAhpEhB,WAA+B,CAA/B,U;UACI,IAAI,CAAC,UAAU,sBAAK,KAAL,CAAV,CAAL,C;YACI,  
OAAO,gBAAK,QAAQ,CAAR,IAAL,C;;QAGf,OAAO,W;O;KAdX,C;mGaiBA,yB;MAAA,4C;MAAA,qD;MAgp  
EI,8D;MAhpEJ,uC;QASI,iBAuoEgB,cAAR,iBAAQ,CAvoEhB,WAA+B,CAA/B,U;UACI,IAAI,CAAC,UAAU,sB  
AAK,KAAL,CAAV,CAAL,C;YACI,OAAO,gBAAK,QAAQ,CAAR,IAAL,C;;QAGf,OAAO,W;O;KAdX,C;mGai  
BA,yB;MAAA,4C;MAAA,qD;MAuoEI,8D;MAvoEJ,uC;QASI,iBA8nEgB,cAAR,iBAAQ,CA9nEhB,WAA+B,CA  
A/B,U;UACI,IAAI,CAAC,UAAU,sBAAK,KAAL,CAAV,CAAL,C;YACI,OAAO,gBAAK,QAAQ,CAAR,IAAL,C  
;;QAGf,OAAO,W;O;KAdX,C;2FAiBA,yB;MAAA,+D;MAAA,uC;QAWiB,Q;QAFb,eAAe,K;QACf,WAAW,gB;Q  
ACE,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,IAAI,QAAJ,C;YACI,IAAK,WAAI,IAAJ,C;eACJ,IAAI,CAAC,U

AAU,IAAV,CAAL,C;YACD,IAAK,WAAI,IAAJ,C;YAACL,WAAW,I;;QAEEnB,OAAO,I;O;KAIBX,C;2FAqBA,yB;MAAA,+D;MAAA,uC;QAWiB,Q;QAFb,eAAe,K;QACf,WAAW,gB;QACE,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,IAAI,QAAJ,C;YACI,IAAK,WAAI,IAAJ,C;eACJ,IAAI,CAAC,UAAU,IAAV,CAAL,C;YACD,IAAK,WAAI,IAAJ,C;YAACL,WAAW,I;;QAEEnB,OAAO,I;O;KAIBX,C;2FAqBA,yB;MAAA,+D;MAAA,uC;QAWiB,Q;QAFb,eAAe,K;QACf,WAAW,gB;QACE,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,IAAI,QAAJ,C;YACI,IAAK,WAAI,IAAJ,C;eACJ,IAAI,CAAC,UAAU,IAAV,CAAL,C;YACD,IAAK,WAAI,IAAJ,C;YAACL,WAAW,I;;QAEEnB,OAAO,I;O;KAIBX,C;2FAqBA,yB;MAAA,+D;MAAA,uC;QAWiB,Q;QAFb,eAAe,K;QACf,WAAW,gB;QACE,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,IAAI,QAAJ,C;YACI,IAAK,WAAI,IAAJ,C;eACJ,IAAI,CAAC,UAAU,IAAV,CAAL,C;YACD,IAAK,WAAI,IAAJ,C;YAACL,WAAW,I;;QAEEnB,OAAO,I;O;KAIBX,C;qFAqBA,yB;MAAA,+D;MAAA,uC;QASW,kBAAS,gB;QAgRA,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UAAM,IAhRa,SAgRT,CAAU,OAAV,CAAJ,C;YAAwB,WAAy,WAAI,OAAJ,C;;QAhR1D,OAIRO,W;O;KA1RX,C;qFAYA,yB;MAAA,+D;MAAA,uC;QASW,kBAAS,gB;QAIrA,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UAAM,IAjRc,SAiRV,CAAU,OAAV,CAAJ,C;YAAwB,WAAy,WAAI,OAAJ,C;;QAJr1D,OAKRO,W;O;KA3RX,C;qFAYA,yB;MAAA,+D;MAAA,uC;QASW,kBAAS,gB;QAKrA,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UAAM,IAIRc,SAkRV,CAAU,OAAV,CAAJ,C;YAAwB,WAAy,WAAI,OAAJ,C;;QAIR1D,OAmRO,W;O;KA5RX,C;qFAYA,yB;MAAA,+D;MAAA,uC;QASW,kBAAS,gB;QAmRA,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UAAM,IAAnRe,SAmRX,CAAU,OAAV,CAAJ,C;YAAwB,WAAy,WAAI,OAAJ,C;;QAnR1D,OAoRO,W;O;KA7RX,C;kGAYA,yB;MAAA,+D;MAAA,uC;QAWW,kBAAGB,gB;QAm5HV,gB;QADb,YAAY,C;QACC,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UA11HT,IAzDsC,SAyDIC,EA01HkB,cA11HIB,EA01HkB,sBA11HIB,WA01H2B,IA11H3B,CAAJ,C;YAA2C,sBA01HZ,IA11HY,C;;QAZD/C,OA2DO,W;O;KATeX,C;mGAcA,yB;MAAA,+D;MAAA,uC;QAWW,kBAAGB,gB;QAK5HV,gB;QADb,YAAY,C;QACC,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UA11HT,IA5DuC,SA4DnC,EAs1HkB,cAt1HIB,EAs1HkB,sBA11HIB,WAs1H2B,IA11H3B,CAAJ,C;YAA2C,sBA11HZ,IA11HY,C;;QA5D/C,OA8DO,W;O;KAZeX,C;mGAcA,yB;MAAA,+D;MAAA,uC;QAWW,kBAAGB,gB;QAI5HV,gB;QADb,YAAY,C;QACC,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UA11HT,IA/DuC,SA+DnC,EAK1HkB,cA11HIB,EAK1HkB,sBA11HIB,WAK1H2B,IA11H3B,CAAJ,C;YAA2C,sBAK1HZ,IA11HY,C;;QA/D/C,OAIeO,W;O;KA5EX,C;mGAcA,yB;MAAA,+D;MAAA,uC;QAWW,kBAAGB,gB;QAG5HV,gB;QADb,YAAY,C;QACC,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UA90HT,IAIEwC,SAkEpC,EA80HkB,cA90HIB,EA80HkB,sBA90HIB,WA80H2B,IA90H3B,CAAJ,C;YAA2C,sBA80HZ,IA90HY,C;;QAIe/C,OAoEO,W;O;KA/EX,C;uGAcA,6C;MAS2HiB,gB;MADb,YAAY,C;MACC,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QA11HT,IAAI,WA01HkB,cA11HIB,EA01HkB,sBA11HIB,WA01H2B,IA11H3B,CAAJ,C;UAA2C,sBA01HZ,IA11HY,C;;MAE/C,OAAO,W;K;uGAGX,6C;MAK2HiB,gB;MADb,YAAY,C;MACC,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QA11HT,IAAI,WAK1HkB,cA11HIB,EAK1HkB,sBA11HIB,WAK1H2B,IA11H3B,CAAJ,C;UAA2C,sBAK1HZ,IA11HY,C;;MAE/C,OAAO,W;K;uGAGX,6C;MA01HiB,gB;MADb,YAAY,C;MACC,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QA90HT,IAAI,WA80HkB,cA90HIB,EA80HkB,sBA90HIB,WA80H2B,IA90H3B,CAAJ,C;UAA2C,sBA80HZ,IA90HY,C;;MAE/C,OAAO,W;K;2FAGX,yB;MAAA,+D;MAAA,uC;QASW,kBAAY,gB;QAGDH,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UAAM,IAAI,CAhDY,SAgDX,CAAU,OAAV,CAAL,C;YAAyB,WAAy,WAAI,OAAJ,C;;QAhD3D,OAI DO,W;O;KA1DX,C;2FAYA,yB;MAAA,+D;MAAA,uC;QASW,kBAAY,gB;QAI DH,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UAAM,IAAI,CAjDa,SAiDZ,CAAU,OAAV,CAAL,C;YAAyB,WAAy,WAAI,OAAJ,C;;QAJD3D,OAKDO,W;O;KA3DX,C;2FAYA,yB;MAAA,+D;MAAA,uC;QASW,kBAAY,gB;QAKDH,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UAAM,IAAI,CAIDa,SAkDZ,CAAU,OAAV,CAAL,C;YAAyB,WAAy,WAAI,OAAJ,C;;QAID3D,OAmDO,W;O;KA5DX,C;2FAYA,yB;MAAA,+D;MAAA,uC;QASW,kBAAY,gB;QAmDH,Q;QAAA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UAAM,IAAI,CAAnDc,SAmDb,CAAU,OAAV,CAAL,C;YAAyB,WAAy,WAAI,OAAJ,C;;QAnD3D,OAoDO,W;O;KA7DX,C;+FAYA,6C;MASoB,Q;MAAA,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QAAM,IAAI,CAAC,UAAU,OAAV,CAAL,C;UAAyB,WAAy,WAAI,OAAJ,C;;MAC3D,OAAO,W;K;+FAGX,6C;MASoB,Q;MAAA,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QAAM,IAAI,CAAC,UAAU,OAAV,CAAL,C;UAAyB,WAAy,WAAI,OAAJ,C;;MAC3D,OAAO,W;K;+FAGX,6C;MASoB,Q;MAAA,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,

yB;QAAM,IAAI,CAAC,UAAU,OAAV,CAAL,C;UAAyB,WAAY,WAAL,OAAJ,C;;MAC3D,OAAO,W;K;+FAGX,6C;MASoB,Q;MAAA,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QAAM,IAAI,CAAC,UAAU,OAAV,CAAL,C;UAAyB,WAAY,WAAL,OAAJ,C;;MAC3D,OAAO,W;K;yFAGX,6C;MASoB,Q;MAAA,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QAAM,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,WAAY,WAAL,OAAJ,C;;MAC1D,OAAO,W;K;yFAGX,6C;MASoB,Q;MAAA,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QAAM,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,WAAY,WAAL,OAAJ,C;;MAC1D,OAAO,W;K;yFAGX,6C;MASoB,Q;MAAA,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QAAM,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,WAAY,WAAL,OAAJ,C;;MAC1D,OAAO,W;K;IAGX,sC;MAMI,IAAI,OAAQ,UAAZ,C;QAAuB,OhCvjEe,W;OgCwjEtC,OAA4D,SA0iDrD,cAAkB,cAAR,iBAAQ,EA1iDN,OAAQ,MA0iDF,EA1iDS,OAAQ,aAAR,GAAuB,CAAvB,IA0iDT,CAAIB,CA1iDqD,C;K;IAGhE,sC;MAMI,IAAI,OAAQ,UAAZ,C;QAAuB,OhCjkEe,W;OgCkkEtC,OAA4D,SAgjDrD,eAAmB,cAAR,iBAAQ,EAhjDP,OAAQ,MAgjDD,EAhjDQ,OAAQ,aAAR,GAAuB,CAAvB,IAgjDR,CAAnB,CAhjDqD,C;K;IAGhE,sC;MAMI,IAAI,OAAQ,UAAZ,C;QAAuB,OhC3kEe,W;OgC4kEtC,OAA4D,UAsjDrD,eAAmB,cAAR,iBAAQ,EAtdjDP,OAAQ,MAtdjDD,EAtdjDQ,OAAQ,aAAR,GAAuB,CAAvB,IASjDR,CAAnB,CAtjDqD,C;K;IAGhE,sC;MAMI,IAAI,OAAQ,UAAZ,C;QAAuB,OhCrlEe,W;OgCslEtC,OAA4D,UA4jDrD,gBAAoB,cAAR,iBAAQ,EA5jDR,OAAQ,MA4jDA,EA5jDO,OAAQ,aAAR,GAAuB,CAAvB,IA4jDP,CAApB,CA5jDqD,C;K;IAGhE,sC;MASKB,Q;MAHd,WAAmB,wBAAR,OAAQ,EAAwB,EAAxB,C;MACnB,IAAI,SAAQ,CAAZ,C;QAAe,OAAO,W;MACtB,WAAW,iBAAGB,IAAhB,C;MACG,yB;MAAd,OAAc,cAAd,C;QAAc,uB;QACV,IAAK,WAAL,sBAAL,KAAL,CAAJ,C;;MAET,OAAO,I;K;IAGX,sC;MASKB,Q;MAHd,WAAmB,wBAAR,OAAQ,EAAwB,EAAxB,C;MACnB,IAAI,SAAQ,CAAZ,C;QAAe,OAAO,W;MACtB,WAAW,iBAAiB,IAAjB,C;MACG,yB;MAAd,OAAc,cAAd,C;QAAc,uB;QACV,IAAK,WAAL,sBAAL,KAAL,CAAJ,C;;MAET,OAAO,I;K;IAGX,sC;MASKB,Q;MAHd,WAAmB,wBAAR,OAAQ,EAAwB,EAAxB,C;MACnB,IAAI,SAAQ,CAAZ,C;QAAe,OAAO,W;MACtB,WAAW,iBAaKB,IAAiB,C;MACG,yB;MAAd,OAAc,cAAd,C;QAAc,uB;QACV,IAAK,WAAL,sBAAL,KAAL,CAAJ,C;;MAET,OAAO,I;K;IAGX,2C;MAMI,OAAO,cAAkB,aAAR,iBAAQ,EAAW,OAAX,CAAIB,C;K;IAGX,2C;MAMI,OAAO,eAAmB,aAAR,iBAAQ,EAAW,OAAX,CAAnB,C;K;IAGX,2C;MAMI,OAAO,cAAkB,cAAR,iBAAQ,EAAW,OAAX,CAAIB,C;K;IAGX,2C;MAMI,OAAO,eAAmB,cAAR,iBAAQ,EAAW,OAAX,CAAnB,C;K;IAGX,2C;MAMI,OAAO,eAAmB,aAAR,iBAAQ,EAAW,OAAX,CAAnB,C;K;IAGX,2C;MAMI,OAAO,gBAAoB,aAAR,iBAAQ,EAAW,OAAX,CAApB,C;K;IAGX,2C;MAMI,OAAO,cAAkB,cAAR,iBAAQ,EAAW,OAAX,CAAIB,C;K;IAGX,2C;MAMI,OAAO,eAAmB,cAAR,iBAAQ,EAAW,OAAX,CAAnB,C;K;IAGX,2C;MAMI,OAAO,eAAmB,aAAR,iBAAQ,EAAW,OAAX,CAAnB,C;K;IAGX,2C;MAMI,OAAO,gBAAoB,cAAR,iBAAQ,EAAW,OAAX,CAApB,C;K;IAGX,+B;MAGBiB,Q;MxB7xEb,IAAI,EwBuxEI,KAAL,CxBvxET,CAAJ,C;QACI,cwBsxEc,sD;QxBrxEb,MAAM,gCAAYB,OAAQ,WAAjC,C;OwBsxEV,IAAI,MAAK,CAAT,C;QAAY,OAAO,W;MACnB,IAAI,KAAL,cAAT,C;QAAe,OAAO,mB;MACtB,IAAI,MAAK,CAAT,C;QAAY,OAAO,OAAO,sBAAK,CAAL,CAAP,C;MACnB,YAAY,C;MACZ,WAAW,iBAAGB,CAAhB,C;MACE,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QACT,IAAK,WAAL,IAAJ,C;QACL,IAAI,mCAAW,CAAF,C;UACI,K;;MAER,OAAO,I;K;IAGX,+B;MAGBiB,Q;MxB7yEb,IAAI,EwB+yEI,KAAL,CxB/yET,CAAJ,C;QACI,cwB8yEc,sD;QxB7yEd,MAAM,gCAAYB,OAAQ,WAAjC,C;OwB8yEV,IAAI,MAAK,CAAT,C;QAAY,OAAO,W;MACnB,IAAI,KAAL,cAAT,C;QAAe,OAAO,mB;MACtB,IAAI,MAAK,CAAT,C;QAAY,OAAO,OAAO,sBAAK,CAAL,CAAP,C;MACnB,YAAY,C;MACZ,WAAW,iBAAiB,CAAjB,C;MACE,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QACT,IAAK,WAAL,IAAJ,C;QACL,IAAI,mCAAW,CAAF,C;UACI,K;;MAER,OAAO,I;K;IAGX,+B;MAGBiB,Q;MxB70Eb,IAAI,EwBu0EI,KAAL,CxBv0ET,CAAJ,C;QACI,cwBs0Ec,sD;QxB70Ed,MAAM,gCAAYB,OAAQ,WAAjC,C;OwBs0EV,IAAI,MAAK,CAAT,C;QAAY,OAAO,W;MACnB,IAAI,KAAL,cAAT,C;QAAe,OAAO,mB;MACtB,IAAI,MAAK,CAAT,C;QAAY,OAAO,OAAO,sBAAK,CAAL,CAAP,C;MACnB,YAAY,C;MACZ,WAAW,iBAAiB,CAAjB,C;MACE,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QACT,IAAK,WAAL,IAAJ,C;QACL,IAAI,mCAAW,CAAF,C;UACI,K;;MAER,OAAO,I;K;IAGX,+B;MAGBiB,Q;MxB71Eb,IAAI,EwB+1EI,KAAL,CxB/1ET,CAAJ,C;QACI,cwB81Ec,sD;QxB71Ed,MAAM,gCAAYB,OAAQ,WAAjC,C;OwB81EV,IAAI,MAAK,CAAT,C;QAAY,OAAO,W;MACnB,IAAI,KAAL,cAAT,C;QAAe,OAAO,mB;MACtB,IAAI,MAAK,CAAT,C;QAAY,OAAO,OAAO,sBAAK,CAAL,CAAP,C;MACnB,YAAY,C;MACZ,WAAW,iBA

AkB,CAAIB,C;MACE,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QACT,IAAK,WAAI,IAAJ,C;QACL,IAAI,mCAAW,CAAf,C;UACI,K;;MAER,OAAO,I;K;IAGX,mC;MxB72EI,IAAI,EwBu3EI,KAAK,CxBv3ET,CAAJ,C;QACI,cwBs3Ec,sD;QxB3Ed,MAAM,gCAAyB,OAAQ,WAAjC,C;OwBs3EV,IAAI,MAAK,CAAT,C;QAAY,OAAO,W;MACnB,WAAW,c;MACX,IAAI,KAAK,IAAT,C;QA Ae,OAAO,mB;MACtB,IAAI,MAAK,CAAT,C;QAAY,OAAO,OA AO,sBAAK,OAAO,CAAP,IAAL,CAAP,C;MACnB,WAAW,iBAAgB,CAAhB,C;MACX,iBAAc,OAAO,CAAP,IA Ad,UAA6B,IAA7B,U;QACI,IAAK,WAAI,sBAAK,KAAL,CAAJ,C;MACT,OAAO,I;K;IAGX,mC;MxB14EI,IAAI, EwB44EI,KAAK,CxB54ET,CAAJ,C;QACI,cwB24Ec,sD;QxB14Ed,MAAM,gCAAyB,OAAQ,WAAjC,C;OwB24E V,IAAI,MAAK,CAAT,C;QAAY,OAAO,W;MACnB,WAAW,c;MACX,IAAI,KAAK,IAAT,C;QA Ae,OAAO,mB; MACtB,IAAI,MAAK,CAAT,C;QAAY,OAAO,OAAO,sBAAK,OAAO,CAAP,IAAL,CAAP,C;MACnB,WAAW,iB AAiB,CAAjB,C;MACX,iBAAc,OAAO,CAAP,IAAd,UAA6B,IAA7B,U;QACI,IAAK,WAAI,sBAAK,KAAL,CAA J,C;MACT,OAAO,I;K;IAGX,mC;MxBv5EI,IAAI,EwBi6EI,KAAK,CxBj6ET,CAAJ,C;QACI,cwBg6Ec,sD;QxB/5 Ed,MAAM,gCAAyB,OAAQ,WAAjC,C;OwBg6EV,IAAI,MAAK,CAAT,C;QAAY,OAAO,W;MACnB,WAAW,c; MACX,IAAI,KAAK,IAAT,C;QA Ae,OAAO,mB;MACtB,IAAI,MAAK,CAAT,C;QAAY,OAAO,OAAO,sBAAK,O AAO,CAAP,IAAL,CAAP,C;MACnB,WAAW,iBAAiB,CAAjB,C;MACX,iBAAc,OAAO,CAAP,IAAd,UAA6B,IA A7B,U;QACI,IAAK,WAAI,sBAAK,KAAL,CAAJ,C;MACT,OAAO,I;K;IAGX,mC;MxB56EI,IAAI,EwBs7EI,KA AK,CxBt7ET,CAAJ,C;QACI,cwBq7Ec,sD;QxBp7Ed,MAAM,gCAAyB,OAAQ,WAAjC,C;OwBq7EV,IAAI,MAA K,CAAT,C;QAAY,OAAO,W;MACnB,WAAW,c;MACX,IAAI,KAAK,IAAT,C;QA Ae,OAAO,mB;MACtB,IAAI, MAAK,CAAT,C;QAAY,OAAO,OAAO,sBAAK,OAAO,CAAP,IAAL,CAAP,C;MACnB,WAAW,iBAAkB,CAAI B,C;MACX,iBAAc,OAAO,CAAP,IAAd,UAA6B,IAA7B,U;QACI,IAAK,WAAI,sBAAK,KAAL,CAAJ,C;MACT, OAAO,I;K;mGAGX,yB;MAAA,4C;MAAA,gD;MA s2CI,8D;Mat2CJ,uC;QASI,iBA61CgB,cAAR,iBAAQ,CA71C hB,WAA+B,CAA/B,U;UACI,IAAI,CAAC,UAAU,sBAAK,KAAL,CAAV,CAAL,C;YACI,OAAO,gBAAK,QAAQ ,CAAR,IAAL,C;;QAGf,OAAO,iB;O;KAdX,C;mGaiBA,yB;MAAA,4C;MAAA,gD;MA61CI,8D;MA71CJ,uC;QA SI,iBAo1CgB,cAAR,iBAAQ,Cap1ChB,WAA+B,CAA/B,U;UACI,IAAI,CAAC,UAAU,sBAAK,KAAL,CAAV,C AAL,C;YACI,OAAO,gBAAK,QAAQ,CAAR,IAAL,C;;QAGf,OAAO,iB;O;KAdX,C;mGaiBA,yB;MAAA,4C;MA AA,gD;MAo1CI,8D;MAP1CJ,uC;QASI,iBA20CgB,cAAR,iBAAQ,CA30ChB,WAA+B,CAA/B,U;UACI,IAAI,CA AC,UAAU,sBAAK,KAAL,CAAV,CAAL,C;YACI,OAAO,gBAAK,QAAQ,CAAR,IAAL,C;;QAGf,OAAO,iB;O;K AdX,C;mGaiBA,yB;MAAA,4C;MAAA,gD;MA20CI,8D;MA30CJ,uC;QASI,iBAk0CgB,cAAR,iBAAQ,CA10ChB, WAA+B,CAA/B,U;UACI,IAAI,CAAC,UAAU,sBAAK,KAAL,CAAV,CAAL,C;YACI,OAAO,gBAAK,QAAQ,C AAR,IAAL,C;;QAGf,OAAO,iB;O;KAdX,C;2FAiBA,yB;MAAA,+D;MAAA,uC;QAUiB,Q;QADb,WAAW,gB;QA CE,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,IAAI,CAAC,UAAU,IAAV,CAAL,C;YACI,K;UACJ,IAAK,WAAI ,IAAJ,C;;QAET,OAAO,I;O;KafX,C;2FAkBA,yB;MAAA,+D;MAAA,uC;QAUiB,Q;QADb,WAAW,gB;QACE,2B ;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,IAAI,CAAC,UAAU,IAAV,CAAL,C;YACI,K;UACJ,IAAK,WAAI,IAAJ, C;;QAET,OAAO,I;O;KafX,C;2FAkBA,yB;MAAA,+D;MAAA,uC;QAUiB,Q;QADb,WAAW,gB;QACE,2B;QAA b,OAAa,cAAb,C;UAAa,sB;UACT,IAAI,CAAC,UAAU,IAAV,CAAL,C;YACI,K;UACJ,IAAK,WAAI,IAAJ,C;;QA ET,OAAO,I;O;KafX,C;2FAkBA,yB;MAAA,+D;MAAA,uC;QAUiB,Q;QADb,WAAW,gB;QACE,2B;QAAb,OAA a,cAAb,C;UAAa,sB;UACT,IAAI,CAAC,UAAU,IAAV,CAAL,C;YACI,K;UACJ,IAAK,WAAI,IAAJ,C;;QA ET,OAAO,I;O;KafX,C;uFAkBA,yB;MAAA,kD;MAAA,4B;QAOY,QAAR,iBAAQ,C;O;KAPZ,C;uFAUA,yB;MAAA,kD ;MAAA,4B;QAOY,QAAR,iBAAQ,C;O;KAPZ,C;uFAUA,yB;MAAA,kD;MAAA,4B;QAOY,QAAR,iBAAQ,C;O; KAPZ,C;uFAUA,yB;MAAA,kD;MAAA,4B;QAOY,QAAR,iBAAQ,C;O;KAPZ,C;uFAUA,yB;MAAA,kD;MAAA, gD;QAaY,QAAR,iBAAQ,EAAQ,SAAR,EAAmB,OAA nB,C;O;KAbZ,C;uFAgBA,yB;MAAA,kD;MAAA,gD;QAa Y,QAAR,iBAAQ,EAAQ,SAAR,EAAmB,OAA nB,C;O;KAbZ,C;uFAgBA,yB;MAAA,kD;MAAA,gD;QAaY,QAAR,iBAA Q,EAAQ,SAAR,EAAmB,OAA nB,C;O;KAbZ,C;IAgBA,gC;MAMI,IAAI,mBAAJ,C;QA Ae,OAAO,W;MACtB,W AAW,0B;MACN,WAAL,IAAK,C;MACL,OAAO,I;K;IAGX,gC;MAMI,IAAI,mBAAJ,C;QA Ae,OAAO,W;MACtB ,WAAW,0B;MACN,WAAL,IAAK,C;MACL,OAAO,I;K;IAGX,gC;MAMI,IAAI,mBAAJ,C;QA Ae,OAAO,W;MA CtB,WAAW,0B;MACN,WAAL,IAAK,C;MACL,OAAO,I;K;kGAGX,yB;MAAA,8D;MAAA,uC;MAAA,4B;Q AOI,OAAO,mBAAkB,cAAR,iBAAQ,CAAIB,C;O;KAPZ,C;kGAUA,yB;MAAA,8D;MAAA,yC;MAAA,4B;QAOI



,OAAO,oBAAmB,cAAR,iBAAQ,CAAnB,C;O;KAPX,C;mGAUA,yB;MAAA,8D;MAAA,yC;MAAA,4B;QAOI,O  
AAO,oBAAmB,cAAR,iBAAQ,CAAnB,C;O;KAPX,C;mGAUA,yB;MAAA,8D;MAAA,2C;MAAA,4B;QAOI,OA  
AO,qBAAoB,cAAR,iBAAQ,CAApB,C;O;KAPX,C;IAUA,+B;MAMI,sBAAQ,4BAAR,C;K;IAGJ,+B;MAMI,sBA  
AQ,4BAAR,C;K;IAGJ,+B;MAMI,sBAAQ,4BAAR,C;K;IAGJ,+B;MAMI,sBAAQ,4BAAR,C;K;IAGJ,uC;MAQI,a  
A8+BgB,gBAAR,iBAAQ,CA9+BhB,OAA2B,CAA3B,M;QACI,QAAQ,MAAO,iBAAQ,IAAI,CAAJ,IAAR,C;QA  
Cf,WAAW,sBAAK,CAAL,C;QACX,sBAAK,CAAL,EAAU,sBAAK,CAAL,CAAV,C;QACA,sBAAK,CAAL,EA  
AU,IAAV,C;;K;IAIR,uC;MAQI,aAs+BgB,gBAAR,iBAAQ,CAt+BhB,OAA2B,CAA3B,M;QACI,QAAQ,MAAO,i  
BAAQ,IAAI,CAAJ,IAAR,C;QACf,WAAW,sBAAK,CAAL,C;QACX,sBAAK,CAAL,EAAU,sBAAK,CAAL,CAA  
V,C;QACA,sBAAK,CAAL,EAAU,IAAV,C;;K;IAIR,uC;MAQI,aA89BgB,gBAAR,iBAAQ,CA99BhB,OAA2B,CA  
A3B,M;QACI,QAAQ,MAAO,iBAAQ,IAAI,CAAJ,IAAR,C;QACf,WAAW,sBAAK,CAAL,C;QACX,sBAAK,CA  
AL,EAAU,sBAAK,CAAL,CAAV,C;QACA,sBAAK,CAAL,EAAU,IAAV,C;;K;IAIR,uC;MAQI,aAs9BgB,gBAAR  
,iBAAQ,CAt9BhB,OAA2B,CAA3B,M;QACI,QAAQ,MAAO,iBAAQ,IAAI,CAAJ,IAAR,C;QACf,WAAW,sBAA  
K,CAAL,C;QACX,sBAAK,CAAL,EAAU,sBAAK,CAAL,CAAV,C;QACA,sBAAK,CAAL,EAAU,IAAV,C;;K;IA  
IR,sC;MAMI,IAAI,iBAAO,CAAX,C;QACI,iB;QApSI,UAAAR,iBAAQ,C;Q;IAySZ,sC;MAMI,IAAI,iBAAO,CAAX  
,C;QACI,iB;QAtSI,UAAAR,iBAAQ,C;Q;IA2SZ,sC;MAMI,IAAI,iBAAO,CAAX,C;QACI,iB;QAxSI,UAAAR,iBAAQ  
,C;Q;IA6SZ,sC;MAMI,IAAI,iBAAO,CAAX,C;QACI,iB;QA1SI,UAAAR,iBAAQ,C;Q;IA+SZ,6B;MAMoB,kBA+nB  
T,cAAU,iBvB58EO,QuB48EjB,C;MA/nBiB,mB;MAAxB,OAAiC,SrBv3F1B,WqBu3F0B,C;K;IAGrC,8B;MAMo  
B,kBAkoBT,eAAmB,UAAAR,iBAAQ,CAAnB,C;MAlOBiB,mB;MAAxB,OAAiC,SrBh4F1B,WqBg4F0B,C;K;IAGr  
C,8B;MAMoB,kBAqoBT,eAAW,iBvBx/EM,QuBw/EjB,C;MAroBiB,mB;MAAxB,OAAiC,UrBz4F1B,WqBy4F0B  
,C;K;IAGrC,8B;MAMoB,kBAwoBT,gBAAY,iBvB1/EK,QuB0/EjB,C;MAxoBiB,mB;MAAxB,OAAiC,UrB15F1B,  
WqBk5F0B,C;K;IAGrC,kC;MAMI,IAAI,mBAAJ,C;QAAe,OAAO,S;MACD,kBA0lBd,cA11BA,SA0lBU,QvB58E  
O,QuB48EjB,C;MA11BsB,mB;MAA7B,OrB55FO,W;K;IqB+5FX,kC;MAMI,IAAI,mBAAJ,C;QAAe,OAAO,S;M  
ACD,kBA4lBd,eAAmB,UA5lBnB,SA4lBW,QAAQ,CAAnB,C;MA5lBsB,mB;MAA7B,OrBt6FO,W;K;IqBy6FX,k  
C;MAMI,IAAI,mBAAJ,C;QAAe,OAAO,S;MACD,kBA8lBd,eA9lBA,SA8lBW,QvBx/EM,QuBw/EjB,C;MA9lBsB  
,mB;MAA7B,OrBh7FO,W;K;IqBm7FX,mC;MAMI,IAAI,mBAAJ,C;QAAe,OAAO,S;MACD,kBAgmBd,gBAhmB  
A,SAgmBY,QvB1/EK,QuB0/EjB,C;MAhmBsB,mB;MAA7B,OrB17FO,W;K;IqB67FX,4C;MAMI,IAAI,mBAAJ,C  
;QAAe,OAAO,S;MACD,kBAkjBd,cAljBA,SAkjBU,QvB58EO,QuB48EjB,C;MALjBsB,8B;MAA7B,OrBp8FO,W;  
K;IqBu8FX,4C;MAMI,IAAI,mBAAJ,C;QAAe,OAAO,S;MACD,kBAojBd,eAAmB,UApjBnB,SAojBW,QAAQ,C  
AAnB,C;MApjBsB,8B;MAA7B,OrB98FO,W;K;IqBi9FX,4C;MAMI,IAAI,mBAAJ,C;QAAe,OAAO,S;MACD,kB  
AsjBd,eAtjBA,SAsjBW,QvBx/EM,QuBw/EjB,C;MATjBsB,8B;MAA7B,OrBx9FO,W;K;IqB29FX,6C;MAMI,IAAI,  
mBAAJ,C;QAAe,OAAO,S;MACD,kBAwjBd,gBAxjBA,SAwjBY,QvB1/EK,QuB0/EjB,C;MAxjBsB,8B;MAA7B,  
OrBl+FO,W;K;IqBq+FX,uC;MAQoB,kBAygBT,cAAU,iBvB58EO,QuB48EjB,C;MAzgBiB,mB;MAAxB,OAAiC,  
YrB7+F1B,WqB6+F0B,C;K;IAGrC,wC;MAQoB,kBA0gBT,eAAmB,UAAAR,iBAAQ,CAAnB,C;MA1gBiB,mB;M  
AAxB,OAAiC,YrBx/F1B,WqBw/F0B,C;K;IAGrC,wC;MAQoB,kBA2gBT,eAAW,iBvBx/EM,QuBw/EjB,C;MA3g  
BiB,mB;MAAxB,OAAiC,YrBngG1B,WqBmgG0B,C;K;IAGrC,wC;MAQoB,kBA4gBT,gBAAY,iBvB1/EK,QuB0/  
EjB,C;MA5gBiB,mB;MAAxB,OAAiC,YrB9gG1B,WqB8gG0B,C;K;4FAGrC,qB;MAQI,OAAO,iB;K;0FAGX,qB;  
MAQI,OAAO,iB;K;4FA+BX,qB;MAQI,OAAO,iB;K;8FAGX,qB;MAQI,OAAO,iB;K;8FAGX,yB;MAAA,yC;MA  
AA,4B;QAQI,OAAO,oBAAW,SAAX,C;O;KARX,C;4FAWA,yB;MAAA,uC;MAAA,4B;QAQI,OAAO,mBAAU,S  
AAV,C;O;KARX,C;8FAWA,yB;MAAA,yC;MAAA,4B;QAQI,OAAO,oBAAW,SAAX,C;O;KARX,C;gGAWA,yB  
;MAAA,2C;MAAA,4B;QAQI,OAAO,qBAAY,SAAZ,C;O;KARX,C;IAWA,2C;MASI,OAAAY,gBAAL,SAAK,EA  
Ac,KAAc,C;K;IAGhB,2C;MASI,OAAAY,gBAAL,SAAK,EAAC,KAAc,C;K;IAGhB,2C;MASI,OAAAY,gBAAL,SA  
AK,EAAC,KAAc,C;K;IAGhB,2C;MASI,OAAAY,gBAAL,SAAK,EAAC,KAAc,C;K;IAGhB,2C;MAOI,OAAqB,cA  
Ad,4CAAc,EAAC,oCAAd,C;K;IAGzB,2C;MAOI,OAAqB,cAAd,4CAAc,EAAC,oCAAd,C;K;IAGzB,2C;MAOI,O  
AAqB,cAAd,4CAAc,EAAC,oCAAd,C;K;IAGzB,2C;MAOI,OAAqB,cAAd,4CAAc,EAAC,oCAAd,C;K;IAGzB,sC;  
MAQI,OAAAY,kBAAL,SAAK,C;K;IAGhB,sC;MAQI,OAAAY,kBAAL,SAAK,C;K;IAGhB,sC;MAQI,OAAAY,kBAA  
L,SAAK,C;K;IAGhB,sC;MAQI,OAAAY,kBAAL,SAAK,C;K;IAGhB,sC;MAMI,OAAqB,gBAAd,4CAAc,C;K;IAGz  
B,sC;MAMI,OAAqB,gBAAd,4CAAc,C;K;IAGzB,sC;MAMI,OAAqB,gBAAd,4CAAc,C;K;IAGzB,sC;MAMI,OA  
AqB,gBAAd,4CAAc,C;K;IAGzB,sC;MAUI,OAAAY,kBAAL,SAAK,C;K;IAGhB,sC;MAUI,OAAAY,kBAAL,SAAK,

C;K;IAGhB,sC;MAUI,OAAy,kBAAL,SAAK,C;K;IAGhB,sC;MAUI,OAAy,kBAAL,SAAK,C;K;IAGhB,sC;MAQ  
W,Q;MAAP,OAAO,sDAAmB,IAAnB,EAAyB,GAAzB,EAA8B,GAA9B,2BAAsC,M;K;IAGjD,sC;MAQW,Q;MA  
AP,OAAO,sDAAmB,IAAnB,EAAyB,GAAzB,EAA8B,GAA9B,2BAAsC,M;K;IAGjD,sC;MAQW,Q;MAAP,OAA  
O,sDAAmB,IAAnB,EAAyB,GAAzB,EAA8B,GAA9B,2BAAsC,M;K;IAGjD,sC;MAQW,Q;MAAP,OAAO,sDAA  
mB,IAAnB,EAAyB,GAAzB,EAA8B,GAA9B,2BAAsC,M;K;sFAGjD,yB;MvBxhFA,8C;MuBwhFA,kF;QAmB6D,  
iC;UAAA,oBAAYB,C;QAAG,0B;UAAA,aAAkB,C;QAAG,wB;UAAA,WAAgB,c;QvBvhF1H,UuBwhFA,iBvBxh  
FA,EuBwhFiB,WAAy,QvBxhF7B,EuBwhFsC,iBvBxhFtC,EuBwhFyD,UvBxhFzD,EuBwhFqE,QvBxhFrE,C;QuB  
yhFA,OAAO,W;O;KArBX,C;wFAwBA,yB;MvBxhFA,8C;MuBwhFA,kF;QAmB+D,iC;UAAA,oBAAYB,C;QAA  
G,0B;UAAA,aAAkB,C;QAAG,wB;UAAA,WAAgB,c;QvBvhF5H,UuBwhFA,iBvBxhFA,EuBwhFiB,WAAy,QvB  
xhF7B,EuBwhFsC,iBvBxhFtC,EuBwhFyD,UvBxhFzD,EuBwhFqE,QvBxhFrE,C;QuByhFA,OAAO,W;O;KArBX,  
C;wFAwBA,yB;MvBxnFA,8C;MuBwnFA,kF;QAmB+D,iC;UAAA,oBAAYB,C;QAAG,0B;UAAA,aAAkB,C;QA  
AG,wB;UAAA,WAAgB,c;QvBvnF5H,UuBwnFA,iBvBxnFA,EuBwnFiB,WAAy,QvBxnF7B,EuBwnFsC,iBvBxnF  
tC,EuBwnFyD,UvBxnFzD,EuBwnFqE,QvBxnFrE,C;QuBynFA,OAAO,W;O;KArBX,C;wFAwBA,yB;MvBxnFA,8  
C;MuBwnFA,kF;QAmBiE,iC;UAAA,oBAAYB,C;QAAG,0B;UAAA,aAAkB,C;QAAG,wB;UAAA,WAAgB,c;QvB  
vnF9H,UuBwnFA,iBvBxnFA,EuBwnFiB,WAAy,QvBxnF7B,EuBwnFsC,iBvBxnFtC,EuBwnFyD,UvBxnFzD,EuB  
wnFqE,QvBxnFrE,C;QuBynFA,OAAO,W;O;KArBX,C;kFAwBA,yB;MAAA,uC;MAAA,4B;QASI,OAAO,mBAA  
U,iBvB58EO,QuB48EjB,C;O;KATX,C;oFAYA,yB;MAAA,gD;MAAA,yC;MAAA,4B;QASI,OAAO,oBAAmB,O  
AAR,iBAAQ,CAAnB,C;O;KATX,C;oFAYA,yB;MAAA,yC;MAAA,4B;QASI,OAAO,oBAAW,iBvBx/EM,QuBw/  
EjB,C;O;KATX,C;oFAYA,yB;MAAA,2C;MAAA,4B;QASI,OAAO,qBAAy,iBvB1/EK,QuB0/EjB,C;O;KATX,C;  
oFAYA,yB;MAAA,gD;MAAA,uC;MAAA,qC;QAWI,OAAO,mBAAkB,OAAR,iBAAQ,EAAO,OAAP,CAAIb,C;  
O;KAXX,C;oFAcA,yB;MAAA,gD;MAAA,yC;MAAA,qC;QAWI,OAAO,oBAAmB,OAAR,iBAAQ,EAAO,OAAP  
,CAAnB,C;O;KAXX,C;oFAcA,yB;MAAA,+C;MAAA,yC;MAAA,qC;QAWI,OAAO,oBAAmB,OAAR,iBAAQ,E  
AAO,OAAP,CAAnB,C;O;KAXX,C;oFAcA,yB;MAAA,gD;MAAA,2C;MAAA,qC;QAWI,OAAO,qBAAoB,OA  
R,iBAAQ,EAAO,OAAP,CAApB,C;O;KAXX,C;4FAcA,yB;MAAA,0D;MAAA,uC;MAAA,gD;QAaI,OAAO,mBA  
AkB,YAAR,iBAAQ,EAAY,SAAZ,EAAuB,OAAvB,CAAIb,C;O;KAbX,C;8FAgBA,yB;MAAA,0D;MAAA,yC;M  
AAA,gD;QAaI,OAAO,oBAAmB,YAAR,iBAAQ,EAAY,SAAZ,EAAuB,OAAvB,CAAnB,C;O;KAbX,C;8FAgBA,  
yB;MAAA,0D;MAAA,yC;MAAA,gD;QAaI,OAAO,oBAAmB,YAAR,iBAAQ,EAAY,SAAZ,EAAuB,OAAvB,CA  
AnB,C;O;KAbX,C;6FAgBA,yB;MAAA,0D;MAAA,2C;MAAA,gD;QAaI,OAAO,qBAAoB,YAAR,iBAAQ,EAAY,  
SAAZ,EAAuB,OAAvB,CAApB,C;O;KAbX,C;IAGBA,sD;MAWyC,yB;QAAA,YAAiB,C;MAAG,uB;QAAA,UAA  
e,c;MACHE,OAAR,iBAAQ,EAAK,OnCv8GoB,KmCu8GzB,EAAsB,SAAtB,EAAiC,OAAjC,C;K;IAGZ,wD;MA  
W2C,yB;QAAA,YAAiB,C;MAAG,uB;QAAA,UAAe,c;MACIE,OAAR,iBAAQ,EAAK,OnB38GsB,KmB28G3B,E  
AAuB,SAAvB,EAAkC,OAAIC,C;K;IAGZ,wD;MAW2C,yB;QAAA,YAAiB,C;MAAG,uB;QAAA,UAAe,c;MACI  
E,OAAR,iBAAQ,EAAK,OpC7gHsB,KoC6gH3B,EAAuB,SAAvB,EAAkC,OAAIC,C;K;IAGZ,wD;MAW6C,yB;Q  
AAA,YAAiB,C;MAAG,uB;QAAA,UAAe,c;MACpE,OAAR,iBAAQ,EAAK,OICjhHwB,KkCihH7B,EAAwB,SA  
xB,EAAmC,OAAnc,C;K;8FASR,yB;MAAA,0D;MAAA,4B;QAAQ,OAAQ,YAAR,iBAAQ,C;O;KAAhB,C;8FAQ  
A,yB;MAAA,0D;MAAA,4B;QAAQ,OAAQ,YAAR,iBAAQ,C;O;KAAhB,C;+FAQA,yB;MAAA,0D;MAAA,4B;Q  
AAQ,OAAQ,YAAR,iBAAQ,C;O;KAAhB,C;+FAQA,yB;MAAA,0D;MAAA,4B;QAAQ,OAAQ,YAAR,iBAAQ,C;  
O;KAAhB,C;kGAQA,yB;MAAA,8D;MAAA,4B;QAAQ,OAAQ,cAAR,iBAAQ,C;O;KAAhB,C;kGAQA,yB;MAA  
A,8D;MAAA,4B;QAAQ,OAAQ,cAAR,iBAAQ,C;O;KAAhB,C;mGAQA,yB;MAAA,8D;MAAA,4B;QAAQ,OAA  
Q,cAAR,iBAAQ,C;O;KAAhB,C;mGAQA,yB;MAAA,8D;MAAA,4B;QAAQ,OAAQ,cAAR,iBAAQ,C;O;KAAhB,  
C;iFAEJ,yB;MAAA,uC;MvBvoEA,iD;MuBuoEA,qC;QAOqB,4B;QAAA,gBAAU,OnC9jHM,K;QmC8jHjC,OAA  
O,mBvBzoEA,2BAxIK,gBAAW,SAAX,EAwIL,CuByoEA,C;O;KAPX,C;iFAUA,yB;MAAA,yC;MvBzoEA,iD;M  
uByoEA,qC;QAOI,OAAO,oBvB3oEA,qBuB2oEW,iBvB3oEX,EAxIK,mBuBmxEGb,OnB7jHO,KJ0yCvB,CAwIL,  
CuB2oEA,C;O;KAPX,C;iFAUA,yB;MAAA,yC;MvB3qEA,iD;MuB2qEA,qC;QAOsB,4B;QAAA,gBAAU,OpC1n  
HO,K;QoC0nHnC,OAAO,oBvB7qEA,2BAxIK,eAAY,SAAZ,EAwIL,CuB6qEA,C;O;KAPX,C;iFAUA,yB;MAAA,  
2C;MvB7qEA,iD;MuB6qEA,qC;QAOuB,4B;QAAA,gBAAU,OICznHQ,K;QkCynHrC,OAAO,qBvB/qEA,2BAxIK  
,gBAAa,SAAb,EAwIL,CuB+qEA,C;O;KAPX,C;IAUA,sC;MAQoB,UAAiB,M;MAFjC,YAAy,c;MACZ,aAAqB,U  
AAR,iBAAQ,EAAO,iBAAO,QAAS,KAAhB,IAAP,C;MACL,0B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QAAU,

OAAO,cAAP,EAAO,sBAAP,YAAkB,OnCvmHX,K;:MmCwmHjC,OAAO,cAAU,MAAV,C;K;IAGX,sC;MAQoB, UAAiB,M;MAFjC,YAAY,c;MACZ,aAAqB,UAAAR,iBAAQ,EAAO,iBAAO,QAAS,KAaHb,IAAP,C;MACL,0B;M AAhB,OAAgB,cAAhB,C;QAAgB,yB;QAAU,OAAO,cAAP,EAAO,sBAAP,YAAkB,OnBxmHT,K;:MmBymHnC, OAAO,eAAW,MAAX,C;K;IAGX,sC;MAQoB,UAAiB,M;MAFjC,YAAY,c;MACZ,aAAqB,UAAAR,iBAAQ,EAAO ,iBAAO,QAAS,KAaHb,IAAP,C;MACL,0B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QAAU,OAAO,cAAP,EAAO ,sBAAP,YAAkB,OpCvqHT,K;:MoCwqHnC,OAAO,eAAW,MAAX,C;K;IAGX,sC;MAQoB,UAAiB,M;MAFjC,Y AAY,c;MACZ,aAAqB,UAAAR,iBAAQ,EAAO,iBAAO,QAAS,KAaHb,IAAP,C;MACL,0B;MAAhB,OAAgB,cAA hB,C;QAAgB,yB;QAAU,OAAO,cAAP,EAAO,sBAAP,YAAkB,OICxqHP,K;:MkCyqHrC,OAAO,gBAAY,MAAZ, C;K;iFAGX,yB;MAAA,uC;MvB/tEA,iD;MuB+tEA,sC;QAOI,OAAO,mBvBjuEA,qBuBiuEU,iBvBjuEV,EuBiuEo B,QAAS,QvBjuE7B,CuBiuEA,C;O;KAPX,C;iFAUA,yB;MAAA,yC;MvBjuEA,iD;MuBiuEA,sC;QAOI,OAAO,oB vBnuEA,qBuBmuEW,iBvBnuEX,EuBmuEqB,QAAS,QvBnuE9B,CuBmuEA,C;O;KAPX,C;iFAUA,yB;MAAA,yC ;MvBnwEA,iD;MuBmwEA,sC;QAOI,OAAO,oBvBrwEA,qBuBqwEW,iBvBrwEX,EuBqwEqB,QAAS,QvBrwE9B ,CuBqwEA,C;O;KAPX,C;iFAUA,yB;MAAA,2C;MvBrwEA,iD;MuBqwEA,sC;QAOI,OAAO,qBvBvwEA,qBuBu wEY,iBvBvwEZ,EuBuwEsB,QAAS,QvBvwE/B,CuBuwEA,C;O;KAPX,C;IAUA,2B;MAQI,IAAI,iBAAO,CAAX, C;QAAC,YAAU,SAAV,EAAGB,CAAhB,EAAMb,cAANb,C;K;IAGIB,2B;MAQI,IAAI,iBAAO,CAAX,C;QAAC,Y AAU,SAAV,EAAGB,CAAhB,EAAMb,cAANb,C;K;IAGIB,2B;MAQI,IAAI,iBAAO,CAAX,C;QAAC,YAAU,SAAV, EAAGB,CAAhB,EAAMb,cAANb,C;K;IAGIB,+C;MAA0B,yB;QAAA,YAAiB,C;MAAG,uB;QAAA,UAAe,c;MACzD,oCA Aa,2BAAkB,SAAlB,EAA6B,OAA7B,EAAc,cAAAtC,C;MACb,YAAU,SAAV,EAAGB,SAAhB,EAA2B,OAA3B, C;K;IAGJ,+C;MAA2B,yB;QAAA,YAAiB,C;MAAG,uB;QAAA,UAAe,c;MAC1D,oCAAA,2BAAkB,SAAlB,EAA6 B,OAA7B,EAAc,cAAAtC,C;MACb,YAAU,SAAV,EAAGB,SAAhB,EAA2B,OAA3B,C;K;IAGJ,+C;MAA2B,yB;Q AAA,YAAiB,C;MAAG,uB;QAAA,UAAe,c;MAC1D,oCAAA,2BAAkB,SAAlB,EAA6B,OAA7B,EAAc,cAAAtC,C ;MACb,YAAU,SAAV,EAAGB,SAAhB,EAA2B,OAA3B,C;K;IAGJ,+C;MAA4B,yB;QAAA,YAAiB,C;MAAG,uB; QAAA,UAAe,c;MAC3D,oCAAA,2BAAkB,SAAlB,EAA6B,OAA7B,EAAc,cAAAtC,C;MACb,YAAU,SAAV,EAAG B,SAAhB,EAA2B,OAA3B,C;K;IAGJ,0D;MAAl,kBAAK,SAAL,EAAGB,OAAhB,C;MAh8CQ,WAAR,iBAAQ,E Ai8CA,SAj8CA,EAi8CW,OAJ8CX,C;K;IAo8CZ,0D;MAAl,kBAAK,SAAL,EAAGB,OAAhB,C;MAj8CQ,WAAR,i BAAQ,EAk8CA,SAI8CA,EAk8CW,OAI8CX,C;K;IAq8CZ,0D;MAAl,kBAAK,SAAL,EAAGB,OAAhB,C;MAI8CQ ,UAAAR,iBAAQ,EA8CA,SA8CA,EA8CW,OAN8CX,C;K;IAS8CZ,0D;MAAl,kBAAK,SAAL,EAAGB,OAAhB, C;MAN8CQ,WAAR,iBAAQ,EAo8CA,SAp8CA,EAo8CW,OAP8CX,C;K;8FAu8CZ,qB;MAQI,OAAO,iBvB3jGiB, Q;K;4FuB8jG5B,qB;MAQI,OAAO,iBvBljGiB,Q;K;8FuBqjG5B,yB;MAAA,gD;MAAA,4B;QAQI,OAAE,OAAR,i BAAQ,C;O;KARnB,C;gGAWA,qB;MAQI,OAAO,iBvBllGiB,Q;K;luB2lGL,gD;MAAA,wB;QAAW,qCAAK,KA AL,C;O;K;IANIC,iC;MAMI,OAAO,iBAAM,cAAN,EAAY,gCAAZ,C;K;IASY,kD;MAAA,wB;QAAW,qCAAK,KA AL,C;O;K;IANIC,mC;MAMI,OAAO,iBAAM,cAAN,EAAY,gCAAZ,C;K;IASY,kD;MAAA,wB;QAAW,qCAAK,KAAL,C;O;K;IANIC,mC;MAMI,OAAO,iBAAM,cAAN,EAAY,gCAAZ,C;K;IASiB,gD;MAAA,wB;QAAW,y BAAK,KAAL,C;O;K;IANvC,iC;MAMI,OJnqIO,eAAW,+BImqIA,gBJnqIA,GAAGB,kBImqIV,8BJnqIU,CAAhB,C AAX,C;K;gGIsqIX,yB;MAAA,yC;MAAA,4B;QAQI,OAAO,oBAAW,SvBppGM,QuBopGjB,C;O;KARX,C;IAiB2 B,8C;MAAA,wB;QAAW,wBAAK,KAAL,C;O;K;IANtC,gC;MAMI,OHvrIO,cAAU,gCGurIA,gBHvrIA,GAAe,iB GurIT,6BHvrIS,CAAF,CAAV,C;K;8FG0rIX,yB;MAAA,uC;MAAA,4B;QAQI,OAAO,mBAAU,SvBppGO,QuBop GjB,C;O;KARX,C;IAiB4B,gD;MAAA,wB;QAAW,yBAAK,KAAL,C;O;K;IANvC,iC;MAMI,OF3sIO,eAAW,kBE 2sIA,gBF3sIA,EAAGB,kBE2sIV,8BF3sIU,CAAhB,CAAX,C;K;gGE8sIX,yB;MAAA,gD;MAAA,yC;MAAA,4B;Q AQI,OAAO,oBAAgB,OAAL,SAAK,CAAhB,C;O;KARX,C;IAiB6B,kD;MAAA,wB;QAAW,0BAAK,KAAL,C;O; K;IANxk,cC;MAMI,OD/tIO,gBAAY,gCC+tIA,gBD/tIA,GAAiB,mBC+tIX,+BD/tIW,CAAjB,CAAZ,C;K;gGckul X,yB;MAAA,2C;MAAA,4B;QAQI,OAAO,qBAAY,SvBtsGK,QuBssGjB,C;O;KARX,C;mgAWA,yB;MAAA,0D; MAAA,yD;MAAA,uE;MAAA,2C;QAcI,aAAa,mBAAyC,cAAIB,YAAY,cAAZ,CAAKB,EAAc,EAAAd,CAAzC,C;Q AsEG,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UArEO,MASEP,aAAI,OAAl,EAteE,aAsEF,CAAc,O AAd,CAAb,C;:QAtEhB,OAaUB,M;O;Kaf3B,C;mgAkBA,yB;MAAA,0D;MAAA,yD;MAAA,uE;MAAA,2C;QAc I,aAAa,mBAA0C,cAAIB,YAAY,cAAZ,CAAKB,EAAc,EAAAd,CAA1C,C;QAsEG,Q;QAAA,2B;QAAhB,OAAgB,c

AAhB,C;UAAgB,yB;UArEO,MAsEP,aAAI,OAAJ,EAtEe,aAsEF,CAAc,OAAAd,CAAb,C;;QAtEhB,OAAuB,M;O;Kaf3B,C;kGakBA,yB;MAAA,0D;MAAA,yD;MAAA,uE;MAAA,2C;QAcI,aAAa,mBAA0C,cAAIB,YAAY,cAAZ,CAAKB,EAAC,EAAd,CAA1C,C;QAsEG,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UArEO,MAsEP,aAAI,OAAJ,EAtEe,aAsEF,CAAc,OAAAd,CAAb,C;;QAtEhB,OAAuB,M;O;Kaf3B,C;mGakBA,yB;MAAA,0D;MAAA,yD;MAAA,uE;MAAA,2C;QAcI,aAAa,mBAA2C,cAAIB,YAAY,cAAZ,CAAKB,EAAC,EAAd,CAA3C,C;QAsEG,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UArEO,MAsEP,aAAI,OAAJ,EAtEe,aAsEF,CAAc,OAAAd,CAAb,C;;QAtEhB,OAAuB,M;O;Kaf3B,C;uGakBA,iD;MAYoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,WAAy,aAAI,OAAJ,EAAa,cAAc,OAAAd,CAAb,C;;MAEhB,OAAO,W;K;uGAGX,iD;MAYoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,WAAy,aAAI,OAAJ,EAAa,cAAc,OAAAd,CAAb,C;;MAEhB,OAAO,W;K;uGAGX,iD;MAYoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,WAAy,aAAI,OAAJ,EAAa,cAAc,OAAAd,CAAb,C;;MAEhB,OAAO,W;K;uFAGX,yB;MAAA,+D;MAoLA,gD;MApLA,uC;QASW,kBAAU,gB;QAKLD,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WAnL6B,SAmLIB,CAAU,OAAV,C;UACC,OAAZ,WAAy,EAAO,IAAP,C;;QApLhB,OAsLO,W;O;KA/LX,C;uFAYA,yB;MAAA,+D;MAsLA,gD;MatLA,uC;QASW,kBAAU,gB;QAOlD,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WArL6B,SAqLiB,CAAU,OAAV,C;UACC,OAAZ,WAAy,EAAO,IAAP,C;;QAtLhB,OAwLO,W;O;KAjMX,C;uFAYA,yB;MAAA,+D;MAwLA,gD;MAxLA,uC;QASW,kBAAU,gB;QAsLD,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WAvL6B,SAuLiB,CAAU,OAAV,C;UACC,OAAZ,WAAy,EAAO,IAAP,C;;QAxLhB,OA0LO,W;O;KAnMX,C;uFAYA,yB;MAAA,+D;MA0LA,gD;MA1LA,uC;QASW,kBAAU,gB;QAwLD,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WAzL6B,SAyLiB,CAAU,OAAV,C;UACC,OAAZ,WAAy,EAAO,IAAP,C;;QA1LhB,OA4LO,W;O;KArMX,C;qGAYA,yB;MAAA,+D;MA4DA,gD;MA5DA,uC;QAYW,kBAAiB,gB;QA2DR,gB;QADhB,YAAY,C;QACI,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WA5DoC,SA4DzB,EAAU,cAAV,EAAU,sBAAV,WAAmB,OAAAnB,C;UACC,OAAZ,WAAy,EAAO,IAAP,C;;QA7DhB,OA+DO,W;O;KA3EX,C;qGAeA,yB;MAAA,+D;MA+DA,gD;MA/DA,uC;QAYW,kBAAiB,gB;QA8DR,gB;QADhB,YAAY,C;QACI,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WA/DoC,SA+DzB,EAAU,cAAV,EAAU,sBAAV,WAAmB,OAAAnB,C;UACC,OAAZ,WAAy,EAAO,IAAP,C;;QAhEhB,OAKEO,W;O;KA9EX,C;qGAeA,yB;MAAA,+D;MAkEA,gD;MAIEA,uC;QAYW,kBAAiB,gB;QAiER,gB;QADhB,YAAY,C;QACI,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WAlEoC,SAkEzB,EAAU,cAAV,EAAU,sBAAV,WAAmB,OAAAnB,C;UACC,OAAZ,WAAy,EAAO,IAAP,C;;QAnEhB,OaqEO,W;O;KAjFX,C;qGAeA,yB;MAAA,+D;MAqEA,gD;MArEA,uC;QAYW,kBAAiB,gB;QAoER,gB;QADhB,YAAY,C;QACI,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WArEoC,SAqEzB,EAAU,cAAV,EAAU,sBAAV,WAAmB,OAAAnB,C;UACC,OAAZ,WAAy,EAAO,IAAP,C;;QAtEhB,OAwEO,W;O;KApFX,C;yGAeA,yB;MAAA,gD;MAAA,oD;QAWoB,UACS,M;QAFzB,YAAY,C;QACI,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WAAW,WAAU,cAAV,EAAU,sBAAV,WAAmB,OAAAnB,C;UACC,OAAZ,WAAy,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KafX,C;yGakBA,yB;MAAA,gD;MAAA,oD;QAWoB,UACS,M;QAFzB,YAAY,C;QACI,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WAAW,WAAU,cAAV,EAAU,sBAAV,WAAmB,OAAAnB,C;UACC,OAAZ,WAAy,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KafX,C;yGakBA,yB;MAAA,gD;MAAA,oD;QAWoB,UACS,M;QAFzB,YAAY,C;QACI,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WAAW,WAAU,cAAV,EAAU,sBAAV,WAAmB,OAAAnB,C;UACC,OAAZ,WAAy,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KafX,C;2FakBA,yB;MAAA,gD;MAAA,oD;QAOoB,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WAAW,UAAU,OAAV,C;UACC,OAAZ,WAAy,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KAXX,C;2FACa,yB;MAAA,gD;MAAA,oD;QAOoB,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WAAW,UAAU,OAAV,C;UACC,OAAZ,WAAy,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KAXX,C;2FACa,yB;MAAA,gD;MAAA,oD;QAOoB,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,WAAW,UAAU,OAAV,C;UACC,OAAZ,WAAy,EAAO,IAAP,C;;QAEhB,OAAO,W;O;KAXX,C;uFACa,yB;MAAA,w

E;MA4HA,+D;MA5HA,yC;QAYW,kBAAU,oB;QA4HD,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,UA7HoD,WA6H1C,CAAY,OAAZ,C;U/B59IP,U;UADP,Y+B89Ie,W/B99IH,W+B89IwB,G/B99IxB,C;UACL,IAAI,aAAJ,C;YACH,a+B49IuC,gB;YAA5B,W/B39IX,a+B29IgC,G/B39IhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;U+Bw9IA,iB;UACA,IAAK,WAAI,OAAJ,C;;QA/HT,OAIiO,W;O;KA7IX,C;uFAeA,yB;MAAA,wE;MAiIA,+D;MAjIA,yC;QAYW,kBAAU,oB;QAIiD,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,UAIiQD,WAKI3C,CAAY,OAAZ,C;U/Bh/IP,U;UADP,Y+Bk/Ie,W/BI/IH,W+Bk/IwB,G/BI/IxB,C;UACL,IAAI,aAAJ,C;YACH,a+Bg/IuC,gB;YAA5B,W/B/+IX,a+B++IgC,G/B/+IhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;U+B4+IA,iB;UACA,IAAK,WAAI,OAAJ,C;;QApIT,OAsIO,W;O;KAIJX,C;sFAeA,yB;MAAA,wE;MASIA,+D;MATIA,yC;QAYW,kBAAU,oB;QAsID,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,UAvIqD,WAuI3C,CAAY,OAAZ,C;U/Bp/gJP,U;UADP,Y+BsgJe,W/BtgJH,W+BsgJwB,G/BtgJxB,C;UACL,IAAI,aAAJ,C;YACH,a+BogJuC,gB;YAA5B,W/BngJX,a+BmgJgC,G/BngJhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;U+BggJA,iB;UACA,IAAK,WAAI,OAAJ,C;;QAzIT,OA2IO,W;O;KAvJX,C;uFAeA,yB;MAAA,wE;MA2IA,+D;MA3IA,yC;QAYW,kBAAU,oB;QA2ID,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,UA5IsD,WA4I5C,CAAY,OAAZ,C;U/BxhJP,U;UADP,Y+B0hJe,W/B1hJH,W+B0hJwB,G/B1hJxB,C;UACL,IAAI,aAAJ,C;YACH,a+BwhJuC,gB;YAA5B,W/BvhJX,a+BuhJgC,G/BvhJhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;U+BohJA,iB;UACA,IAAK,WAAI,OAAJ,C;;QA9IT,OAqJO,W;O;KA5JX,C;uFAeA,yB;MAAA,wE;MAgJA,+D;MAhJA,yD;QAaW,kBAAU,oB;QAqJD,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,UAjJiD,WaiJvC,CAAY,OAAZ,C;U/B7iJP,U;UADP,Y+B+iJe,W/B/iJH,W+B+iJwB,G/B/iJxB,C;UACL,IAAI,aAAJ,C;YACH,a+B6iJuC,gB;YAA5B,W/B5iJX,a+B4iJgC,G/B5iJhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;U+ByiJA,iB;UACA,IAAK,WAnJyD,cAmJrD,CAAe,OAAf,CAAJ,C;;QAnJT,OAqJO,W;O;KAIKX,C;uFagBA,yB;MAAA,wE;MAqJA,+D;MARJA,yD;QAaW,kBAAU,oB;QAqJD,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,UAtJiD,WAsJvC,CAAY,OAAZ,C;U/BlkJP,U;UADP,Y+BokJe,W/BpkJH,W+BokJwB,G/BpkJxB,C;UACL,IAAI,aAAJ,C;YACH,a+BkkJuC,gB;YAA5B,W/BjkJX,a+BikJgC,G/BjkJhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;U+B8jJA,iB;UACA,IAAK,WAxJyD,cAwJrD,CAAe,OAAf,CAAJ,C;;QAxJT,OA0JO,W;O;KAvKX,C;uFagBA,yB;MAAA,wE;MA0JA,+D;MA1JA,yD;QAaW,kBAAU,oB;QA0JD,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,UA3JiD,WA2JvC,CAAY,OAAZ,C;U/BvIJP,U;UADP,Y+BylJe,W/BzIjH,W+BylJwB,G/BzIjxB,C;UACL,IAAI,aAAJ,C;YACH,a+BulJuC,gB;YAA5B,W/BtIjX,a+BslJgC,G/BtIjhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;U+BmlJA,iB;UACA,IAAK,WA7JyD,cA6JrD,CAAe,OAAf,CAAJ,C;;QA7JT,OA+JO,W;O;KA5KX,C;uFagBA,yB;MAAA,wE;MA+JA,+D;MA/JA,yD;QAaW,kBAAU,oB;QA+JD,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,UAhKiD,WAgKvC,CAAY,OAAZ,C;U/B5mJP,U;UADP,Y+B8mJe,W/B9mJH,W+B8mJwB,G/B9mJxB,C;UACL,IAAI,aAAJ,C;YACH,a+B4mJuC,gB;YAA5B,W/B3mJX,a+B2mJgC,G/B3mJhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;U+BwmJA,iB;UACA,IAAK,WAIKyD,cAkKrD,CAAe,OAAf,CAAJ,C;;QAIKT,OAoKO,W;O;KAjLX,C;2FAgBA,yB;MAAA,+D;MAAA,sD;QAYoB,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,UAAU,YAAY,OAAZ,C;U/B59IP,U;UADP,Y+B89Ie,W/B99IH,W+B89IwB,G/B99IxB,C;UACL,IAAI,aAAJ,C;YACH,a+B49IuC,gB;YAA5B,W/B39IX,a+B29IgC,G/B39IhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;U+Bw9IA,iB;UACA,IAAK,WAAI,OAAJ,C;;QAET,OAAO,W;O;KAjBX,C;2FAoBA,yB;MAAA,+D;MAAA,sD;QAYoB,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,UAAU,YAAY,OAAZ,C;U/Bh/IP,U;UADP,Y+Bk/Ie,W/BI/IH,W+Bk/IwB,G/BI/IxB,C;UACL,IAAI,aAAJ,C;YACH,a+Bg/IuC,gB;YAA5B,W/B/+IX,a+B++IgC,G/B/+IhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;U+B4+IA,iB;UACA,IAAK,WAAI,OAAJ,C;;QAET,OAAO,W;O;KAjBX,C;2FAoBA,yB;MAAA,+D;MAAA,sD;QAYoB,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,UAAU,YAAY,OAAZ,C;U/BpgJP,U;UADP,Y+BsgJe,W/BtgJH,W+BsgJwB,G/BtgJxB,C;UACL,IAAI,aAAJ,C;YACH,a+BogJuC,gB;YAA5B,W/BngJX,a+BmgJgC,G/BngJhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;U+BggJA,iB;UACA,IAAK,WAAI,OAAJ,C;;QAET,OAAO,W;O;KAjBX,C;2FAoBA,yB;MAAA,+D;MAAA,sD;QAYoB,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,UAAU,YAAY,OAAZ,C;U/BxhJP,U;UADP,Y+B0hJe,W/B1hJH,W+B0hJwB,G/B1hJxB,C;UACL,IAAI,aAAJ,C;YACH,a+BwhJuC,gB;YAA5B,W/BvhJX,a+BuhJgC,G/BvhJhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;U+BohJA,iB;UACA,IAAK,WAAI,OAAJ,C;;QAET,OAAO,W;O;KAjBX,C;2FAoBA,yB;MAAA,+D;MAAA,sE;QAaoB,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,UAAU,YAAY,OAAZ,C;U/B7iJP,U;UADP,Y+B+iJe,W/B/iJH,W+B+iJwB,G/B/iJxB,C;UACL,IAAI,aAAJ,C;YACH,a+B6iJuC,gB;YAA5B,W/B5iJX,a+B4iJgC,G/B5iJhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;U+ByiJA,iB;UA

CA,IAAK,WAAI,eAAe,OAAf,CAAJ,C;;QAET,OAAO,W;O;KAIBX,C;2FAqBA,yB;MAAA,+D;MAAA,sE;QAaoB,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,UAAU,YAAY,OAAZ,C;U/BkJP,U;UADP,Y+BokJe,W/BpkJH,W+BokJwB,G/BpkJxB,C;UACL,IAAI,aAAJ,C;YACH,a+BkkJuC,gB;YAA5B,W/BjkJX,a+BikJgC,G/BjkJhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;U+B8jJA,iB;UACA,IAAK,WAAI,eAAe,OAAf,CAAJ,C;;QAET,OA AO,W;O;KAIBX,C;2FAqBA,yB;MAAA,+D;MAAA,sE;QAaoB,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB ,yB;UACZ,UAAU,YAAY,OAAZ,C;U/BvIJJP,U;UADP,Y+BvIJJe,W/BzIJH,W+BvIJwB,G/BzIJxB,C;UACL,IAAI,a AAJ,C;YACH,a+BulJuC,gB;YAA5B,W/BtlJX,a+BslJgC,G/BtlJhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;U+BmlJA ,iB;UACA,IAAK,WAAI,eAAe,OAAf,CAAJ,C;;QAET,OAAO,W;O;KAIBX,C;2FAqBA,yB;MAAA,+D;MAAA,sE ;QAaoB,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,UAAU,YAAY,OAAZ,C;U/B5mJP,U;UADP ,Y+B8mJe,W/B9mJH,W+B8mJwB,G/B9mJxB,C;UACL,IAAI,aAAJ,C;YACH,a+B4mJuC,gB;YAA5B,W/B3mJX, a+B2mJgC,G/B3mJhC,EAAS,MAAT,C;YACA,e;;YAEA,c;;U+BwmJA,iB;UACA,IAAK,WAAI,eAAe,OAAf,CA AJ,C;;QAET,OAAO,W;O;KAIBX,C;+EAqBA,yB;MAAA,gE;MAAA,uC;QAUW,kBAAM,eAAa,cAAb,C;QAsKA ,Q;QAAA,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,WAAY,WAvKiB,SAuKb,CAAU,IAAV,CAAJ,C;;QAvKhB ,OAwKO,W;O;KAILX,C;+EAaA,yB;MAAA,gE;MAAA,uC;QAUW,kBAAM,eAAa,cAAb,C;QAsKA,Q;QAAA,2 B;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,WAAY,WAvKiB,SAuKb,CAAU,IAAV,CAAJ,C;;QAvKhB,OAwKO, W;O;KAILX,C;8EAaA,yB;MAAA,gE;MAAA,uC;QAUW,kBAAM,eAAa,cAAb,C;QAsKA,Q;QAAA,2B;QAAb,O AaA,cAAb,C;UAAa,sB;UACT,WAAY,WAvKiB,SAuKb,CAAU,IAAV,CAAJ,C;;QAvKhB,OAwKO,W;O;KAILX ,C;+EAaA,yB;MAAA,gE;MAAA,uC;QAUW,kBAAM,eAAa,cAAb,C;QAsKA,Q;QAAA,2B;QAAb,OAAa,cAAb, C;UAAa,sB;UACT,WAAY,WAvKiB,SAuKb,CAAU,IAAV,CAAJ,C;;QAvKhB,OAwKO,W;O;KAILX,C;4FAaA,y B;MAAA,gE;MAAA,uC;QAUW,kBAaA,eAAa,cAAb,C;QAqDP,gB;QADb,YAAY,C;QACC,2B;QAAb,OAAa,cA Ab,C;UAAa,sB;UACT,WAAY,WAtDwB,SASDpB,EAAU,cAAV,EAAU,sBAAV,WAAMb,IAAnB,CAAJ,C;;QAt DhB,OAuDO,W;O;KAjEX,C;6FAaA,yB;MAAA,gE;MAAA,uC;QAUW,kBAaA,eAAa,cAAb,C;QAwDP,gB;QAD b,YAAY,C;QACC,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,WAAY,WAZDwB,SAyDpB,EAAU,cAAV,EAAU, sBAAV,WAAMb,IAAnB,CAAJ,C;;QAZDhB,OA0DO,W;O;KApEX,C;6FAaA,yB;MAAA,gE;MAAA,uC;QAUW, kBAaA,eAAa,cAAb,C;QA2DP,gB;QADb,YAAY,C;QACC,2B;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,WAAY,W A5DwB,SA4DpB,EAAU,cAAV,EAAU,sBAAV,WAAMb,IAAnB,CAAJ,C;;QA5DhB,OA6DO,W;O;KAvEX,C;4F AaA,yB;MAAA,gE;MAAA,uC;QAUW,kBAaA,eAAa,cAAb,C;QA8DP,gB;QADb,YAAY,C;QACC,2B;QAAb,OA Aa,cAAb,C;UAAa,sB;UACT,WAAY,WA/DwB,SA+DpB,EAAU,cAAV,EAAU,sBAAV,WAAMb,IAAnB,CAAJ, C;;QA/DhB,OAgEO,W;O;KA1EX,C;iGAaA,6C;MAWiB,UACiB,M;MAF9B,YAAY,C;MACC,2B;MAAb,OAAa, cAAb,C;QAAa,sB;QACT,WAAY,WAAI,WAAU,cAAV,EAAU,sBAAV,WAAMb,IAAnB,CAAJ,C;;MACHb,OA AO,W;K;iGAGX,6C;MAWiB,UACiB,M;MAF9B,YAAY,C;MACC,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QACT, WAAY,WAAI,WAAU,cAAV,EAAU,sBAAV,WAAMb,IAAnB,CAAJ,C;;MACHb,OAAO,W;K;iGAGX,6C;MAW iB,UACiB,M;MAF9B,YAAY,C;MACC,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QACT,WAAY,WAAI,WAAU,cAA V,EAAU,sBAAV,WAAMb,IAAnB,CAAJ,C;;MACHb,OAAO,W;K;iGAGX,6C;MAWiB,UACiB,M;MAF9B,YAA Y,C;MACC,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QACT,WAAY,WAAI,WAAU,cAAV,EAAU,sBAAV,WAAMb,I AAnB,CAAJ,C;;MACHb,OAAO,W;K;mFAGX,6C;MAQiB,Q;MAAA,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QAC T,WAAY,WAAI,UAAU,IAAV,CAAJ,C;;MACHb,OAAO,W;K;mFAGX,6C;MAQiB,Q;MAAA,2B;MAAb,OAAa, cAAb,C;QAAa,sB;QACT,WAAY,WAAI,UAAU,IAAV,CAAJ,C;;MACHb,OAAO,W;K;mFAGX,6C;MAQiB,Q;M AAA,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QACT,WAAY,WAAI,UAAU,IAAV,CAAJ,C;;MACHb,OAAO,W;K;m FAGX,6C;MAQiB,Q;MAAA,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QACT,WAAY,WAAI,UAAU,IAAV,CAAJ,C;; MACHb,OAAO,W;K;IAUiB,6C;MAAA,mB;QAAE,gC;O;K;IAP9B,iC;MAOI,OAAO,qBAAiB,8BAAjB,C;K;IAU iB,6C;MAAA,mB;QAAE,gC;O;K;IAP9B,iC;MAOI,OAAO,qBAAiB,8BAAjB,C;K;IAUiB,6C;MAAA,mB;QAAE, gC;O;K;IAP9B,iC;MAOI,OAAO,qBAAiB,8BAAjB,C;K;IAUiB,6C;MAAA,mB;QAAE,gC;O;K;IAP9B,iC;MAOI, OAAO,qBAAiB,8BAAjB,C;K;+EAGX,gC;MASoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAGB,yB;QAAM ,IAAI,CAAC,UAAU,OA AV,CAAL,C;UAAyB,OAAO,K;;MACTD,OAAO,I;K;+EAGX,gC;MASoB,Q;MAAA,2B; MAAhB,OAAgB,cAAhB,C;QAAGB,yB;QAAM,IAAI,CAAC,UAAU,OA AV,CAAL,C;UAAyB,OAAO,K;;MACTD ,OAAO,I;K;+EAGX,gC;MASoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAGB,yB;QAAM,IAAI,CAAC,UA AU,OA AV,CAAL,C;UAAyB,OAAO,K;;MACTD,OAAO,I;K;+EAGX,gC;MASoB,Q;MAAA,2B;MAAhB,OAAgB,



MAOoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QAAM,OAAO,OAAP,C;;K;uFAG1B,6B;MAOoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QAAM,OAAO,OAAP,C;;K;uFAG1B,6B;MAOoB,Q;MAAA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QAAM,OAAO,OAAP,C;;K;qGAG1B,6B;MAUiB,UAAa,M;MAD1B,YAAY,C;MACC,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QAAM,QAAO,cAAP,EAAO,sBAAP,WAAgB,IAAhB,C;;K;qGAGvB,6B;MAUiB,UAAa,M;MAD1B,YAAY,C;MACC,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QAAM,QAAO,cAAP,EAAO,sBAAP,WAAgB,IAAhB,C;;K;qGAGvB,6B;MAUiB,UAAa,M;MAD1B,YAAY,C;MACC,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QAAM,QAAO,cAAP,EAAO,sBAAP,WAAgB,IAAhB,C;;K;qGAGvB,6B;MAUiB,UAAa,M;MAD1B,YAAY,C;MACC,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QAAM,QAAO,cAAP,EAAO,sBAAP,WAAgB,IAAhB,C;;K;IAGvB,2B;MAKI,OAAO,uB;K;IAGX,2B;MAKI,OAAO,uB;K;IAGX,2B;MAKI,OAAO,uB;K;IAGX,2B;MAKI,OAAO,uB;K;mFAGX,yB;MA9gEI,8D;MA8gEJ,sC;QAMW,sB;;UAuCP,IAAI,mBAAJ,C;YAAe,qBAAO,I;YAAP,uB;WACf,cAAc,sBAAK,CAAL,C;UACd,gBA7jEgB,cAAR,iBAAQ,C;UA8jEhB,IAAI,cAAa,CAAjB,C;YAAoB,qBAAO,O;YAAP,uB;WACpB,eA3CmB,QA2CJ,CAAS,OAAT,C;UACf,aAAU,CAAV,OAAa,SAAb,M;YACI,QAAQ,sBAAK,CAAL,C;YACR,QA9Ce,QA8CP,CAAS,CAAT,C;YACR,IAAI,2BAAW,CAAX,KAAJ,C;cACI,UAAU,C;cACV,WAAW,C;;UAGnB,qBAAO,O;;QApDP,yB;O;KANJ,C;mFASA,yB;MAgEI,8D;MA+gEJ,sC;QAMW,sB;;UAuDP,IAAI,mBAAJ,C;YAAe,qBAAO,I;YAAP,uB;WACf,cAAc,sBAAK,CAAL,C;UACd,gBA9kEgB,cAAR,iBAAQ,C;UA+kEhB,IAAI,cAAa,CAAjB,C;YAAoB,qBAAO,O;YAAP,uB;WACpB,eA3DmB,QA2DJ,CAAS,OAAT,C;UACf,aAAU,CAAV,OAAa,SAAb,M;YACI,QAAQ,sBAAK,CAAL,C;YACR,QA9De,QA8DP,CAAS,CAAT,C;YACR,IAAI,2BAAW,CAAX,KAAJ,C;cACI,UAAU,C;cACV,WAAW,C;;UAGnB,qBAAO,O;;QApEP,yB;O;KANJ,C;mFASA,yB;MAhhEI,8D;MAghEJ,sC;QAMW,sB;;UAuEP,IAAI,mBAAJ,C;YAAe,qBAAO,I;YAAP,uB;WACf,cAAc,sBAAK,CAAL,C;UACd,gBA/IEgB,cAAR,iBAAQ,C;UAgmEhB,IAAI,cAAa,CAAjB,C;YAAoB,qBAAO,O;YAAP,uB;WACpB,eA3EmB,QA2EJ,CAAS,OAAT,C;UACf,aAAU,CAAV,OAAa,SAAb,M;YACI,QAAQ,sBAAK,CAAL,C;YACR,QA9Ee,QA8EP,CAAS,CAAT,C;YACR,IAAI,2BAAW,CAAX,KAAJ,C;cACI,UAAU,C;cACV,WAAW,C;;UAGnB,qBAAO,O;;QApFP,yB;O;KANJ,C;mFASA,yB;MAjhEI,8D;MAihEJ,sC;QAMW,sB;;UAuFP,IAAI,mBAAJ,C;YAAe,qBAAO,I;YAAP,uB;WACf,cAAc,sBAAK,CAAL,C;UACd,gBAhnEgB,cAAR,iBAAQ,C;UAinEhB,IAAI,cAAa,CAAjB,C;YAAoB,qBAAO,O;YAAP,uB;WACpB,eA3FmB,QA2FJ,CAAS,OAAT,C;UACf,aAAU,CAAV,OAAa,SAAb,M;YACI,QAAQ,sBAAK,CAAL,C;YACR,QA9Fe,QA8FP,CAAS,CAAT,C;YACR,IAAI,2BAAW,CAAX,KAAJ,C;cACI,UAAU,C;cACV,WAAW,C;;UAGnB,qBAAO,O;;QApGP,yB;O;KANJ,C;+FASA,yB;MALjEI,8D;MAkjEJ,sC;QASI,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,cAAc,sBAAK,CAAL,C;QACd,gBA7jEgB,cA6jEA,SA7jER,QAAQ,C;QA8jEhB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,SAAS,OAAT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,sBAAK,CAAL,C;UACR,QAAQ,SAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KAtBX,C;+FAyBA,yB;MAnkEI,8D;MAnkEJ,sC;QASI,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,cAAc,sBAAK,CAAL,C;QACd,gBA9kEgB,cA8kEA,SA9kER,QAAQ,C;QA+kEhB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,SAAS,OAAT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,sBAAK,CAAL,C;UACR,QAAQ,SAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KAtBX,C;+FAyBA,yB;MAplEI,8D;MAolEJ,sC;QASI,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,cAAc,sBAAK,CAAL,C;QACd,gBA/IEgB,cA+IEA,SA/IER,QAAQ,C;QAgmEhB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,SAAS,OAAT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,sBAAK,CAAL,C;UACR,QAAQ,SAAS,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KAtBX,C;kFAyBA,yB;MAAA,sE;MATpEI,8D;MpBnwHJ,iB;MoBy5LA,sC;QAgBiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAtqEG,cAAR,iBAAQ,C;QAsqEhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpBn6LG,MAAO,KoBm6LO,QpBn6LP,EoBm6LiB,CpBn6LjB,C;;QoBq6Ld,OAAO,Q;O;KApBX,C;mFAuBA,yB;MAAA,sE;MarqEI,8D;MpB3wHJ,iB;MoBg7LA,sC;QAgBiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OArrEG,cAAR,iBAAQ,



C;QAqrEhB,aAAU,CAA V,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpB17LG,MAAO,KoB07LO ,QpB17LP,EoB07LiB,CpB17LjB,C;;QoB47Ld,OAAO,Q;O;KApBX,C;mFAuBA,yB;MAAA,sE;MAprEI,8D;MpB nxHJ,iB;MoBu8LA,sC;QAgBiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL ,CAAT,C;QACF,OApS EG,cAAR,iBAAQ,C;QAosEhB,aAAU,CAA V,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CA AT,C;UACR,WpBj9LG,MAAO,KoBi9LO,QpBj9LP,EoBi9LiB,CpBj9LjB,C;;QoBm9Ld,OAAO,Q;O;KApBX,C;m FAuBA,yB;MAAA,sE;MAnsEI,8D;MpB3xHJ,iB;MoB89LA,sC;QAgBiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM ,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAntEG,cAAR,iBAAQ,C;QAmtEhB,aAAU,CAA V,iB; UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpBx+LG,MAAO,KoBw+LO,QpBx+LP,EoBw+LiB,CpBx +LjB,C;;QoB0+Ld,OAAO,Q;O;KApBX,C;mFAuBA,yB;MAAA,sE;MAIvEI,8D;MpB9wHJ,iB;MoBggMA,sC;QA gBiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAlwEG, cAAR,iBAAQ,C;QakwEhB,aAAU,CAA V,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpB1gMG, MAAO,KoB0gMO,QpB1gMP,EoB0gMiB,CpB1gMjB,C;;QoB4gMd,OAAO,Q;O;KApBX,C;mFAuBA,yB;MAAA, sE;MAjwEI,8D;MpBtxHJ,iB;MoBuhMA,sC;QAgBiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QACrB,eAAe, SAAS,sBAAK,CAAL,CAAT,C;QACF,OAJxEG,cAAR,iBAAQ,C;QAixEhB,aAAU,CAA V,iB;UACI,QAAQ,SAA S,sBAAK,CAAL,CAAT,C;UACR,WpBjiMG,MAAO,KoBiiMO,QpBjiMP,EoBiiMiB,CpBjiMjB,C;;QoBmiMd,OA AO,Q;O;KApBX,C;mFAuBA,yB;MAAA,sE;MAhxEI,8D;MpB9xHJ,iB;MoB8iMA,sC;QAgBiB,Q;QAFb,IAAI,mB AAJ,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAhYEG,cAAR,iBAAQ,C;QAgY EhB,aAAU,CAA V,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpBxjMG,MAAO,KoBwjMO,QpBxj MP,EoBwjMiB,CpBxjMjB,C;;QoB0jMd,OAAO,Q;O;KApBX,C;mFAuBA,yB;MAAA,sE;MA/xEI,8D;MpBtyHJ,i B;MoBqkMA,sC;QAgBiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,CAA T,C;QACF,OA/yEG,cAAR,iBAAQ,C;QA+yEhB,aAAU,CAA V,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C; UACR,WpB/kMG,MAAO,KoB+kMO,QpB/kMP,EoB+kMiB,CpB/kMjB,C;;QoBilMd,OAAO,Q;O;KApBX,C;mF AuBA,yB;MAAA,sE;MA90EI,8D;MA80EJ,sC;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QACrB,eAAe, SAAS,sBAAK,CAAL,CAAT,C;QACF,OA51EG,cAAR,iBAAQ,C;QA41EhB,aAAU,CAA V,iB;UACI,QAAQ,SAA S,sBAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KApBX ,C;mFAuBA,yB;MAAA,sE;MA71EI,8D;MA61EJ,sC;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QACrB, eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OA32EG,cAAR,iBAAQ,C;QA22EhB,aAAU,CAA V,iB;UACI,QAA Q,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O; KApBX,C;mFAuBA,yB;MAAA,sE;MA52EI,8D;MA42EJ,sC;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B; QACrB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OA13EG,cAAR,iBAAQ,C;QA03EhB,aAAU,CAA V,iB;UA CI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OA AO,Q;O;KApBX,C;mFAuBA,yB;MAAA,sE;MA33EI,8D;MA23EJ,sC;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,M AAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAz4EG,cAAR,iBAAQ,C;QAY4EhB,aAAU,CAA V,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QA GnB,OAAO,Q;O;KApBX,C;8FAuBA,yB;MA16EI,8D;MpBnwHJ,iB;MoB6qMA,sC;QAcIB,Q;QAFb,IAAI,mBAA J,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAx7EG,cAAR,iBAAQ,C;QAw7EhB,a AAU,CAA V,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpBrrMG,MAAO,KoBqrMO,QpBrrMP,Eo BqrMiB,CpBrrMjB,C;;QoBurMd,OAAO,Q;O;KAlBX,C;+FAqBA,yB;MAv7EI,8D;MpB3wHJ,iB;MoBksMA,sC;Q AcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAr8EG,cA AR,iBAAQ,C;QAq8EhB,aAAU,CAA V,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpB1sMG,MA AO,KoB0sMO,QpB1sMP,EoB0sMiB,CpB1sMjB,C;;QoB4sMd,OAAO,Q;O;KAlBX,C;+FAqBA,yB;MAp8EI,8D; MpBnxHJ,iB;MoButMA,sC;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAA L,CAAT,C;QACF,OAI9EG,cAAR,iBAAQ,C;Qak9EhB,aAAU,CAA V,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CA AT,C;UACR,WpB/tMG,MAAO,KoB+tMO,QpB/tMP,EoB+tMiB,CpB/tMjB,C;;QoBiuMd,OAAO,Q;O;KAlBX,C; +FAqBA,yB;MAj9EI,8D;MpB3xHJ,iB;MoB4uMA,sC;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,e AAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OA/9EG,cAAR,iBAAQ,C;QA+9EhB,aAAU,CAA V,iB;UACI,QAAQ, SAAS,sBAAK,CAAL,CAAT,C;UACR,WpBpvMG,MAAO,KoBovMO,QpBpvMP,EoBovMiB,CpBpvMjB,C;;QoB svMd,OAAO,Q;O;KAlBX,C;+FAqBA,yB;MA9/EI,8D;MpB9wHJ,iB;MoB4wMA,sC;QAcIB,Q;QAFb,IAAI,mBA

AJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OA5gFG,cAAR,iBAAQ,C;QA4gFhB,  
aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpBpxMG,MAAO,KoBoxMO,QpBpxMP  
,EoBoxMiB,CpBpxMjB,C;;QoBsxMd,OAAO,Q;O;KAIBX,C;+FAqBA,yB;MA3gFI,8D;MpBtxHJ,iB;MoBiyMA,s  
C;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAzhF  
G,cAAR,iBAAQ,C;QAYhFhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpBzyMG,  
MAAO,KoByyMO,QpBzyMP,EoByyMiB,CpBzyMjB,C;;QoB2yMd,OAAO,Q;O;KAIBX,C;+FAqBA,yB;MAxhFI,  
8D;MpB9xHJ,iB;MoBszMA,sC;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,C  
AAL,CAAT,C;QACF,OAtiFG,cAAR,iBAAQ,C;QAsiFhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,C  
AAT,C;UACR,WpB9zMG,MAAO,KoB8zMO,QpB9zMP,EoB8zMiB,CpB9zMjB,C;;QoBg0Md,OAAO,Q;O;KAIB  
X,C;+FAqBA,yB;MAriFI,8D;MpBtyHJ,iB;MoB20MA,sC;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACt  
B,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAnjFG,cAAR,iBAAQ,C;QAmjFhB,aAAU,CAAV,iB;UACI,QA  
AQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpBn1MG,MAAO,KoBm1MO,QpBn1MP,EoBm1MiB,CpBn1MjB,C;  
;QoBq1Md,OAAO,Q;O;KAIBX,C;+FAqBA,yB;MAlFI,8D;MAkIFJ,sC;QAYiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,  
OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OA9IFG,cAAR,iBAAQ,C;QA8IFhB,aAAU,CAAV,  
iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGn  
B,OAAO,Q;O;KAIBX,C;+FAqBA,yB;MAIFI,8D;MAIFJ,sC;QAYiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;  
QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OA3mFG,cAAR,iBAAQ,C;QA2mFhB,aAAU,CAAV,iB;UA  
CI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OA  
AO,Q;O;KAIBX,C;+FAqBA,yB;MA5mFI,8D;MA4mFJ,sC;QAYiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QA  
CtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAxnFG,cAAR,iBAAQ,C;QAwnFhB,aAAU,CAAV,iB;UACI,  
QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,  
Q;O;KAIBX,C;+FAqBA,yB;MAznFI,8D;MAynFJ,sC;QAYiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,e  
AAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OArFG,cAAR,iBAAQ,C;QAqoFhB,aAAU,CAAV,iB;UACI,QAAQ,  
SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;K  
AIBX,C;2FAqBA,yB;MAAA,sE;MATqFI,8D;MASqFJ,kD;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QA  
CrB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAprFG,cAAR,iBAAQ,C;QAorFhB,aAAU,CAAV,iB;UACI,Q  
AAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAt  
C,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KApBX,C;0FAuBA,yB;MAAA,sE;MArrFI,8D;MAqrFJ,kD;QAcIB,Q;  
QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAnsFG,cAAR,i  
BAAQ,C;QAmsFhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,  
QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KApBX,C;2FAuBA,yB  
;MAAA,sE;MApsFI,8D;MAosFJ,kD;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sB  
AAK,CAAL,CAAT,C;QACF,OAltFG,cAAR,iBAAQ,C;QaktFhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,  
CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;  
;QAGnB,OAAO,Q;O;KApBX,C;2FAuBA,yB;MAAA,sE;MAntFI,8D;MAntFJ,kD;QAcIB,Q;QAFb,IAAI,mBAAJ,  
C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OajuFG,cAAR,iBAAQ,C;QAiuFhB,a  
AAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,  
CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KApBX,C;uGAuBA,yB;MAlwFI,8D;MAkwF  
J,kD;QAYiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OA9  
wFG,cAAR,iBAAQ,C;QA8wFhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,U  
AAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAIBX,C  
;sGAqBA,yB;MA+wFI,8D;MA+wFJ,kD;QAYiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,s  
BAAK,CAAL,CAAT,C;QACF,OA3xFG,cAAR,iBAAQ,C;QA2xFhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAA  
K,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,  
C;;QAGnB,OAAO,Q;O;KAIBX,C;uGAqBA,yB;MA5xFI,8D;MA4xFJ,kD;QAYiB,Q;QAFb,IAAI,mBAAJ,C;UAA  
e,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAxyFG,cAAR,iBAAQ,C;QAwyFhB,aAAU,CA  
AV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,  
GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAIBX,C;uGAqBA,yB;MAzyFI,8D;MAyyFJ,kD;QAY

iB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OArzFG,cAAR ,iBAAQ,C;QAqzFhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ ,QAAR,EAAkB,CAAIB,CAAX,GAAkC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAIBX,C;IAqBA,iC; MAQiB,Q;MAFb,IAAI,mBAAJ,C;QAAe,OAAO,I;MACtB,UAAU,sBAAK,CAAL,C;MACG,OA91FG,gBAAR,iB AAQ,C;MA81FhB,aAAU,CAAV,iB;QACI,QAAQ,sBAAK,CAAL,C;QACR,InC5mN8D,YmC4mN1D,GnC5mN2 E,KAAjB,EmC4mNpD,CnC5mNiF,KAA7B,CmC4mN1D,IAAJ,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAGX,i C;MAQiB,Q;MAFb,IAAI,mBAAJ,C;QAAe,OAAO,I;MACtB,UAAU,sBAAK,CAAL,C;MACG,OAr2FG,gBAAR,i BAAQ,C;MAq2FhB,aAAU,CAAV,iB;QACI,QAAQ,sBAAK,CAAL,C;QACR,InBnnN+D,amBnnN3D,GnBnnN6 E,KAAIB,EmBnnNrD,CnBnnNmF,KAA9B,CmBnnN3D,IAAJ,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAGX,i C;MAQiB,Q;MAFb,IAAI,mBAAJ,C;QAAe,OAAO,I;MACtB,UAAU,sBAAK,CAAL,C;MACG,OA52FG,gBAAR, iBAAQ,C;MA42FhB,aAAU,CAAV,iB;QACI,QAAQ,sBAAK,CAAL,C;QACR,IpC1pN4E,0BoC0pNx,E,GpC/6M8 B,KAAAL,GAAiB,GA308B,EoC0pNIE,CpC/6MwB,KAAAL,GAAiB,GA308B,CoC0pNx,E,IAAJ,C;UAAa,MAAM, C;;MAEvB,OAAO,G;K;IAGX,iC;MAQiB,Q;MAFb,IAAI,mBAAJ,C;QAAe,OAAO,I;MACtB,UAAU,sBAAK,CA AL,C;MACG,OAn3FG,gBAAR,iBAAQ,C;MAm3FhB,aAAU,CAAV,iB;QACI,QAAQ,sBAAK,CAAL,C;QACR,II CjqN6E,0BkCiqNzE,GlC77M8B,KAAAL,GAAiB,KApO+B,EkCiqNnE,CiC77MwB,KAAAL,GAAiB,KApO+B,CkCi qNzE,IAAJ,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAGX,2C;MAKI,OAAO,4BAAc,UAAAd,C;K;IAGX,2C;MA KI,OAAO,4BAAc,UAAAd,C;K;IAGX,2C;MAKI,OAAO,4BAAc,UAAAd,C;K;IAGX,2C;MAKI,OAAO,4BAAc,UAA d,C;K;IAGX,iD;MAQiB,Q;MAFb,IAAI,mBAAJ,C;QAAe,OAAO,I;MACtB,UAAU,sBAAK,CAAL,C;MACG,OA 17FG,gBAAR,iBAAQ,C;MA07FhB,aAAU,CAAV,iB;QACI,QAAQ,sBAAK,CAAL,C;QACR,IAAI,UAAW,SAA Q,GAAR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,iD;MAQiB,Q; MAFb,IAAI,mBAAJ,C;QAAe,OAAO,I;MACtB,UAAU,sBAAK,CAAL,C;MACG,OAj8FG,gBAAR,iBAAQ,C;M Ai8FhB,aAAU,CAAV,iB;QACI,QAAQ,sBAAK,CAAL,C;QACR,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAA X,GAA6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,iD;MAQiB,Q;MAFb,IAAI,mBAAJ,C;QAAe ,OAAO,I;MACtB,UAAU,sBAAK,CAAL,C;MACG,OAx8FG,gBAAR,iBAAQ,C;MAw8FhB,aAAU,CAAV,iB;QA CI,QAAQ,sBAAK,CAAL,C;QACR,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC, MAAM,C;;MAE9C,OAAO,G;K;IAGX,iD;MAQiB,Q;MAFb,IAAI,mBAAJ,C;QAAe,OAAO,I;MACtB,UAAU,sBA AK,CAAL,C;MACG,OA/8FG,gBAAR,iBAAQ,C;MA+8FhB,aAAU,CAAV,iB;QACI,QAAQ,sBAAK,CAAL,C;Q ACR,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G; K;IAGX,2B;MAKI,OAAO,uB;K;IAGX,2B;MAKI,OAAO,uB;K;IAGX,2B;MAKI,OAAO,uB;K;IAGX,2B;MAKI, OAAO,uB;K;mFAGX,yB;MA9gGI,8D;MA8gGJ,sC;QAMW,sB;;UAuCP,IAAI,mBAAJ,C;YAAe,qBAAO,I;YAAP ,uB;WACf,cAAc,sBAAK,CAAL,C;UACd,gBA7jGgB,cAAR,iBAAQ,C;UA8jGhB,IAAI,cAAa,CAAjB,C;YAAoB, qBAAO,O;YAAP,uB;WACpB,eA3CmB,QA2CJ,CAAS,OAAT,C;UACf,aAAU,CAAV,OAAa,SAAb,M;YACI,QA AQ,sBAAK,CAAL,C;YACR,QA9Ce,QA8CP,CAAS,CAAT,C;YACR,IAAI,2BAAW,CAAX,KAAJ,C;cACI,UAA U,C;cACV,WAAW,C;;UAGnB,qBAAO,O;;QApDP,yB;O;KANJ,C;mFASA,yB;MA/gGI,8D;MA+gGJ,sC;QAMW ,sB;;UAuDP,IAAI,mBAAJ,C;YAAe,qBAAO,I;YAAP,uB;WACf,cAAc,sBAAK,CAAL,C;UACd,gBA9kGgB,cAA R,iBAAQ,C;UA+kGhB,IAAI,cAAa,CAAjB,C;YAAoB,qBAAO,O;YAAP,uB;WACpB,eA3DmB,QA2DJ,CAAS,O AAT,C;UACf,aAAU,CAAV,OAAa,SAAb,M;YACI,QAAQ,sBAAK,CAAL,C;YACR,QA9De,QA8DP,CAAS,CAA T,C;YACR,IAAI,2BAAW,CAAX,KAAJ,C;cACI,UAAU,C;cACV,WAAW,C;;UAGnB,qBAAO,O;;QApEP,yB;O; KANJ,C;mFASA,yB;MAhhGI,8D;MAghGJ,sC;QAMW,sB;;UAuEP,IAAI,mBAAJ,C;YAAe,qBAAO,I;YAAP,uB; WACf,cAAc,sBAAK,CAAL,C;UACd,gBA/lGgB,cAAR,iBAAQ,C;UAgmGhB,IAAI,cAAa,CAAjB,C;YAAoB,qB AAO,O;YAAP,uB;WACpB,eA3EmB,QA2EJ,CAAS,OAAT,C;UACf,aAAU,CAAV,OAAa,SAAb,M;YACI,QAAQ ,sBAAK,CAAL,C;YACR,QA9Ee,QA8EP,CAAS,CAAT,C;YACR,IAAI,2BAAW,CAAX,KAAJ,C;cACI,UAAU,C; cACV,WAAW,C;;UAGnB,qBAAO,O;;QApFP,yB;O;KANJ,C;mFASA,yB;MAjhGI,8D;MAihGJ,sC;QAMW,sB;; UAuFP,IAAI,mBAAJ,C;YAAe,qBAAO,I;YAAP,uB;WACf,cAAc,sBAAK,CAAL,C;UACd,gBAhnGgB,cAAR,iB AAQ,C;UAinGhB,IAAI,cAAa,CAAjB,C;YAAoB,qBAAO,O;YAAP,uB;WACpB,eA3FmB,QA2FJ,CAAS,OAAT, C;UACf,aAAU,CAAV,OAAa,SAAb,M;YACI,QAAQ,sBAAK,CAAL,C;YACR,QA9Fe,QA8FP,CAAS,CAAT,C;Y ACR,IAAI,2BAAW,CAAX,KAAJ,C;cACI,UAAU,C;cACV,WAAW,C;;UAGnB,qBAAO,O;;QApGP,yB;O;KANJ ,C;+FASA,yB;MALjGI,8D;MAkjGJ,sC;QASI,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,cAAc,sBAAK,CAAL,C;Q

ACd,gBA7jGgB,cA6jGA,SA7jGR,QAAQ,C;QA8jGhB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,S  
AAS,OAAT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,sBAAK,CAAL,C;UACR,QAAQ,SAAS,CAAT  
,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KAtBX,C;+FA  
yBA,yB;MAnkGI,8D;MAmkGJ,sC;QASI,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,cAAc,sBAAK,CAAL,C;QACd,  
gBA9kGgB,cA8kGA,SA9kGR,QAAQ,C;QA+kGhB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,SAA  
S,OAAT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,sBAAK,CAAL,C;UACR,QAAQ,SAAS,CAAT,C;  
UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KAtBX,C;+FAyB  
A,yB;MAplGI,8D;MAoIGJ,sC;QASI,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,cAAc,sBAAK,CAAL,C;QACd,gBA  
/lGgB,cA+lGA,SA/lGR,QAAQ,C;QAgmGhB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,SAAS,OA  
AT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,sBAAK,CAAL,C;UACR,QAAQ,SAAS,CAAT,C;UAC  
R,IAAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KAtBX,C;+FAyBA,yB  
;MArmGI,8D;MAqmGJ,sC;QASI,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,cAAc,sBAAK,CAAL,C;QACd,gBAh  
nGgB,cAgnGA,SAhnGR,QAAQ,C;QAinGhB,IAAI,cAAa,CAAjB,C;UAAoB,OAAO,O;QAC3B,eAAe,SAAS,OA  
AT,C;QACf,aAAU,CAAV,OAAa,SAAb,M;UACI,QAAQ,sBAAK,CAAL,C;UACR,QAAQ,SAAS,CAAT,C;UACR,I  
AAI,2BAAW,CAAX,KAAJ,C;YACI,UAAU,C;YACV,WAAW,C;;QAGnB,OAAO,O;O;KAtBX,C;kFAyBA,yB;M  
AAA,sE;MATpGI,8D;MpB/iHJ,iB;MoBqsNA,sC;QAgBiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QACrB,eA  
Ae,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAtqGG,cAAR,iBAAQ,C;QAsqGhB,aAAU,CAAV,iB;UACI,QAAQ,S  
AAS,sBAAK,CAAL,CAAT,C;UACR,WpB/sNG,MAAO,KoB+sNO,QpB/sNP,EoB+sNiB,CpB/sNjB,C;;QoBitNd,  
OAAO,Q;O;KApBX,C;mFAuBA,yB;MAAA,sE;MARqGI,8D;MpBvjHJ,iB;MoB4tNA,sC;QAgBiB,Q;QAFb,IAAI,  
mBAAJ,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OArrGG,cAAR,iBAAQ,C;QA  
qrGhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpBtuNG,MAAO,KoBsuNO,QpBt  
uNP,EoBsuNiB,CpBtuNjB,C;;QoBwuNd,OAAO,Q;O;KApBX,C;mFAuBA,yB;MAAA,sE;MAprGI,8D;MpB/jHJ,i  
B;MoBmvNA,sC;QAgBiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,CAA  
T,C;QACF,OApGG,cAAR,iBAAQ,C;QAosGhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;  
UACR,WpB7vNG,MAAO,KoB6vNO,QpB7vNP,EoB6vNiB,CpB7vNjB,C;;QoB+vNd,OAAO,Q;O;KApBX,C;mF  
AuBA,yB;MAAA,sE;MAAnsGI,8D;MpBvkHJ,iB;MoB0wNA,sC;QAgBiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM  
,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAntGG,cAAR,iBAAQ,C;QAmtGhB,aAAU,CAAV,iB;  
UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpBpxNG,MAAO,KoBoxNO,QpBpxNP,EoBoxNiB,CpBpx  
NjB,C;;QoBsxDnd,OAAO,Q;O;KApBX,C;mFAuBA,yB;MAAA,sE;MAlvGI,8D;MpB1jHJ,iB;MoB4yNA,sC;QAgB  
iB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAlwGG,c  
AAR,iBAAQ,C;QAKwGhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpBtzNG,M  
AAO,KoBszNO,QpBtzNP,EoBszNiB,CpBtzNjB,C;;QoBwzNd,OAAO,Q;O;KApBX,C;mFAuBA,yB;MAAA,sE;M  
AjwGI,8D;MpBlkHJ,iB;MoBm0NA,sC;QAgBiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QACrB,eAAe,SAA  
S,sBAAK,CAAL,CAAT,C;QACF,OAJxGG,cAAR,iBAAQ,C;QAixGhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sB  
AAK,CAAL,CAAT,C;UACR,WpB70NG,MAAO,KoB60NO,QpB70NP,EoB60NiB,CpB70NjB,C;;QoB+0Nd,OAA  
O,Q;O;KApBX,C;mFAuBA,yB;MAAA,sE;MAhxGI,8D;MpB1kHJ,iB;MoB01NA,sC;QAgBiB,Q;QAFb,IAAI,mB  
AAJ,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAhYGG,cAAR,iBAAQ,C;QAgY  
GhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpBp2NG,MAAO,KoBo2NO,QpBp  
2NP,EoBo2NiB,CpBp2NjB,C;;QoBs2Nd,OAAO,Q;O;KApBX,C;mFAuBA,yB;MAAA,sE;MA/xGI,8D;MpBllHJ,i  
B;MoBi3NA,sC;QAgBiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,CAA  
T,C;QACF,OA/yGG,cAAR,iBAAQ,C;QA+yGhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;  
UACR,WpB33NG,MAAO,KoB23NO,QpB33NP,EoB23NiB,CpB33NjB,C;;QoB63Nd,OAAO,Q;O;KApBX,C;mF  
AuBA,yB;MAAA,sE;MA90GI,8D;MA80GJ,sC;QACiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QACrB,eAAe  
,SAAS,sBAAK,CAAL,CAAT,C;QACF,OA51GG,cAAR,iBAAQ,C;QA41GhB,aAAU,CAAV,iB;UACI,QAAQ,SA  
AS,sBAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KApB  
X,C;mFAuBA,yB;MAAA,sE;MA71GI,8D;MA61GJ,sC;QACiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QACr  
B,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OA32GG,cAAR,iBAAQ,C;QA22GhB,aAAU,CAAV,iB;UACI,QA  
AQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;

O;KApBX,C;mFAuBA,yB;MAAA,sE;MA52GI,8D;MA42GJ,sC;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OA13GG,cAAR,iBAAQ,C;QA03GhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KApBX,C;mFAuBA,yB;MAAA,sE;MA33GI,8D;MA23GJ,sC;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAz4GG,cAAR,iBAAQ,C;QAY4GhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KApBX,C;8FAuBA,yB;MA16GI,8D;MpB/iHJ,iB;MoBy9NA,sC;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAx7GG,cAAR,iBAAQ,C;QAw7GhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpBj+NG,MAAO,KoBi+NO,QpBj+NP,EoBi+NiB,CpBj+NjB,C;;QoBm+Nd,OAAO,Q;O;KAIBX,C;+FAqBA,yB;MAv7GI,8D;MpBvjHJ,iB;MoB8+NA,sC;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAr8GG,cAAR,iBAAQ,C;QAq8GhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpBt/NG,MAAO,KoBs/NO,QpBt/NP,EoBs/NiB,CpBt/NjB,C;;QoBw/Nd,OAAO,Q;O;KAIBX,C;+FAqBA,yB;MAP8GI,8D;MpB/jHJ,iB;MoBmgOA,sC;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OA19GG,cAAR,iBAAQ,C;QAk9GhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpB3gOG,MAAO,KoB2gOO,QpB3gOP,EoB2gOiB,CpB3gOjB,C;;QoB6gOd,OAAO,Q;O;KAIBX,C;+FAqBA,yB;MAj9GI,8D;MpBvkHJ,iB;MoBwhOA,sC;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OA/9GG,cAAR,iBAAQ,C;QA+9GhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpBhiOG,MAAO,KoBgiOO,QpBhiOP,EoBgiOiB,CpBhiOjB,C;;QoBkiOd,OAAO,Q;O;KAIBX,C;+FAqBA,yB;MA9/GI,8D;MpB1jHJ,iB;MoBwjOA,sC;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OA5gHG,cAAR,iBAAQ,C;QA4gHhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpBhkOG,MAAO,KoBgkOO,QpBhkOP,EoBgkOiB,CpBhkOjB,C;;QoBkkOd,OAAO,Q;O;KAIBX,C;+FAqBA,yB;MA3gHI,8D;MpBlkHJ,iB;MoB6kOA,sC;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAzhHG,cAAR,iBAAQ,C;QAYhHhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpBrlOG,MAAO,KoBqlOO,QpBrlOP,EoBqlOiB,CpBrlOjB,C;;QoBulOd,OAAO,Q;O;KAIBX,C;+FAqBA,yB;MAXhHI,8D;MpB1kHJ,iB;MoBkmOA,sC;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAtiHG,cAAR,iBAAQ,C;QAsiHhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpB1mOG,MAAO,KoB0mOO,QpB1mOP,EoB0mOiB,CpB1mOjB,C;;QoB4mOd,OAAO,Q;O;KAIBX,C;+FAqBA,yB;MAriHI,8D;MpBliHJ,iB;MoBunOA,sC;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAanjHG,cAAR,iBAAQ,C;QAmjHhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,WpB/nOG,MAAO,KoB+nOO,QpB/nOP,EoB+nOiB,CpB/nOjB,C;;QoBioOd,OAAO,Q;O;KAIBX,C;+FAqBA,yB;MAliHI,8D;MAkiHJ,sC;QAYiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OA9IHG,cAAR,iBAAQ,C;QA8IHhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAIBX,C;+FAqBA,yB;MA/1HI,8D;MA+IHJ,sC;QAYiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OA3mHG,cAAR,iBAAQ,C;QA2mHhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAIBX,C;+FAqBA,yB;MA5mHI,8D;MA4mHJ,sC;QAYiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAxnHG,cAAR,iBAAQ,C;QAwHhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAIBX,C;+FAqBA,yB;MAznHI,8D;MAynHJ,sC;QAYiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAroHG,cAAR,iBAAQ,C;QAqoHhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,2BAAW,CAAX,KAAJ,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAIBX,C;2FAqBA,yB;MAAA,sE;MATqHI,8D;MASqHJ,kD;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAprHG,cAAR,iBAAQ,C;QAorHhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAT,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KApBX,C;0FAuBA,yB;MAAA,sE;MArrHI,8D;MAqrHJ,kD;QAcIB,Q;QAFb,I

AAI,mBAAJ,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAnSHG,cAAR,iBAAQ,C;QAMsHhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KApBX,C;2FAuBA,yB;MAA A,sE;MApsHI,8D;MAosHJ,kD;QAcIB,Q;QAFb,IAAI,mBAAJ,C;UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAlHG,cAAR,iBAAQ,C;QAKtHhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAA L,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QA GnB,OAAO,Q;O;KApBX,C;2FAuBA,yB;MAAA,sE;MAntHI,8D;MAmtHJ,kD;QAcIB,Q;QAFb,IAAI,mBAAJ,C; UAAe,MAAM,6B;QACrB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAJuHG,cAAR,iBAAQ,C;QAiuHhB,aA AU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB, CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KApBX,C;uGAuBA,yB;MALwHI,8D;MAkwHJ ,kD;QAYiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OA9 wHG,cAAR,iBAAQ,C;QA8wHhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,U AAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAIBX,C ;sGAqBA,yB;MA/wHI,8D;MA+wHJ,kD;QAYiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,s BAAK,CAAL,CAAT,C;QACF,OA3xHG,cAAR,iBAAQ,C;QA2xHhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBA AK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAA W,C;;QAGnB,OAAO,Q;O;KAIBX,C;uGAqBA,yB;MA5xHI,8D;MA4xHJ,kD;QAYiB,Q;QAFb,IAAI,mBAAJ,C;U AAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OAxHG,cAAR,iBAAQ,C;QAWyHhB,aAAU, CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,UAAW,SAAQ,QAAR,EAakB,CAAIB,CA AX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAIBX,C;uGAqBA,yB;MAzyHI,8D;MAyyHJ,kD; QAYiB,Q;QAFb,IAAI,mBAAJ,C;UAAe,OAAO,I;QACtB,eAAe,SAAS,sBAAK,CAAL,CAAT,C;QACF,OArzHG, cAAR,iBAAQ,C;QAqzHhB,aAAU,CAAV,iB;UACI,QAAQ,SAAS,sBAAK,CAAL,CAAT,C;UACR,IAAI,UAAW, SAAQ,QAAR,EAakB,CAAIB,CAAX,GAakC,CAAtC,C;YACI,WAAW,C;;QAGnB,OAAO,Q;O;KAIBX,C;IAqB A,iC;MAQiB,Q;MAFb,IAAI,mBAAJ,C;QAAe,OAAO,I;MActB,UAAU,sBAAK,CAAL,C;MACG,OA91HG,gBA AR,iBAAQ,C;MA81HhB,aAAU,CAAV,iB;QACI,QAAQ,sBAAK,CAAL,C;QACR,InC5mP8D,YmC4mP1D,GnC5 mP2E,KAAjB,EmC4mPpD,CnC5mPiF,KAA7B,CmC4mP1D,IAAJ,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAG X,iC;MAQiB,Q;MAFb,IAAI,mBAAJ,C;QAAe,OAAO,I;MActB,UAAU,sBAAK,CAAL,C;MACG,OAr2HG,gBA AR,iBAAQ,C;MAq2HhB,aAAU,CAAV,iB;QACI,QAAQ,sBAAK,CAAL,C;QACR,InBnnP+D,amBnnP3D,GnBnn P6E,KAAIB,EmBnnPrD,CnBnnPmF,KAA9B,CmBnnP3D,IAAJ,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAGX ,iC;MAQiB,Q;MAFb,IAAI,mBAAJ,C;QAAe,OAAO,I;MActB,UAAU,sBAAK,CAAL,C;MACG,OA52HG,gBAA R,iBAAQ,C;MA42HhB,aAAU,CAAV,iB;QACI,QAAQ,sBAAK,CAAL,C;QACR,IpC1pP4E,0BoC0pPxE,GpC/6O 8B,KAAL,GAAiB,GA3O8B,EoC0pPIE,CpC/6OwB,KAAL,GAAiB,GA3O8B,CoC0pPxE,IAAJ,C;UAAa,MAAM, C;;MAEvB,OAAO,G;K;IAGX,iC;MAQiB,Q;MAFb,IAAI,mBAAJ,C;QAAe,OAAO,I;MActB,UAAU,sBAAK,CA AL,C;MACG,OAn3HG,gBAAR,iBAAQ,C;MAm3HhB,aAAU,CAAV,iB;QACI,QAAQ,sBAAK,CAAL,C;QACR,I ICjqP6E,0BkCiqPzE,GIC77O8B,KAAL,GAAiB,KApO+B,EkCiqPnE,CIC77OwB,KAAL,GAAiB,KApO+B,CkCiq PzE,IAAJ,C;UAAa,MAAM,C;;MAEvB,OAAO,G;K;IAGX,2C;MAKI,OAAO,4BAAc,UAd,C;K;IAGX,2C;MAK I,OAAO,4BAAc,UAd,C;K;IAGX,2C;MAKI,OAAO,4BAAc,UAd,C;K;IAGX,2C;MAKI,OAAO,4BAAc,UAd, C;K;IAGX,iD;MAQiB,Q;MAFb,IAAI,mBAAJ,C;QAAe,OAAO,I;MActB,UAAU,sBAAK,CAAL,C;MACG,OA17 HG,gBAAR,iBAAQ,C;MA07HhB,aAAU,CAAV,iB;QACI,QAAQ,sBAAK,CAAL,C;QACR,IAAI,UAAW,SAAQ, GAAR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,iD;MAQiB,Q;M AFb,IAAI,mBAAJ,C;QAAe,OAAO,I;MActB,UAAU,sBAAK,CAAL,C;MACG,OAj8HG,gBAAR,iBAAQ,C;MAi 8HhB,aAAU,CAAV,iB;QACI,QAAQ,sBAAK,CAAL,C;QACR,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAAX, GAA6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;K;IAGX,iD;MAQiB,Q;MAFb,IAAI,mBAAJ,C;QAAe,O AAO,I;MActB,UAAU,sBAAK,CAAL,C;MACG,OAx8HG,gBAAR,iBAAQ,C;MAw8HhB,aAAU,CAAV,iB;QAC I,QAAQ,sBAAK,CAAL,C;QACR,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC, MAAM,C;;MAE9C,OAAO,G;K;IAGX,iD;MAQiB,Q;MAFb,IAAI,mBAAJ,C;QAAe,OAAO,I;MActB,UAAU,sBA AK,CAAL,C;MACG,OA/8HG,gBAAR,iBAAQ,C;MA+8HhB,aAAU,CAAV,iB;QACI,QAAQ,sBAAK,CAAL,C;Q ACR,IAAI,UAAW,SAAQ,GAAR,EAAa,CAAb,CAAX,GAA6B,CAAjC,C;UAAoC,MAAM,C;;MAE9C,OAAO,G;

K;iFAGX,qB;MASI,OAAO,mB;K;iFAGX,qB;MASI,OAAO,mB;K;iFAGX,qB;MASI,OAAO,mB;K;iFAGX,qB;M  
ASI,OAAO,mB;K;iFAGX,gC;MASoB,Q;MAAA,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QAAM,IAAI,UAA  
U,OAAV,CAAJ,C;UAAwB,OAAO,K;;MACrD,OAAO,I;K;iFAGX,gC;MASoB,Q;MAAA,2B;MAAhB,OAAGB,c  
AAhB,C;QAAGB,yB;QAAM,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,OAAO,K;;MACrD,OAAO,I;K;iFAGX,gC;M  
ASoB,Q;MAAA,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QAAM,IAAI,UAAU,OAAV,CAAJ,C;UAAwB,OAA  
O,K;;MACrD,OAAO,I;K;iFAGX,gC;MASoB,Q;MAAA,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QAAM,IAAI  
,UAAU,OAAV,CAAJ,C;UAAwB,OAAO,K;;MACrD,OAAO,I;K;qFAGX,6B;MAOmC,Q;MAAA,2B;MAAhB,OA  
AGB,cAAhB,C;QAAGB,yB;QAAM,OAAO,OAAP,C;;MAArC,gB;K;qFAGJ,6B;MAOmC,Q;MAAA,2B;MAAhB,  
OAAAGB,cAAhB,C;QAAGB,yB;QAAM,OAAO,OAAP,C;;MAArC,gB;K;qFAGJ,6B;MAOmC,Q;MAAA,2B;MAAh  
B,OAAGB,cAAhB,C;QAAGB,yB;QAAM,OAAO,OAAP,C;;MAArC,gB;K;qFAGJ,6B;MAOmC,Q;MAAA,2B;MA  
AhB,OAAGB,cAAhB,C;QAAGB,yB;QAAM,OAAO,OAAP,C;;MAArC,gB;K;mGAGJ,6B;MAtrEiB,gB;MADb,YA  
AY,C;MACC,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QAAM,QAAO,cAAP,EAAO,sBAAP,WAAgB,IAAhB,C;;MA  
gsEnB,gB;K;mGAGJ,6B;MAtrEiB,gB;MADb,YAA Y,C;MACC,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QAAM,QA  
AO,cAAP,EAAO,sBAAP,WAAgB,IAAhB,C;;MAgsEnB,gB;K;mGAGJ,6B;MAtrEiB,gB;MADb,YAA Y,C;MACC,  
2B;MAAb,OAAa,cAAb,C;QAAa,sB;QAAM,QAAO,cAAP,EAAO,sBAAP,WAAgB,IAAhB,C;;MAgsEnB,gB;K;m  
GAGJ,6B;MAtrEiB,gB;MADb,YAA Y,C;MACC,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QAAM,QAAO,cAAP,EAA  
O,sBAAP,WAAgB,IAAhB,C;;MAgsEnB,gB;K;qFAGJ,yB;MAAA,4F;MA9qII,8D;MA8qIJ,uC;QAmBqB,Q;QAHj  
B,IAAI,mBAAJ,C;UACI,MAAM,mCAA8B,+BAA9B,C;QACV,kBAAkB,sBAAK,CAAL,C;QACD,OAJsID,cAA  
R,iBAAQ,C;QAisIhB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,WAAV,EAAuB,sBAAK,KAAL,CAA vB,C;;QAEIB,  
OAAO,W;O;KAtBX,C;qFAyBA,yB;MAAA,4F;MA/rII,8D;MA+rIJ,uC;QAmBqB,Q;QAHjB,IAAI,mBAAJ,C;UA  
CI,MAAM,mCAA8B,+BAA9B,C;QACV,kBAAkB,sBAAK,CAAL,C;QACD,OAltID,cAAR,iBAAQ,C;QAktIhB,i  
BAAc,CAAd,yB;UACI,cAAc,UAAU,WAAV,EAAuB,sBAAK,KAAL,CAA vB,C;;QAEIB,OAAO,W;O;KAtBX,C;  
qFAyBA,yB;MAAA,4F;MAhtII,8D;MAgtIJ,uC;QAmBqB,Q;QAHjB,IAAI,mBAAJ,C;UACI,MAAM,mCAA8B,+  
BAA9B,C;QACV,kBAAkB,sBAAK,CAAL,C;QACD,OAnuID,cAAR,iBAAQ,C;QAmuIhB,iBAAc,CAAd,yB;UA  
CI,cAAc,UAAU,WAAV,EAAuB,sBAAK,KAAL,CAA vB,C;;QAEIB,OAAO,W;O;KAtBX,C;qFAyBA,yB;MAAA,  
4F;MAjuII,8D;MAiuIJ,uC;QAmBqB,Q;QAHjB,IAAI,mBAAJ,C;UACI,MAAM,mCAA8B,+BAA9B,C;QACV,kB  
AAkB,sBAAK,CAAL,C;QACD,OAPvID,cAAR,iBAAQ,C;QAovIhB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,WAA  
V,EAAuB,sBAAK,KAAL,CAA vB,C;;QAEIB,OAAO,W;O;KAtBX,C;mGayBA,yB;MAAA,4F;MAIxII,8D;MAkx  
IJ,uC;QAmBqB,Q;QAHjB,IAAI,mBAAJ,C;UACI,MAAM,mCAA8B,+BAA9B,C;QACV,kBAAkB,sBAAK,CAAL  
,C;QACD,OArYID,cAAR,iBAAQ,C;QAqyIhB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,KA AV,EAAiB,WAAjB,EA  
A8B,sBAAK,KAAL,CAA9B,C;;QAEIB,OAAO,W;O;KAtBX,C;mGayBA,yB;MAAA,4F;MAnyII,8D;MAmyIJ,u  
C;QAmBqB,Q;QAHjB,IAAI,mBAAJ,C;UACI,MAAM,mCAA8B,+BAA9B,C;QACV,kBAAkB,sBAAK,CAAL,C;  
QACD,OAtzID,cAAR,iBAAQ,C;QAszIhB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,KA AV,EAAiB,WAAjB,EAA8B  
,sBAAK,KAAL,CAA9B,C;;QAEIB,OAAO,W;O;KAtBX,C;mGayBA,yB;MAAA,4F;MApzII,8D;MAozIJ,uC;QA  
mBqB,Q;QAHjB,IAAI,mBAAJ,C;UACI,MAAM,mCAA8B,+BAA9B,C;QACV,kBAAkB,sBAAK,CAAL,C;QAC  
D,OAv0ID,cAAR,iBAAQ,C;QAu0IhB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,KA AV,EAAiB,WAAjB,EAA8B,sB  
AAK,KAAL,CAA9B,C;;QAEIB,OAAO,W;O;KAtBX,C;mGayBA,yB;MAAA,4F;MAR0II,8D;MAq0IJ,uC;QAmB  
qB,Q;QAHjB,IAAI,mBAAJ,C;UACI,MAAM,mCAA8B,+BAA9B,C;QACV,kBAAkB,sBAAK,CAAL,C;QACD,O  
Ax1ID,cAAR,iBAAQ,C;QAw1IhB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,KA AV,EAAiB,WAAjB,EAA8B,sBAA  
K,KAAL,CAA9B,C;;QAEIB,OAAO,W;O;KAtBX,C;+GAYBA,yB;MAt3II,8D;MAS3IJ,uC;QAKbqB,Q;QAHjB,IA  
AI,mBAAJ,C;UACI,OAAO,I;QACX,kBAAkB,sBAAK,CAAL,C;QACD,OAx4ID,cAAR,iBAAQ,C;QAw4IhB,iBA  
Ac,CAAd,yB;UACI,cAAc,UAAU,KA AV,EAAiB,WAAjB,EAA8B,sBAAK,KAAL,CAA9B,C;;QAEIB,OAAO,W;  
O;KArBX,C;+GAWBA,yB;MAt4II,8D;MAS4IJ,uC;QAKbqB,Q;QAHjB,IAAI,mBAAJ,C;UACI,OAAO,I;QACX,k  
BAAkB,sBAAK,CAAL,C;QACD,OAx5ID,cAAR,iBAAQ,C;QAw5IhB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,KA  
AV,EAAiB,WAAjB,EAA8B,sBAAK,KAAL,CAA9B,C;;QAEIB,OAAO,W;O;KArBX,C;+GAWBA,yB;MAt5II,8D  
;MAS5IJ,uC;QAKbqB,Q;QAHjB,IAAI,mBAAJ,C;UACI,OAAO,I;QACX,kBAAkB,sBAAK,CAAL,C;QACD,OAx  
6ID,cAAR,iBAAQ,C;QAw6IhB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,KA AV,EAAiB,WAAjB,EAA8B,sBAAK,K  
AAL,CAA9B,C;;QAEIB,OAAO,W;O;KArBX,C;+GAWBA,yB;MAt6II,8D;MAS6IJ,uC;QAKbqB,Q;QAHjB,IAAI,

mBAAJ,C;UACI,OAAO,I;QACX,kBAAkB,sBAAK,CAAL,C;QACD,OAx7ID,cAAR,iBAAQ,C;QAw7IhB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,sBAAK,KAAL,CAA9B,C;;QAEIB,OAAO,W;O;KArBX,C;iGAwBA,yB;MA9II,8D;MA9IJ,uC;QAmBqB,Q;QAHjB,IAAI,mBAAJ,C;UACI,OAAO,I;QACX,kBAAkB,sBAAK,CAAL,C;QACD,OAz+ID,cAAR,iBAAQ,C;QAY+IhB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,WAAV,EAAuB,sBAAK,KAAL,CAA9B,C;;QAEIB,OAAO,W;O;KATBX,C;iGAYBA,yB;MAv+II,8D;MAu+IJ,uC;QAmBqB,Q;QAHjB,IAAI,mBAAJ,C;UACI,OAAO,I;QACX,kBAAkB,sBAAK,CAAL,C;QACD,OA1/ID,cAAR,iBAAQ,C;QA0/IhB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,WAAV,EAAuB,sBAAK,KAAL,CAA9B,C;;QAEIB,OAAO,W;O;KATBX,C;iGAYBA,yB;MAx/II,8D;MAw/IJ,uC;QAmBqB,Q;QAHjB,IAAI,mBAAJ,C;UACI,OAAO,I;QACX,kBAAkB,sBAAK,CAAL,C;QACD,OA3gJD,cAAR,iBAAQ,C;QA2gJhB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,WAAV,EAAuB,sBAAK,KAAL,CAA9B,C;;QAEIB,OAAO,W;O;KATBX,C;iGAYBA,yB;MAz/JI,8D;MAy/JJ,uC;QAmBqB,Q;QAHjB,IAAI,mBAAJ,C;UACI,OAAO,I;QACX,kBAAkB,sBAAK,CAAL,C;QACD,OA5hJD,cAAR,iBAAQ,C;QA4hJhB,iBAAc,CAAd,yB;UACI,cAAc,UAAU,WAAV,EAAuB,sBAAK,KAAL,CAA9B,C;;QAEIB,OAAO,W;O;KATBX,C;+FAyBA,yB;MAAA,4F;MA1jJI,8D;MA0jJJ,uC;QAKB0B,UAEU,M;QAJhC,YA1kJgB,cAAR,iBAAQ,C;QA2kJhB,IAAI,QAAQ,CAAZ,C;UAAe,MAAM,mCAA8B,+BAA9B,C;QACrB,kBAAkB,uBAAI,YAAJ,EAAL,oBAAJ,Q;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,uBAAI,cAAJ,EAAL,sBAAJ,UAAV,EAawB,WAAXB,C;;QAEIB,OAAO,W;O;KATBX,C;+FAyBA,yB;MAAA,4F;MA3kJI,8D;MA2kJJ,uC;QAKB0B,UAEU,M;QAJhC,YA3lJgB,cAAR,iBAAQ,C;QA4lJhB,IAAI,QAAQ,CAAZ,C;UAAe,MAAM,mCAA8B,+BAA9B,C;QACrB,kBAAkB,uBAAI,YAAJ,EAAL,oBAAJ,Q;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,uBAAI,cAAJ,EAAL,sBAAJ,UAAV,EAawB,WAAXB,C;;QAEIB,OAAO,W;O;KATBX,C;+FAyBA,yB;MAAA,4F;MA5lJI,8D;MA4lJJ,uC;QAKB0B,UAEU,M;QAJhC,YA5mJgB,cAAR,iBAAQ,C;QA6mJhB,IAAI,QAAQ,CAAZ,C;UAAe,MAAM,mCAA8B,+BAA9B,C;QACrB,kBAAkB,uBAAI,YAAJ,EAAL,oBAAJ,Q;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,uBAAI,cAAJ,EAAL,sBAAJ,UAAV,EAawB,WAAXB,C;;QAEIB,OAAO,W;O;KATBX,C;+FAyBA,yB;MAAA,4F;MA7mJI,8D;MA6mJJ,uC;QAKB0B,UAEU,M;QAJhC,YA7nJgB,cAAR,iBAAQ,C;QA8nJhB,IAAI,QAAQ,CAAZ,C;UAAe,MAAM,mCAA8B,+BAA9B,C;QACrB,kBAAkB,uBAAI,YAAJ,EAAL,oBAAJ,Q;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,uBAAI,cAAJ,EAAL,sBAAJ,UAAV,EAawB,WAAXB,C;;QAEIB,OAAO,W;O;KATBX,C;6GAYBA,yB;MAAA,4F;MA9pJI,8D;MA8pJJ,uC;QAKB0B,Q;QAFtB,YA9qJgB,cAAR,iBAAQ,C;QA+qJhB,IAAI,QAAQ,CAAZ,C;UAAe,MAAM,mCAA8B,+BAA9B,C;QACrB,kBAAkB,uBAAI,YAAJ,EAAL,oBAAJ,Q;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,KAAV,EAAiB,sBAAI,KAAJ,CAAjB,EAA6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,W;O;KAVBX,C;6GA0BA,yB;MAAA,4F;MAhrJI,8D;MAgrJJ,uC;QAKB0B,Q;QAFtB,YAhsJgB,cAAR,iBAAQ,C;QAisJhB,IAAI,QAAQ,CAAZ,C;UAAe,MAAM,mCAA8B,+BAA9B,C;QACrB,kBAAkB,uBAAI,YAAJ,EAAL,oBAAJ,Q;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,KAAV,EAAiB,sBAAI,KAAJ,CAAjB,EAA6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,W;O;KAVBX,C;6GA0BA,yB;MAAA,4F;MAIsJI,8D;MAksJJ,uC;QAKB0B,Q;QAFtB,YAltJgB,cAAR,iBAAQ,C;QAMtJhB,IAAI,QAAQ,CAAZ,C;UAAe,MAAM,mCAA8B,+BAA9B,C;QACrB,kBAAkB,uBAAI,YAAJ,EAAL,oBAAJ,Q;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,KAAV,EAAiB,sBAAI,KAAJ,CAAjB,EAA6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,W;O;KAVBX,C;6GA0BA,yB;MAAA,4F;MAptJI,8D;MAotJJ,uC;QAKB0B,Q;QAFtB,YApuJgB,cAAR,iBAAQ,C;QAquJhB,IAAI,QAAQ,CAAZ,C;UAAe,MAAM,mCAA8B,+BAA9B,C;QACrB,kBAAkB,uBAAI,YAAJ,EAAL,oBAAJ,Q;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,KAAV,EAAiB,sBAAI,KAAJ,CAAjB,EAA6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,W;O;KAVBX,C;yHA0BA,yB;MATwJI,8D;MASwJJ,uC;QAIb0B,Q;QAFtB,YArxJgB,cAAR,iBAAQ,C;QAsxJhB,IAAI,QAAQ,CAAZ,C;UAAe,OAAO,I;QACtB,kBAAkB,uBAAI,YAAJ,EAAL,oBAAJ,Q;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,KAAV,EAAiB,sBAAI,KAAJ,CAAjB,EAA6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,W;O;KATBX,C;yHAYBA,yB;MAvxJI,8D;MAuxJJ,uC;QAIb0B,Q;QAFtB,YAtyJgB,cAAR,iBAAQ,C;QAuyJhB,IAAI,QAAQ,CAAZ,C;UAAe,OAAO,I;QACtB,kBAAkB,uBAAI,YAAJ,EAAL,oBAAJ,Q;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,KAAV,EAAiB,sBAAI,KAAJ,CAAjB,EAA6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,W;O;KATBX,C;yHAYBA,yB;MAxyJI,8D;MAwyJJ,uC;QAIb0B,Q;QAFtB,YAvzJgB,cAAR,iBAAQ,C;QAwzJhB,IAAI,QAAQ,CAAZ,C;UAAe,OAAO,I;QACtB,kBAAkB,uBAAI,YAAJ,EAAL,oBAAJ,Q;QACIB,OAAO,SAAS,CAAhB,C;UACI,cAAc,UAAU,KAAV,EAAiB,sBAAI,KAAJ,CAAjB,EAA6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,W;O;KATBX,C;yHAYBA,yB;MAzzJI,8D;MAyzJJ,uC;QAIb0B,Q;QAFtB,YAx0JgB,cAAR,iBAAQ,C;QAY0JhB,



IAAI,QAAQ,CAAZ,C;UAAe,OAAO,I;QACtB,kBAaKB,uBAAI,YAAJ,EAAI,oBAAJ,Q;QACIB,OAAO,SAAS,C  
AAhB,C;UACI,cAAc,UAAU,KAAV,EAAiB,sBAAI,KAAJ,CAAjB,EAA6B,WAA7B,C;UACd,qB;;QAEJ,OAAO,  
W;O;KAtBX,C;2GAyBA,yB;MA12JI,8D;MA02JJ,uC;QAKB0B,UAEU,M;QAJhC,YA13JgB,cAAR,iBAAQ,C;QA  
23JhB,IAAI,QAAQ,CAAZ,C;UAAe,OAAO,I;QACtB,kBAaKB,uBAAI,YAAJ,EAAI,oBAAJ,Q;QACIB,OAAO,SA  
AS,CAAhB,C;UACI,cAAc,UAAU,uBAAI,cAAJ,EAAI,sBAAJ,UAAV,EAAwB,WAAxB,C;;QAEIB,OAAO,W;O;  
KAtBX,C;2GAyBA,yB;MA33JI,8D;MA23JJ,uC;QAKB0B,UAEU,M;QAJhC,YA34JgB,cAAR,iBAAQ,C;QA44Jh  
B,IAAI,QAAQ,CAAZ,C;UAAe,OAAO,I;QACtB,kBAaKB,uBAAI,YAAJ,EAAI,oBAAJ,Q;QACIB,OAAO,SAAS,  
CAAhB,C;UACI,cAAc,UAAU,uBAAI,cAAJ,EAAI,sBAAJ,UAAV,EAAwB,WAAxB,C;;QAEIB,OAAO,W;O;KAt  
BX,C;2GAyBA,yB;MA54JI,8D;MA44JJ,uC;QAKB0B,UAEU,M;QAJhC,YA55JgB,cAAR,iBAAQ,C;QA65JhB,IA  
AI,QAAQ,CAAZ,C;UAAe,OAAO,I;QACtB,kBAaKB,uBAAI,YAAJ,EAAI,oBAAJ,Q;QACIB,OAAO,SAAS,CAA  
hB,C;UACI,cAAc,UAAU,uBAAI,cAAJ,EAAI,sBAAJ,UAAV,EAAwB,WAAxB,C;;QAEIB,OAAO,W;O;KAtBX,C  
;2GAyBA,yB;MA75JI,8D;MA65JJ,uC;QAKB0B,UAEU,M;QAJhC,YA76JgB,cAAR,iBAAQ,C;QA86JhB,IAAI,Q  
AAQ,CAAZ,C;UAAe,OAAO,I;QACtB,kBAaKB,uBAAI,YAAJ,EAAI,oBAAJ,Q;QACIB,OAAO,SAAS,CAAhB,C  
;UACI,cAAc,UAAU,uBAAI,cAAJ,EAAI,sBAAJ,UAAV,EAAwB,WAAxB,C;;QAEIB,OAAO,W;O;KAtBX,C;+F  
AyBA,yB;MAAA,gD;MAAA,gE;MAAA,gD;QAKBoB,Q;QAHhB,IAAI,mBAAJ,C;UAAe,OAAO,OAAO,OAAP,  
C;QACc,kBAAvB,eAAa,iBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,arBrRO,W;QqBstRP,kBAaKB,O;QACF,2  
B;QAAhB,OAAGB,cAAhB,C;UAGB,yB;UACZ,cAAc,UAAU,WAAV,EAAuB,OAavB,C;UACd,MAAO,WAAI,  
WAAJ,C;;QAEX,OAAO,M;O;KAtBX,C;+FAyBA,yB;MAAA,gD;MAAA,gE;MAAA,gD;QAKBoB,Q;QAHhB,IA  
AI,mBAAJ,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,iBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,  
arB9uRO,W;QqB+uRP,kBAaKB,O;QACF,2B;QAAhB,OAAGB,cAAhB,C;UAGB,yB;UACZ,cAAc,UAAU,WAA  
V,EAAuB,OAavB,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KAtBX,C;+FAyBA,yB;MAAA,gD;M  
AAA,gE;MAAA,gD;QAKBoB,Q;QAHhB,IAAI,mBAAJ,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,  
iBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,arBvwRO,W;QqBwwRP,kBAaKB,O;QACF,2B;QAAhB,OAAGB,cA  
AhB,C;UAGB,yB;UACZ,cAAc,UAAU,WAAV,EAAuB,OAavB,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAA  
O,M;O;KAtBX,C;+FAyBA,yB;MAAA,gD;MAAA,gE;MAAA,gD;QAKBoB,Q;QAHhB,IAAI,mBAAJ,C;UAAe,O  
AAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,iBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,arBhyRO,W;QqBiyRP,  
kBAaKB,O;QACF,2B;QAAhB,OAAGB,cAAhB,C;UAGB,yB;UACZ,cAAc,UAAU,WAAV,EAAuB,OAavB,C;U  
ACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KAtBX,C;6GAyBA,yB;MAAA,gD;MAAA,gE;MAI1KI,0D;M  
Ak1KJ,gD;QAmBkB,gC;QAHd,IAAI,mBAAJ,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,iBAAO,C  
AAP,IAAb,C;QAA+B,8B;QAA5C,arB1zRO,W;QqB2zRP,kBAaKB,O;QACJ,OArmKE,YAAR,iBAAQ,C;QAqmK  
F,mB;QAAA,kB;QAAA,kB;QAAd,0D;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,sBAAK,KAAL,CAA  
9B,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KAvBX,C;6GA0BA,yB;MAAA,gD;MAAA,gE;MApm  
KI,0D;MAomKJ,gD;QAmBkB,gC;QAHd,IAAI,mBAAJ,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAvB,eAAa,  
iBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,arBp1RO,W;QqBq1RP,kBAaKB,O;QACJ,OAvnKE,YAAR,iBAAQ,  
C;QAunKF,mB;QAAA,kB;QAAA,kB;QAAd,0D;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,sBAAK,K  
AAL,CAA9B,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KAvBX,C;6GA0BA,yB;MAAA,gD;MAAA,  
gE;MATnKI,0D;MAsnKJ,gD;QAmBkB,gC;QAHd,IAAI,mBAAJ,C;UAAe,OAAO,OAAO,OAAP,C;QACc,kBAAv  
B,eAAa,iBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,arB92RO,W;QqB+2RP,kBAaKB,O;QACJ,OazoKE,YAAR,i  
BAAQ,C;QAyoKF,mB;QAAA,kB;QAAA,kB;QAAd,0D;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,EAA8B,sB  
AAK,KAAL,CAA9B,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KAvBX,C;6GA0BA,yB;MAAA,gD;  
MAAA,gE;MAxoKI,0D;MAwoKJ,gD;QAmBkB,gC;QAHd,IAAI,mBAAJ,C;UAAe,OAAO,OAAO,OAAP,C;QAC  
c,kBAAvB,eAAa,iBAAO,CAAP,IAAb,C;QAA+B,8B;QAA5C,arBx4RO,W;QqBy4RP,kBAaKB,O;QACJ,OA3pK  
E,YAAR,iBAAQ,C;QA2pKF,mB;QAAA,kB;QAAA,kB;QAAd,0D;UACI,cAAc,UAAU,KAAV,EAAiB,WAAjB,E  
AA8B,sBAAK,KAAL,CAA9B,C;UACd,MAAO,WAAI,WAAJ,C;;QAEX,OAAO,M;O;KAvBX,C;mGA0BA,yB;M  
AAA,qD;MAAA,gE;MAAA,uC;QAKB0B,Q;QAHtB,IAAI,mBAAJ,C;UAAe,OAAO,W;QACtB,sBAaKB,sBAAK,  
CAAL,CAAIb,C;QACmC,kBAAtB,eAAgB,cAAhB,C;QAA8B,sBAAI,aAAJ,C;QAA3C,arBl6RO,W;QqBm6Re,q  
B;QAAtB,iBAAC,CAAd,wB;UACI,gBAAC,UAAU,aAAV,EAAuB,sBAAK,KAAL,CAAvB,C;UACd,MAAO,W  
AI,aAAJ,C;;QAEX,OAAO,M;O;KAtBX,C;mGAyBA,yB;MAAA,qD;MAAA,gE;MAAA,uC;QAKB0B,Q;QAHtB,I

AAI,mBAAJ,C;UAAe,OAAO,W;QACtB,sBAakB,sBAAK,CAAL,CAAIB,C;QACoC,kBAAvB,eAAiB,cAAjB,C;  
QAA+B,sBAAI,aAAJ,C;QAA5C,arB37RO,W;QqB47Re,qB;QAAtB,iBAAC,CAAd,wB;UACI,gBAAC,UAAU,aAA  
V,EAAuB,sBAAK,KAAL,CAAvB,C;UACd,MAAO,WAAI,aAAJ,C;;QAEX,OAAO,M;O;KAtBX,C;mGAYBA,yB;  
MAAA,qD;MAAA,gE;MAAA,uC;QakB0B,Q;QAHtB,IAAI,mBAAJ,C;UAAe,OAAO,W;QACtB,sBAakB,sBAA  
K,CAAL,CAAIB,C;QACoC,kBAAvB,eAAiB,cAAjB,C;QAA+B,sBAAI,aAAJ,C;QAA5C,arBp9RO,W;QqBq9Re,q  
B;QAAtB,iBAAC,CAAd,wB;UACI,gBAAC,UAAU,aAAV,EAAuB,sBAAK,KAAL,CAAvB,C;UACd,MAAO,WA  
AI,aAAJ,C;;QAEX,OAAO,M;O;KAtBX,C;mGAYBA,yB;MAAA,qD;MAAA,gE;MAAA,uC;QakB0B,Q;QAHtB,I  
AAI,mBAAJ,C;UAAe,OAAO,W;QACtB,sBAakB,sBAAK,CAAL,CAAIB,C;QACqC,kBAAxB,eAAkB,cAAIB,C;  
QAAgC,sBAAI,aAAJ,C;QAA7C,arB7+RO,W;QqB8+Re,qB;QAAtB,iBAAC,CAAd,wB;UACI,gBAAC,UAAU,aA  
AV,EAAuB,sBAAK,KAAL,CAAvB,C;UACd,MAAO,WAAI,aAAJ,C;;QAEX,OAAO,M;O;KAtBX,C;iHAYBA,yB  
;MAAA,qD;MAAA,gE;MAAA,uC;QAmB0B,Q;QAHtB,IAAI,mBAAJ,C;UAAe,OAAO,W;QACtB,sBAakB,sBA  
AK,CAAL,CAAIB,C;QACmC,kBAAtB,eAAgB,cAAhB,C;QAA8B,sBAAI,aAAJ,C;QAA3C,arBvgSO,W;QqBwgS  
e,qB;QAAtB,iBAAC,CAAd,wB;UACI,gBAAC,UAAU,KA AV,EAAiB,aAAjB,EAA8B,sBAAK,KAAL,CAA9B,C;  
UACd,MAAO,WAAI,aAAJ,C;;QAEX,OAAO,M;O;KAVBX,C;iHA0BA,yB;MAAA,qD;MAAA,gE;MAAA,uC;QA  
mB0B,Q;QAHtB,IAAI,mBAAJ,C;UAAe,OAAO,W;QACtB,sBAakB,sBAAK,CAAL,CAAIB,C;QACoC,kBAAvB,  
eAAiB,cAAjB,C;QAA+B,sBAAI,aAAJ,C;QAA5C,arBjiSO,W;QqBkiSe,qB;QAAtB,iBAAC,CAAd,wB;UACI,gBA  
AC,UAAU,KA AV,EAAiB,aAAjB,EAA8B,sBAAK,KAAL,CAA9B,C;UACd,MAAO,WAAI,aAAJ,C;;QAEX,OAA  
O,M;O;KAVBX,C;iHA0BA,yB;MAAA,qD;MAAA,gE;MAAA,uC;QAmB0B,Q;QAHtB,IAAI,mBAAJ,C;UAAe,O  
AAO,W;QACtB,sBAakB,sBAAK,CAAL,CAAIB,C;QACoC,kBAAvB,eAAiB,cAAjB,C;QAA+B,sBAAI,aAAJ,C;  
QAA5C,arB3jSO,W;QqB4jSe,qB;QAAtB,iBAAC,CAAd,wB;UACI,gBAAC,UAAU,KA AV,EAAiB,aAAjB,EAA8B  
sBAAK,KAAL,CAA9B,C;UACd,MAAO,WAAI,aAAJ,C;;QAEX,OAAO,M;O;KAVBX,C;iHA0BA,yB;MAAA,q  
D;MAAA,gE;MAAA,uC;QAmB0B,Q;QAHtB,IAAI,mBAAJ,C;UAAe,OAAO,W;QACtB,sBAakB,sBAAK,CAAL  
,CAAIB,C;QACqC,kBAAxB,eAAkB,cAAIB,C;QAAgC,sBAAI,aAAJ,C;QAA7C,arBrlSO,W;QqBslSe,qB;QAAtB,  
iBAAC,CAAd,wB;UACI,gBAAC,UAAU,KA AV,EAAiB,aAAjB,EAA8B,sBAAK,KAAL,CAA9B,C;UACd,MAAO  
,WAAI,aAAJ,C;;QAEX,OAAO,M;O;KAVBX,C;iFA0BA,yB;MAxZA,gD;MAAA,gE;MAwZA,gD;QAgBW,sB;;U  
AtZS,Q;UAHhB,IAAI,mBAAJ,C;YAAe,qBAAO,OAYZH,OA ZG,C;YAAP,uB;WACqB,kBAAvB,eAAa,iBAAO,  
CAAP,IAAb,C;UAA+B,sBAwZzB,OAxZyB,C;UAA5C,arBrtRO,W;UqBstRP,kBAuZmB,O;UAtZH,2B;UAAhB,O  
AAgB,cAAhB,C;YAAgB,yB;YACZ,cAqZwB,SArZV,CAAU,WAAV,EAAuB,OAAvB,C;YACd,MAAO,WAAI,W  
AAJ,C;;UAEX,qBAAO,M;;;QakZP,yB;O;KAhBJ,C;iFamBA,yB;MAIZA,gD;MAAA,gE;MAkZA,gD;QAgBW,sB  
;;UAhZS,Q;UAHhB,IAAI,mBAAJ,C;YAAe,qBAAO,OAmZH,OAnZG,C;YAAP,uB;WACqB,kBAAvB,eAAa,iBAA  
AO,CAAP,IAAb,C;UAA+B,sBAkZzB,OAIzYB,C;UAA5C,arB9uRO,W;UqB+uRP,kBAiZmB,O;UAhZH,2B;UAA  
hB,OAAgB,cAAhB,C;YAAgB,yB;YACZ,cAYwB,SA/YV,CAAU,WAAV,EAAuB,OAAvB,C;YACd,MAAO,W  
AAI,WAAJ,C;;UAEX,qBAAO,M;;;QA4YP,yB;O;KAhBJ,C;iFamBA,yB;MA5YA,gD;MAAA,gE;MA4YA,gD;Q  
AgBW,sB;;UA1YS,Q;UAHhB,IAAI,mBAAJ,C;YAAe,qBAAO,OA6YH,OA7YG,C;YAAP,uB;WACqB,kBAAvB,  
eAAa,iBAAO,CAAP,IAAb,C;UAA+B,sBA4YzB,OA5YyB,C;UAA5C,arBvwRO,W;UqBvwRP,kBA2YmB,O;UA  
1YH,2B;UAAhB,OAAgB,cAAhB,C;YAAgB,yB;YACZ,cAYwB,SAzYV,CAAU,WAAV,EAAuB,OAAvB,C;YA  
Cd,MAAO,WAAI,WAAJ,C;;UAEX,qBAAO,M;;;QAsYP,yB;O;KAhBJ,C;iFamBA,yB;MATYA,gD;MAAA,gE;M  
AsYA,gD;QAgBW,sB;;UApYS,Q;UAHhB,IAAI,mBAAJ,C;YAAe,qBAAO,OAYYH,OAvYG,C;YAAP,uB;WACq  
B,kBAAvB,eAAa,iBAAO,CAAP,IAAb,C;UAA+B,sBA5YzB,OAtYyB,C;UAA5C,arBhyRO,W;UqBiyRP,kBAqY  
mB,O;UApYH,2B;UAAhB,OAAgB,cAAhB,C;YAAgB,yB;YACZ,cAmYwB,SAnYV,CAAU,WAAV,EAAuB,OA  
AvB,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,qBAAO,M;;;QAgYP,yB;O;KAhBJ,C;+FamBA,yB;MAhYA,gD;  
MAAA,gE;MAlKI,0D;MAk9KJ,gD;QaiBW,6B;;UA9XO,gC;UAHd,IAAI,mBAAJ,C;YAAe,4BAAO,OaiYI,OAj  
YI,C;YAAP,8B;WACqB,kBAAvB,eAAa,iBAAO,CAAP,IAAb,C;UAA+B,sBAgYIB,OAhYkB,C;UAA5C,arB1zR  
O,W;UqB2zRP,kBA+X0B,O;UA9XZ,OArmKE,YAAR,iBAAQ,C;UAqmKF,mB;UAAA,kB;UAAA,kB;UAAAd,0D;  
YACI,cA6X+B,SA7XjB,CAAU,KA AV,EAAiB,WAAjB,EAA8B,sBAAK,KAAL,CAA9B,C;YACd,MAAO,WAAI  
,WAAJ,C;;UAEX,4BAAO,M;;;QA0XP,gC;O;KAjBJ,C;+FAoBA,yB;MA1XA,gD;MAAA,gE;MApmKI,0D;MA89  
KJ,gD;QaiBW,6B;;UAxXO,gC;UAHd,IAAI,mBAAJ,C;YAAe,4BAAO,OA2XI,OA3XJ,C;YAAP,8B;WACqB,kB  
AAvB,eAAa,iBAAO,CAAP,IAAb,C;UAA+B,sBA0XIB,OA1XkB,C;UAA5C,arBp1RO,W;UqBq1RP,kBAyX0B,O

;UAxXZ,OAvnKE,YAAR,iBAAQ,C;UAunKF,mB;UAAA,kB;UAAA,kB;UAAAd,0D;YACI,cAuX+B,SAvXjB,CA  
AU,KAAV,EAAiB,WAAjB,EAA8B,sBAAK,KAAL,CAA9B,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,4BAAO,  
M;;;QAoXP,gC;O;KAjBJ,C;+FAoBA,yB;MApXA,gD;MAAA,gE;MAtnKI,0D;MA0+KJ,gD;QAIbW,6B;;UAIXO,  
gC;UAHd,IAAI,mBAAJ,C;YAAe,4BAAO,OAqXI,OA rXJ,C;YAAP,8B;WACqB,kBAAvB,eAAa,iBAAO,CAAP,I  
AAb,C;UAA+B,sBAoXIB,OA pXkB,C;UAA5C,arB92RO,W;UqB+2RP,kBA mX0B,O;UAIXZ,OAzoKE,YAAR,iB  
AAQ,C;UAyoKF,mB;UAAA,kB;UAAA,kB;UAAAd,0D;YACI,cAiX+B,SAjXjB,CAAU,KAAV,EAAiB,WAAjB,E  
AA8B,sBAAK,KAAL,CAA9B,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,4BAAO,M;;;QA8WP,gC;O;KAjBJ,C;+F  
AoBA,yB;MA9WA,gD;MAAA,gE;MAxoKI,0D;MA s/KJ,gD;QAIbW,6B;;UA5WO,gC;UAHd,IAAI,mBAAJ,C;Y  
AAe,4BAAO,OA+WI,OA/WJ,C;YAAP,8B;WACqB,kBAAvB,eAAa,iBAAO,CAAP,IAAb,C;UAA+B,sBA8WIB,  
OA9WkB,C;UAA5C,arBx4RO,W;UqBy4RP,kBA6W0B,O;UA5WZ,OA3pKE,YAAR,iBAAQ,C;UA2pKF,mB;UA  
AA,kB;UAAA,kB;UAAAd,0D;YACI,cA2W+B,SA3WjB,CAAU,KAAV,EAAiB,WAAjB,EAA8B,sBAAK,KAAL,C  
AA9B,C;YACd,MAAO,WAAI,WAAJ,C;;UAEX,4BAAO,M;;;QAwWP,gC;O;KAjBJ,C;mFAoBA,yB;MAAA,wB;  
MAAA,sC;QAUoB,Q;QADhB,UAAgB,W;QACA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,Mn CvwSiD,  
SmCuwsjD,Gn Cvws2D,KAAK,GmCuwszD,SAAS,OAAT,Cn CvwsOE,KAAx,IAAf,C;;QmCysrD,OAAO,G;O;  
KAbX,C;mFAGBA,yB;MAAA,wB;MAAA,sC;QAUoB,Q;QADhB,UAAgB,W;QACA,2B;QAAhB,OAAGB,cAAh  
B,C;UAAgB,yB;UACZ,Mn CvxsSiD,SmCuxSjD,Gn Cvxs2D,KAAK,GmCuxSzD,SAAS,OAAT,Cn CvxsOE,KAAx,I  
AAf,C;;QmCyxSrD,OAAO,G;O;KAbX,C;mFAGBA,yB;MAAA,wB;MAAA,sC;QAUoB,Q;QADhB,UAAgB,W;Q  
ACA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,Mn CvysSiD,SmCuySjD,Gn Cvys2D,KAAK,GmCuySzD,S  
AAS,OAAT,Cn CvysOE,KAAx,IAAf,C;;QmCyySrD,OAAO,G;O;KAbX,C;mFAGBA,yB;MAAA,wB;MAAA,sC;Q  
AUoB,Q;QADhB,UAAgB,W;QACA,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,Mn CvzSiD,SmCuzSjD,G  
n CvzS2D,KAAK,GmCuzSzD,SAAS,OAAT,Cn CvzSoE,KAAx,IAAf,C;;QmCyzSrD,OAAO,G;O;KAbX,C;8FAGB  
A,+B;MAUoB,Q;MADhB,UAAkB,G;MACF,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QACZ,OAAO,SAAS,O  
AAT,C;;MAEX,OAAO,G;K;+FAGX,+B;MAUoB,Q;MADhB,UAAkB,G;MACF,2B;MAAhB,OAAGB,cAAhB,C;  
QAAGB,yB;QACZ,OAAO,SAAS,OAAT,C;;MAEX,OAAO,G;K;+FAGX,+B;MAUoB,Q;MADhB,UAAkB,G;MA  
CF,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QACZ,OAAO,SAAS,OAAT,C;;MAEX,OAAO,G;K;+FAGX,+B;  
MAUoB,Q;MADhB,UAAkB,G;MACF,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QACZ,OAAO,SAAS,OAAT,  
C;;MAEX,OAAO,G;K;kFAGX,+B;MAYoB,Q;MADhB,UAAoB,C;MACJ,2B;MAAhB,OAAGB,cAAhB,C;QAAG  
B,yB;QACZ,OAAO,SAAS,OAAT,C;;MAEX,OAAO,G;K;mFAGX,+B;MAYoB,Q;MADhB,UAAoB,C;MACJ,2B;  
MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QACZ,OAAO,SAAS,OAAT,C;;MAEX,OAAO,G;K;mFAGX,+B;MAYo  
B,Q;MADhB,UAAoB,C;MACJ,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QACZ,OAAO,SAAS,OAAT,C;;MAE  
X,OAAO,G;K;mFAGX,+B;MAYoB,Q;MADhB,UAAoB,C;MACJ,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;Q  
ACZ,OAAO,SAAS,OAAT,C;;MAEX,OAAO,G;K;mFAGX,+B;MAYoB,Q;MADhB,UAAe,C;MACC,2B;MAAhB,  
OAAGB,cAAhB,C;QAAGB,yB;QACZ,YAAO,SAAS,OAAT,CAAP,I;;MAEJ,OAAO,G;K;mFAGX,+B;MAYoB,Q;  
MADhB,UAAe,C;MACC,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QACZ,YAAO,SAAS,OAAT,CAAP,I;;MAE  
J,OAAO,G;K;mFAGX,+B;MAYoB,Q;MADhB,UAAe,C;MACC,2B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QAC  
Z,YAAO,SAAS,OAAT,CAAP,I;;MAEJ,OAAO,G;K;mFAGX,+B;MAYoB,Q;MADhB,UAAe,C;MACC,2B;MAAh  
B,OAAGB,cAAhB,C;QAAGB,yB;QACZ,YAAO,SAAS,OAAT,CAAP,I;;MAEJ,OAAO,G;K;mFAGX,yB;MAAA,S  
AWoB,gB;MAXpB,sC;QAYoB,Q;QADhB,Y;QACgB,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,cAAO,S  
AAS,OAAT,CAAP,C;;QAEJ,OAAO,G;O;KAFx,C;mFAkBA,yB;MAAA,SAWoB,gB;MAXpB,sC;QAYoB,Q;QA  
DhB,Y;QACgB,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,cAAO,SAAS,OAAT,CAAP,C;;QAEJ,OAAO,  
G;O;KAFx,C;mFAkBA,yB;MAAA,SAWoB,gB;MAXpB,sC;QAYoB,Q;QADhB,Y;QACgB,2B;QAAhB,OAAGB,c  
AAhB,C;UAAgB,yB;UACZ,cAAO,SAAS,OAAT,CAAP,C;;QAEJ,OAAO,G;O;KAFx,C;mFAkBA,yB;MAAA,SA  
WoB,gB;MAXpB,sC;QAYoB,Q;QADhB,Y;QACgB,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,cAAO,SA  
AS,OAAT,CAAP,C;;QAEJ,OAAO,G;O;KAFx,C;mFAkBA,yB;Mn C5xSA,6B;Mm C4xSA,sC;QAaoB,Q;QADhB,U  
n C9xSmC,cm C8xSnB,Cn C9xSmB,C;Qm C+xSnB,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,Mn ClmTiD,c  
mCkmTjD,Gn ClmT2D,KAAK,GmCkmTzD,SAAS,OAAT,Cn ClmToE,KAAx,IAAf,C;;QmComTrD,OAAO,G;O;  
KAhBX,C;mFAMBA,yB;Mn C/ySA,6B;Mm C+ySA,sC;QAaoB,Q;QADhB,Un CjzSmC,cm CizSnB,Cn CjzSmB,C;Q  
mCkzSnB,2B;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,Mn CrnTiD,cm CqnTjD,Gn CrnT2D,KAAK,GmCqnT

zD,SAAS,OAAT,CnCrnToE,KAAX,IAAf,C;;QmCunTrD,OAAO,G;O;KAhBX,C;mFAmBA,yB;MnCl0SA,6B;Mm  
Ck0SA,sC;QAaoB,Q;QADhB,UnCp0SmC,cmCo0SnB,CnCp0SmB,C;QmCq0SnB,2B;QAaHb,OAAGb,cAAhB,C;  
UAAgB,yB;UACZ,MnCxoTiD,cmCwoTjD,GnCxoT2D,KAAK,GmCwoTzD,SAAS,OAAT,CnCxoToE,KAAX,IA  
Af,C;;QmC0oTrD,OAAO,G;O;KAhBX,C;mFAmBA,yB;MnCr1SA,6B;MmCq1SA,sC;QAaoB,Q;QADhB,UnCv1S  
mC,cmCu1SnB,CnCv1SmB,C;QmCw1SnB,2B;QAaHb,OAAGb,cAAhB,C;UAAgB,yB;UACZ,MnC3pTiD,cmC2p  
TjD,GnC3pT2D,KAAK,GmC2pTzD,SAAS,OAAT,CnC3pToE,KAAX,IAAf,C;;QmC6pTrD,OAAO,G;O;KAhBX,  
C;mFAmBA,yB;MnBr2SA,+B;MmBq2SA,sC;QAaoB,Q;QADhB,UnBt2SqC,eAAW,oBmBs2S/B,CnBt2S+B,CAA  
X,C;QmBu2SrB,2B;QAaHb,OAAGb,cAAhB,C;UAAgB,yB;UACZ,MnB3qTmD,emB2qTnD,GnB3qT8D,KAAK,  
KmB2qT5D,SAAS,OAAT,CnB3qTuE,KAAX,CAAhB,C;;QmB6qTvD,OAAO,G;O;KAhBX,C;mFAmBA,yB;MnB  
x3SA,+B;MmBw3SA,sC;QAaoB,Q;QADhB,UnBz3SqC,eAAW,oBmBy3S/B,CnBz3S+B,CAAX,C;QmB03SrB,2B  
;QAaHb,OAAGb,cAAhB,C;UAAgB,yB;UACZ,MnB9rTmD,emB8rTnD,GnB9rT8D,KAAK,KmB8rT5D,SAAS,O  
AAT,CnB9rTuE,KAAX,CAAhB,C;;QmBgsTvD,OAAO,G;O;KAhBX,C;mFAmBA,yB;MnB34SA,+B;MmB24SA,  
sC;QAaoB,Q;QADhB,UnB54SqC,eAAW,oBmB44S/B,CnB54S+B,CAAX,C;QmB64SrB,2B;QAaHb,OAAGb,cA  
AhB,C;UAAgB,yB;UACZ,MnBjtTmD,emBitTnD,GnBjtT8D,KAAK,KmBitT5D,SAAS,OAAT,CnBjtTuE,KAAX,  
CAAhB,C;;QmBmtTvD,OAAO,G;O;KAhBX,C;mFAmBA,yB;MnB95SA,+B;MmB85SA,sC;QAaoB,Q;QADhB,U  
nB/5SqC,eAAW,oBmB+5S/B,CnB/5S+B,CAAX,C;QmB6SrB,2B;QAaHb,OAAGb,cAAhB,C;UAAgB,yB;UACZ  
,MnBpuTmD,emBouTnD,GnBpuT8D,KAAK,KmBouT5D,SAAS,OAAT,CnBpuTuE,KAAX,CAAhB,C;;QmBsuTv  
D,OAAO,G;O;KAhBX,C;IAmBA,kC;MA2DI,WpBnnTO,MAAO,KoBmnTG,cpBnnTH,EoBikTH,KAkDkB,OpBn  
nTf,C;MoBonTd,WAAW,iBAaA,IAAb,C;MACX,aAAU,CAAV,MAAkB,IAAIB,M;QACI,IAAK,WArDqB,GAqD  
P,sBAAK,CAAL,CArDO,EAAnB,KaQdQB,CAAM,CAAN,CArDF,CAqDrB,C;;MArDT,OAuDO,I;K;IApDX,kC;  
MAkEI,WpBtoTO,MAAO,KoBsoTG,cpBtoTH,EoB6kTH,KAyDkB,OpBtoTf,C;MoBuoTd,WAAW,iBAaA,IAAb,  
C;MACX,aAAU,CAAV,MAAkB,IAAIB,M;QACI,IAAK,WA5DqB,GA4DP,sBAAK,CAAL,CA5DO,EAAnB,KA4  
DqB,CAAM,CAAN,CA5DF,CA4DrB,C;;MA5DT,OA8DO,I;K;IA3DX,kC;MAyEI,WpBzpTO,MAAO,KoBypTG,c  
pBzpTH,EoBylTH,KAgEkB,OpBzpTf,C;MoB0pTd,WAAW,iBAaA,IAAb,C;MACX,aAAU,CAAV,MAAkB,IAA  
IB,M;QACI,IAAK,WAnEqB,GAmEP,sBAAK,CAAL,CAnEO,EAAnB,KAmEqB,CAAM,CAAN,CAnEF,CAmErB,  
C;;MArDT,OAuDO,I;K;IAIEX,kC;MAGFI,WpB5qTO,MAAO,KoB4qTG,cpB5qTH,EoBqmTH,KAuEkB,OpB5qTf  
,C;MoB6qTd,WAAW,iBAaA,IAAb,C;MACX,aAAU,CAAV,MAAkB,IAAIB,M;QACI,IAAK,WA1EqB,GA0EP,s  
BAAK,CAAL,CA1EO,EAAnB,KA0EqB,CAAM,CAAN,CA1EF,CA0ErB,C;;MA1ET,OA4EO,I;K;+EAzEX,yB;M  
AAA,gE;MpB9mTA,iB;MoB8mTA,8C;QAWI,WpBnnTO,MAAO,KoBmnTG,cpBnnTH,EoBmnTS,KAAM,OpBn  
nTf,C;QoBonTd,WAAW,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,IAAK,WAAI,UAAU,sBA  
AK,CAAL,CAAV,EAAmB,MAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAhBX,C;+EAmBA,yB;MAAA  
,gE;MpBjoTA,iB;MoBioTA,8C;QAWI,WpBtoTO,MAAO,KoBsoTG,cpBtoTH,EoBsoTS,KAAM,OpBtoTf,C;QoB  
uoTd,WAAW,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,IAAK,WAAI,UAAU,sBAAK,CAAL  
,CAAV,EAAmB,MAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAhBX,C;+EAmBA,yB;MAAA,gE;MpBp  
pTA,iB;MoBopTA,8C;QAWI,WpBzpTO,MAAO,KoBypTG,cpBzpTH,EoBypTS,KAAM,OpBzpTf,C;QoB0pTd,W  
AAW,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,IAAK,WAAI,UAAU,sBAAK,CAAL,CAAV,  
EAAmB,MAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAhBX,C;+EAmBA,yB;MAAA,gE;MpBvqTA,iB;  
MoBuqTA,8C;QAWI,WpB5qTO,MAAO,KoB4qTG,cpB5qTH,EoB4qTS,KAAM,OpB5qTf,C;QoB6qTd,WAAW,e  
AAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,IAAK,WAAI,UAAU,sBAAK,CAAL,CAAV,EAAm  
B,MAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAhBX,C;IAmBA,kC;MA8DoB,gB;MAHhB,gBAAGb,c;  
MACHB,WAAW,iBpBhvTJ,MAAO,KoBgvTsB,wBAnDzB,KAmDyB,EAAwB,EAAXB,CpBhvTtB,EoBgvTmD,S  
pBhvTnD,CoBgvTH,C;MACX,QAAQ,C;MACQ,OArdL,KAqDK,W;MAAhB,OAAGb,cAAhB,C;QAAGb,yB;QA  
CZ,IAAI,KAAK,SAAT,C;UAAoB,K;QACpB,IAAK,WAvDqB,GAuDP,uBAAK,UAAL,EAAX,kBAAL,UAvDO,  
EAuDI,OAvDJ,CAuDrB,C;;MAvDT,OAYDO,I;K;IAtdX,kC;MAuEoB,gB;MAHhB,gBAAGb,c;MACHB,WAAW,i  
BpBrwTJ,MAAO,KoBqwTsB,wBA5DzB,KA4DyB,EAAwB,EAAXB,CpBrwTtB,EoBqwTmD,SpBrwTnD,CoBqw  
TH,C;MACX,QAAQ,C;MACQ,OA9DL,KA8DK,W;MAAhB,OAAGb,cAAhB,C;QAAGb,yB;QACZ,IAAI,KAAK,  
SAAT,C;UAAoB,K;QACpB,IAAK,WAhEqB,GAgEP,uBAAK,UAAL,EAAX,kBAAL,UAhEO,EAgEI,OAhEJ,CA  
gErB,C;;MAhET,OAkEO,I;K;IA/DX,kC;MAGFoB,gB;MAHhB,gBAAGb,c;MACHB,WAAW,iBpB1xTJ,MAAO,K

oB0xTsB,wBArEzB,KAqEyB,EAAwB,EAAxB,CpB1xTtB,EoB0xTmD,SpB1xTnD,CoB0xTH,C;MACX,QAAQ,C;MACQ,OAveL,KAuEK,W;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QACZ,IAAI,KAAK,SAAT,C;UAAoB,K;QACpB,IAAK,WazEqB,GAYEP,uBAAK,UAAAL,EAAK,kBAAL,UazEO,EAYEI,OAzeJ,CAYErB,C;;MAzET,OA2EO,I;K;IAxEX,kC;MAYFoB,gB;MAHhB,gBAAGB,c;MACHB,WAAW,iBpB/yTJ,MAAO,KoB+yTsB,wBA9EzB,KAS8EyB,EAAwB,EAAxB,CpB/yTtB,EoB+yTmD,SpB/yTnD,CoB+yTH,C;MACX,QAAQ,C;MACQ,OAFL,KAqFK,W;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QACZ,IAAI,KAAK,SAAT,C;UAAoB,K;QACpB,IAAK,WAlFqB,GAKFP,uBAAK,UAAAL,EAAK,kBAAL,UAlFO,EAKFI,OAIFJ,CAkFrB,C;;MAIFT,OAoFO,I;K;+EAjFX,yB;MAAA,kF;MAAA,gE;MpB1uTA,iB;MoB0uTA,8C;QAcOB,UAEY,M;QAL5B,gBAAGB,c;QACHB,WAAW,epBhvTJ,MAAO,KoBgvTsB,wBAAN,KAAM,EAAwB,EAAxB,CpBhvTtB,EoBgvTmD,SpBhvTnD,CoBgvTH,C;QACX,QAAQ,C;QACQ,uB;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,IAAI,KAAK,SAAT,C;YAAoB,K;UACpB,IAAK,WAAI,UAAU,uBAAK,UAAAL,EAAK,kBAAL,UAAV,EAAqB,OAARb,CAAJ,C;;QAET,OAAO,I;O;KAIBX,C;+EAqBA,yB;MAAA,kF;MAAA,gE;MpB/vTA,iB;MoB+vTA,8C;QAcOB,UAEY,M;QAL5B,gBAAGB,c;QACHB,WAAW,epBrwTJ,MAAO,KoBqwTsB,wBAAN,KAAM,EAAwB,EAAxB,CpBrwTtB,EoBqwTmD,SpBrwTnD,CoBqwTH,C;QACX,QAAQ,C;QACQ,uB;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,IAAI,KAAK,SAAT,C;YAAoB,K;UACpB,IAAK,WAAI,UAAU,uBAAK,UAAAL,EAAK,kBAAL,UAAV,EAAqB,OAARb,CAAJ,C;;QAET,OAAO,I;O;KAIBX,C;+EAqBA,yB;MAAA,kF;MAAA,gE;MpBpxTA,iB;MoBoxTA,8C;QAcOB,UAEY,M;QAL5B,gBAAGB,c;QACHB,WAAW,epB1xTJ,MAAO,KoB0xTsB,wBAAN,KAAM,EAAwB,EAAxB,CpB1xTtB,EoB0xTmD,SpB1xTnD,CoB0xTH,C;QACX,QAAQ,C;QACQ,uB;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,IAAI,KAAK,SAAT,C;YAAoB,K;UACpB,IAAK,WAAI,UAAU,uBAAK,UAAAL,EAAK,kBAAL,UAAV,EAAqB,OAARb,CAAJ,C;;QAET,OAAO,I;O;KAIBX,C;+EAqBA,yB;MAAA,kF;MAAA,gE;MpBzyTA,iB;MoByyTA,8C;QAcOB,UAEY,M;QAL5B,gBAAGB,c;QACHB,WAAW,epB/yTJ,MAAO,KoB+yTsB,wBAAN,KAAM,EAAwB,EAAxB,CpB/yTtB,EoB+yTmD,SpB/yTnD,CoB+yTH,C;QACX,QAAQ,C;QACQ,uB;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UACZ,IAAI,KAAK,SAAT,C;YAAoB,K;UACpB,IAAK,WAAI,UAAU,uBAAK,UAAAL,EAAK,kBAAL,UAAV,EAAqB,OAARb,CAAJ,C;;QAET,OAAO,I;O;KAIBX,C;IAqBA,kC;MA2DI,WpBn3TO,MAAO,KoBm3TG,cpBn3TH,EoBi0TH,KAKdKB,KpBn3Tf,C;MoBo3Td,WAAW,iBAaA,IAAb,C;MACX,aAAU,CAAV,MAAkB,IAAIB,M;QACI,IAAK,WArDqB,GAqDP,sBAAK,CAAL,CArDO,EAAAnB,KAqDqB,aAAM,CAAN,CArDF,CAqDrB,C;;MArDT,OAuDO,I;K;IApDX,kC;MAkEI,WpBt4TO,MAAO,KoBs4TG,cpBt4TH,EoB60TH,KAyDkB,KpBt4Tf,C;MoBu4Td,WAAW,iBAaA,IAAb,C;MACX,aAAU,CAAV,MAAkB,IAAIB,M;QACI,IAAK,WA5DqB,GA4DP,sBAAK,CAAL,CA5DO,EAAAnB,KA4DqB,aAAM,CAAN,CA5DF,CA4DrB,C;;MA5DT,OA8DO,I;K;IA3DX,kC;MAyEI,WpBz5TO,MAAO,KoBy5TG,cpBz5TH,EoBy1TH,KAgEkB,KpBz5Tf,C;MoB05Td,WAAW,iBAaA,IAAb,C;MACX,aAAU,CAAV,MAAkB,IAAIB,M;QACI,IAAK,WAnEqB,GAmEP,sBAAK,CAAL,CANEO,EAAAnB,KAmEqB,aAAM,CAAN,CANEF,CAMerB,C;;MANET,OAqEO,I;K;IALEX,kC;MAGFI,WpB56TO,MAAO,KoB46TG,cpB56TH,EoBq2TH,KAuEkB,KpB56Tf,C;MoB66Td,WAAW,iBAaA,IAAb,C;MACX,aAAU,CAAV,MAAkB,IAAIB,M;QACI,IAAK,WAlEqB,GA0EP,sBAAK,CAAL,CA1EO,EAAAnB,KA0EqB,aAAM,CAAN,CA1EF,CA0ErB,C;;MA1ET,OA4EO,I;K;+EAzEX,yB;MAAA,gE;MpB92TA,iB;MoB82TA,8C;QAWI,WpBn3TO,MAAO,KoBm3TG,cpBn3TH,EoBm3TS,KAAM,KpBn3Tf,C;QoBo3Td,WAAW,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,IAAK,WAAI,UAAU,sBAAK,CAAL,CAAV,EAAmB,kBAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAhBX,C;+EAmBA,yB;MAAA,gE;MpBj4TA,iB;MoBi4TA,8C;QAWI,WpBt4TO,MAAO,KoBs4TG,cpBt4TH,EoBs4TS,KAAM,KpBt4Tf,C;QoBu4Td,WAAW,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,IAAK,WAAI,UAAU,sBAAK,CAAL,CAAV,EAAmB,kBAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAhBX,C;+EAmBA,yB;MAAA,gE;MpBv6TA,iB;MoBu6TA,8C;QAWI,WpB56TO,MAAO,KoB46TG,cpB56TH,EoB46TS,KAAM,KpB56Tf,C;QoB66Td,WAAW,eAAa,IAAb,C;QACX,aAAU,CAAV,MAAkB,IAAIB,M;UACI,IAAK,WAAI,UAAU,sBAAK,CAAL,CAAV,EAAmB,kBAAM,CAAN,CAAnB,CAAJ,C;;QAET,OAAO,I;O;KAhBX,C;IAmBA,2B;MAQoB,Q;MADhB,UAAgB,W;MACHB,wBAAGB,SAAhB,gB;QAAGB,cAAA,SAAhB,M;QACI,MnCjnUiD,SmCinUjD,GnCjnU2D,KAAK,GmCinUzD,OnCjnUoE,KAAX,IAAf,C;;MmCmnUrD,OAAO,G;K;IAGX,2B;MAQoB,Q;MADhB,UAAiB,2B;MA

CjB,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,MnB5nUmD,UmB4nUnD,GnB5nU8D,KAAK,KmB4nU5D,OnB5nUuE,KAAx,CAAhB,C;;MmB8nUvD,OAAO,G;K;IAGX,2B;MAQoB,Q;MADhB,UAAgB,W;MACHB,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,MnC7oUiD,SmC6oUjD,GnC7oU2D,KAAK,GAAW,CD2O5C,SoCk6TxB,OpCl6TkC,KAAL,GAAiB,GAAtB,CC3O4C,MAAX,IAAf,C;;MmC+oUrD,OAAO,G;K;IAGX,2B;MAQoB,Q;MADhB,UAAgB,W;MACHB,wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QACI,MnC3pUiD,SmC2pUjD,GnC3pU2D,KAAK,GAAW,CC4O5C,SkC+6TxB,OIC/6TkC,KAAL,GAAiB,KAAtB,CD5O4C,MAAX,IAAf,C;;MmC6pUrD,OAAO,G;K;+EAGX,yB;MAAA,0C;MnC2TA,6B;MmCw2TA,4B;QAOI,OnCr2TmC,cmCq2TpB,IAAR,iBAAQ,CnCr2ToB,C;O;KmC81TvC,C;+EAUA,yB;MAAA,0C;MnBn2TA,+B;MmBm2TA,4B;QAOI,OnBh2TsC,emBg2TvB,IAAR,iBAAQ,CnBh2TuB,C;O;KmBy1T1C,C;+EAUA,yB;MAAA,sC;MnC53TA,6B;MmC43TA,iBAOiB,yB;QpCz9Tb,6B;eoCy9Ta,c;UAAE,OpCh9ToB,coCg9TpB,EpCh9T8B,KAAL,GAAiB,GAAtB,C;S;OoCg9TtB,C;MAPjB,4B;QA7iBoB,Q;QADhB,UnCp0SmC,cmCo0SnB,CnCp0SmB,C;QmCq0SnB,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,MnCxoTiD,cmCwoTjD,GnCxoT2D,KAAK,GAAW,CD2O5C,coC65Sf,OpC75SyB,KAAL,GAAiB,GAAtB,CC3O4C,MAAX,IAAf,C;;QmC2rUrD,OAjjBO,G;O;KA0iBX,C;+EAUA,yB;MAAA,sC;MnCt4TA,6B;MmCs4TA,iBAOiB,yB;QlCl+Tb,6B;ekCk+Ta,c;UAAE,OICz9ToB,ckCy9TpB,EICz9T8B,KAAAL,GAAiB,KAAtB,C;S;OkCy9TtB,C;MAPjB,4B;QApiBoB,Q;QADhB,UnCv1SmC,cmCu1SnB,CnCv1SmB,C;QmCw1SnB,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UACZ,MnC3pTiD,cmC2pTjD,GnC3pT2D,KAAK,GAAW,CC4O5C,ckC+6Sf,OIC/6SyB,KAAL,GAAiB,KAAtB,CD5O4C,MAAX,IAAf,C;;QmCqsUrD,OAXiBO,G;O;KAIiBX,C;IC3vUA,mC;MAQoB,UACL,M;MAHX,aAAa,gBAAW,cAAX,C;MACb,YAAY,C;MACI,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,oBAAO,cAAP,EAAO,sBAAP,WAAkB,OAAIB,C;;MACJ,OAAO,M;K;IAGX,kC;MAQoB,UACL,M;MAHX,aAAa,eAAU,cAAV,C;MACb,YAAY,C;MACI,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,oBAAO,cAAP,EAAO,sBAAP,WAAkB,OAAIB,C;;MACJ,OAAO,M;K;IAGX,mC;MAQoB,UACL,M;MAHX,aAAa,gBAAW,cAAX,C;MACb,YAAY,C;MACI,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,oBAAO,cAAP,EAAO,sBAAP,WAAkB,OAAIB,C;;MACJ,OAAO,M;K;IAGX,oC;MAQoB,UACL,M;MAHX,aAAa,iBAAAY,cAAZ,C;MACb,YAAY,C;MACI,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,oBAAO,cAAP,EAAO,sBAAP,WAAkB,OAAIB,C;;MACJ,OAAO,M;K;IAGX,2B;MAQoB,Q;MADhB,UAAgB,W;MACA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,MpCAiD,SoCAjD,GpCA2D,KAAK,GoCAzD,OpCAoE,KAAx,IAAf,C;;MocErD,OAAO,G;K;IAGX,2B;MAQoB,Q;MADhB,UAAiB,2B;MACD,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,MpBXmD,UoBwnD,GpBX8D,KAAK,KoBW5D,OpBXuE,KAAx,CAAhB,C;;MoBavD,OAAO,G;K;IAGX,2B;MAQoB,Q;MADhB,UAAgB,W;MACA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,MpC5BiD,SoC4BjD,GpC5B2D,KAAK,GAAW,CD2O5C,SqC/MxB,OrC+MkC,KAAL,GAAiB,GAAtB,CC3O4C,MAAX,IAAf,C;;MoC8BrD,OAAO,G;K;IAGX,2B;MAQoB,Q;MADhB,UAAgB,W;MACA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,MpC1CiD,SoC0CjD,GpC1C2D,KAAK,GAAW,CC4O5C,SmClMxB,OnCkMkC,KAAL,GAAiB,KAAtB,CD5O4C,MAAX,IAAf,C;;MoC4CrD,OAAO,G;K;IC3GX,wB;MAMI,OrCuCkE,YqCvCvD,CrCuCwE,KAAjB,EqCvClD,CrCuC+E,KAA7B,CqCvCvD,KAAJ,GAAY,CAAZ,GAAmB,C;K;IAG9B,wB;MAMI,OrBsCmE,aqBtCxD,CrBsC0E,KAAIB,EqBtCnD,CrBsCiF,KAA9B,CqBtCxD,KAAJ,GAAY,CAAZ,GAAmB,C;K;IAG9B,wB;MAMI,OtCKgF,0BsCLrE,CtCgP2B,KAAL,GAAiB,GA3O8B,EsCLhE,CtCgPsB,KAAL,GAAiB,GA3O8B,CsCLrE,KAAJ,GAAY,CAAZ,GAAmB,C;K;IAG9B,wB;MAMI,OpClIF,0BoCjTE,CpCwO2B,KAAL,GAAiB,KApO+B,EoCjJE,CpCwOsB,KAAL,GAAiB,KApO+B,CoCjTE,KAAJ,GAAY,CAAZ,GAAmB,C;K;mFAG9B,yB;MAAA,8C;MAAA,0B;QAOI,OAAO,MAAM,CAAN,EAAS,MAAM,CAAN,EAAS,CAAT,CAAT,C;O;KAPX,C;mFAUA,yB;MAAA,8C;MAAA,0B;QAOI,OAAO,MAAM,CAAN,EAAS,MAAM,CAAN,EAAS,CAAT,CAAT,C;O;KAPX,C;mFAUA,yB;MAAA,8C;MAAA,0B;QAOI,OAAO,MAAM,CAAN,EAAS,MAAM,CAAN,EAAS,CAAT,CAAT,C;O;KAPX,C;IAUA,4B;MAOc,Q;MADV,UAAU,C;MACA,uB;MAAV,OAAU,cAAV,C;QAAU,mB;QAAO,MAAM,SAAM,GAAN,EAAW,CAAX,C;;MACvB,OAAO,G;K;IAGX,4B;MAOc,Q;MADV,UAAU,C;MACA,uB;MAAV,OAAU,cAAV,C;QAAU,mB;QAAO,MAAM,SAAM,GAAN,EAAW,CAAX,C;;MACvB,OAAO,G;K;IAGX,4B;MAOc,Q;MADV,UAAU,C;MACA,uB;MAAV,OAAU,cAAV,C;QAAU,mB;QAAO,MAAM,SAAM,GAAN,EAAW,CAAX,C;;MACvB,OAAO,G;K;IAGX,wB;MAMI,OrCjFkE,YqCiFvD

,CrCjFwE,KAAjB,EqCiFID,CrCjF+E,KAA7B,CqCiFvD,KAAJ,GAAY,CAAZ,GAAMb,C;K;IAG9B,wB;MAMI,O  
rBlFmE,aqBkFxD,CrBlF0E,KAA1B,EqBkFnD,CrBlFIF,KAA9B,CqBkFxD,KAAJ,GAAY,CAAZ,GAAMb,C;K;IA  
G9B,wB;MAMI,OtCnHgF,0BsCmHrE,CtCwH2B,KAAL,GAAiB,GA3O8B,EsCmHhE,CtCwHsB,KAAL,GAAiB,  
GA3O8B,CsCmHrE,KAAJ,GAAY,CAAZ,GAAMb,C;K;IAG9B,wB;MAMI,OpCpHiF,0BoCoHtE,CpCgH2B,KAA  
L,GAAiB,KApO+B,EoCoHjE,CpCgHsB,KAAL,GAAiB,KApO+B,CoCoHtE,KAAJ,GAAY,CAAZ,GAAMb,C;K;  
mFAG9B,yB;MAAA,8C;MAAA,0B;QAOI,OAAO,MAAM,CAAN,EAAS,MAAM,CAAN,EAAS,CAAT,CAAT,C;  
O;KAPX,C;mFAUA,yB;MAAA,8C;MAAA,0B;QAOI,OAAO,MAAM,CAAN,EAAS,MAAM,CAAN,EAAS,CAA  
T,CAAT,C;O;KAPX,C;mFAUA,yB;MAAA,8C;MAAA,0B;QAOI,OAAO,MAAM,CAAN,EAAS,MAAM,CAAN,  
EAAS,CAAT,CAAT,C;O;KAPX,C;mFAUA,yB;MAAA,8C;MAAA,0B;QAOI,OAAO,MAAM,CAAN,EAAS,MA  
AM,CAAN,EAAS,CAAT,CAAT,C;O;KAPX,C;IAUA,4B;MAOc,Q;MADV,UAAU,C;MACA,uB;MAAV,OAAU,  
cAAV,C;QAAU,mB;QAAO,MAAM,SAAM,GAAN,EAAS,CAAX,C;;MACvB,OAAO,G;K;IAGX,4B;MAOc,Q;  
MADV,UAAU,C;MACA,uB;MAAV,OAAU,cAAV,C;QAAU,mB;QAAO,MAAM,SAAM,GAAN,EAAS,CAAX,  
C;;MACvB,OAAO,G;K;IAGX,4B;MAOc,Q;MADV,UAAU,C;MACA,uB;MAAV,OAAU,cAAV,C;QAAU,mB;Q  
AAO,MAAM,SAAM,GAAN,EAAS,CAAX,C;;MACvB,OAAO,G;K;IAGX,4B;MAOc,Q;MADV,UAAU,C;MAC  
A,uB;MAAV,OAAU,cAAV,C;QAAU,mB;QAAO,MAAM,SAAM,GAAN,EAAS,CAAX,C;;MACvB,OAAO,G;K  
;gFC7OX,yB;MAAA,mC;MAAA,2C;MAAA,4B;QASI,OAAO,kBAAO,cAAP,C;O;KATX,C;gFAYA,yB;MAAA,  
mC;MAAA,2C;MAAA,4B;QASI,OAAO,kBAAO,cAAP,C;O;KATX,C;IAYA,sC;;QASQ,OAAc,WAAP,MAAO,E  
AAS,SAAT,C;;QACHB,+C;UACE,MAAM,2BAAuB,CAAE,QAAzB,C;;UAHV,O;;K;IAOJ,sC;;QASQ,OAAc,YA  
AP,MAAO,EAAU,SAAV,C;;QACHB,+C;UACE,MAAM,2BAAuB,CAAE,QAAzB,C;;UAHV,O;;K;4FAOJ,yB;M  
AAA,mC;MAAA,uD;MAAA,4B;QAOI,OAAO,wBAAa,cAAb,C;O;KAPX,C;4FAUA,yB;MAAA,mC;MAAA,uD;  
MAAA,4B;QAOI,OAAO,wBAAa,cAAb,C;O;KAPX,C;IAUA,4C;MAMI,IAAI,mBAAJ,C;QACI,OAAO,I;MACX,  
OAAc,WAAP,MAAO,EAAS,SAAT,C;K;IAGIB,4C;MAMI,IAAI,mBAAJ,C;QACI,OAAO,I;MACX,OAAc,YAAP  
,MAAO,EAAU,SAAV,C;K;oFAGIB,8B;MASI,OAAO,WAAW,IAAX,IAAmB,2BAAS,OAAT,C;K;oFAG9B,8B;  
MASI,OAAO,WAAW,IAAX,IAAmB,2BAAS,OAAT,C;K;IAG9B,uC;MAMI,OAAO,2BvC4K4B,SuC5KnB,KvC4  
K6B,KAAL,GAAiB,GAAtB,CuC5K5B,C;K;IAGX,uC;MAMI,OAAO,2BvC6K8B,UAAW,oBuC7KhC,KvC6K2B,  
KAAK,CAAL,UAAN,CuC7K9B,C;K;IAGX,uC;MAMI,OAAO,2BtCwL8B,UAAW,oBsCxLhC,KtCwL2B,KAAK,  
CAAL,iBAAN,CsCxL9B,C;K;IAGX,uC;MAMY,Q;MAAD,cAAC,OtBqF4C,UsBrF5C,KtBqFkD,yBsBrFxC,EtBq  
FwC,CAAN,CsBrF7C,wBAA8B,2BAA9B,Q;MAAA,W;QAAqC,oCtCoPR,SsCpPiB,KtB6K1B,KhBuEW,QAAV,C  
sCpPQ,C;OAA5C,a;K;IAGJ,uC;MAMI,OAAO,2BrCyI4B,SqCzInB,KrCyI6B,KAAL,GAAiB,KAAtB,CqCzI5B,C;  
K;IAGX,uC;MAMI,OAAO,2BrC0I8B,UAAW,oBqC1IhC,KrC0I2B,KAAK,CAAL,YAAN,CqC1I9B,C;K;IAGX,k  
C;MASI,OAAO,uCAAgB,yBvCmHY,SuCnHl,SvCmHM,KAAL,GAAiB,GAAtB,CuCnHZ,EvCmHY,SuCnHmB,E  
vCmHT,KAAL,GAAiB,GAAtB,CuCnHZ,EAA4C,EAA5C,C;K;IAG3B,kC;MASI,OAAO,uCAAgB,yBAAGB,SAA  
hB,EAAsB,EAAtB,EAA0B,EAA1B,C;K;IAG3B,kC;MASI,OAAO,wCAAIb,yBAAGB,SAAhB,EAAsB,EAAtB,M;  
K;IAG5B,kC;MASI,OAAO,uCAAgB,yBrCgFY,SqChFl,SrCgFM,KAAL,GAAiB,KAAtB,CqChFZ,ErCgFY,SqChF  
mB,ErCgFT,KAAL,GAAiB,KAAtB,CqChFZ,EAA4C,EAA5C,C;K;IAG3B,gC;MAMI,OAAO,uCAAgB,yBAAGB,  
cAAhB,EAAsB,eAAtB,EAA6B,CAAC,cAAD,IAA7B,C;K;IAG3B,gC;MAMI,OAAO,wCAAIb,yBAAGB,cAAhB,  
EAAsB,eAAtB,EAA8B,cAAD,aAA7B,C;K;IAG5B,iC;MAMI,oBAAoB,OAAO,CAA3B,EAA8B,IAA9B,C;MAC  
A,OAAO,uCAAgB,yBAAGB,eAAhB,EAAuB,cAAvB,EAAiC,SAAK,KAAL,GAAY,CAAhB,GAAMb,IAAnB,GA  
A6B,CAAC,IAAD,IAA1D,C;K;IAG3B,iC;MAMI,oBAAoB,kBAAO,CAA3B,EAA8B,IAA9B,C;MACA,OAAO,w  
CAAIb,yBAAGB,eAAhB,EAAuB,cAAvB,EAAiC,SAAK,KAAL,cAAY,CAAhB,GAAMb,IAAnB,GA8B,IAAD,  
aAA1D,C;K;IAG5B,iC;MAQI,IvC/OgF,0BuC+O5E,EvCJkC,KAAL,GAAiB,GA3O8B,EUc+OtE,6BAAM,UvCJsB  
,KAAL,GAAiB,GA3O8B,CuC+O5E,KAAJ,C;QAA2B,OAAO,iCAAU,M;MACHC,WvC6BuB,SuC7B5B,SvC6Bs  
C,KAAL,GAAiB,GAAtB,C;MuC7BV,YAAK,W;MAA9B,OtCjD6D,oBAhJP,SAAU,CD8N7B,SuC7BV,EvC6BoB  
,KAAL,GAAiB,GAAtB,CC9N6B,MAAK,GDAK,KCAO,KAAZ,IAAf,CAGJO,C;K;IsCoDjE,iC;MAQI,ItC3OkE,Y  
sC2O9D,EtC3O+E,KAAjB,EsC2OxD,4BAAK,UtC3OgF,KAA7B,CsC2O9D,KAAJ,C;QAA0B,OAAO,iCAAU,M;  
MAC3C,OtC7D6D,csC6DtD,StC7DsD,EAhJP,SsC6MtC,EtC7MgD,KAAK,GAAY,CsC6M5D,WtC7M4D,MAAZ,  
IAAf,CAGJO,C;K;IsCgEjE,iC;MAQI,ItB/OmE,asB+O/D,EtB/OiF,KAAIB,EsB+OzD,6BAAM,UtB/OiF,KAA9B,Cs  
B+O/D,KAAJ,C;QAA2B,OAAO,kCAAW,M;MAC7C,OtBzE+D,iBsByExD,StBzEwD,EA7IP,UsBsNxC,EtBtNmD

,KAAK,UAA Y,ChByP/C,UAAW,oBAAL,CsCnCb,WtCmCsB,MAAK,CAAL,iBAAN,CgBzP+C,MAAZ,CAAhB,CA6IO,C;K;IsB4EnE,iC;MAQI,IrC3QiF,0BqC2Q7E,ErCvCkC,KAAL,GAAiB,KApO+B,EqC2QvE,8BAAO,UrCvCqB,KAAL,GAAiB,KApO+B,CqC2Q7E,KAAJ,C;QAA4B,OAAO,iCAAU,M;MACjC,WrCNuB,SqCM5B,SrCNC,C,KAAL,GAAiB,KAAtB,C;MqCMV,YAAK,W;MAA9B,OtCrF6D,oBAhJP,SAAU,CC+N7B,SqCMV,ErCnOb,KAAAL,GAAiB,KAAtB,CD/N6B,MAAK,GCAK,KDAO,KAAZ,IAAf,CAGJO,C;K;IsCwFjE,kD;MAUI,OtCjRkE,YsCiRvD,StCjRwE,KAAjB,EsCiRhD,YtCjR6E,KAA7B,CsCiRvD,IAAJ,GAAyB,YAAzB,GAA2C,S;K;IAGtD,kD;MAUI,OtBtRmE,asBsRxD,StBtR0E,KAAiB,EsBsRjD,YtBtR+E,KAA9B,CsBsRxD,IAAJ,GAAyB,YAAzB,GAA2C,S;K;IAGtD,kD;MAUI,OvC3TgF,0BuC2TrE,SvChF2B,KAAL,GAAiB,GA3O8B,EUc2T9D,YvChFoB,KAAL,GAAiB,GA3O8B,CuC2TrE,IAAJ,GAAyB,YAAzB,GAA2C,S;K;IAGtD,kD;MAUI,OrChUiF,0BqCgUtE,SrC5F2B,KAAL,GAAiB,KApO+B,EqCgU/D,YrC5FoB,KAAL,GAAiB,KApO+B,CqCgUtE,IAAJ,GAAyB,YAAzB,GAA2C,S;K;IAGtD,iD;MAUI,OtCrUkE,YsCqUvD,StCrUwE,KAAjB,EsCqUhD,YtCrU6E,KAA7B,CsCqUvD,IAAJ,GAAyB,YAAzB,GAA2C,S;K;IAGtD,iD;MAUI,OtB1UmE,asB0UxD,StB1U0E,KAAiB,EsB0UjD,YtB1U+E,KAA9B,CsB0UxD,IAAJ,GAAyB,YAAzB,GAA2C,S;K;IAGtD,iD;MAUI,OvC/WgF,0BuC+WrE,SvCpI2B,KAAL,GAAiB,GA3O8B,EUc+W9D,YvCpIoB,KAAL,GAAiB,GA3O8B,CuC+WrE,IAAJ,GAAyB,YAAzB,GAA2C,S;K;IAGtD,iD;MAUI,OrCpXiF,0BqCoXtE,SrChJ2B,KAAL,GAAiB,KApO+B,EqCoX/D,YrChJoB,KAAL,GAAiB,KApO+B,CqCoXtE,IAAJ,GAAyB,YAAzB,GAA2C,S;K;IAGtD,4D;MAUI,ItCzXkE,YsCyX9D,YtCzX+E,KAAjB,EsCyX/C,YtCzX4E,KAA7B,CsCyX9D,IAAJ,C;QAAiC,MAAM,gCAAYB,oDAAiD,YAAjD,8BAAoF,YAApF,MAAZB,C;MACvC,ItC1XkE,YsC0X9D,StC1X+E,KAAjB,EsC0XvD,YtC1XoF,KAA7B,CsC0X9D,IAAJ,C;QAAyB,OAAO,Y;MAChC,ItC3XkE,YsC2X9D,StC3X+E,KAAjB,EsC2XvD,YtC3XoF,KAA7B,CsC2X9D,IAAJ,C;QAAyB,OAAO,Y;MAChC,OAAO,S;K;IAGX,4D;MAUI,ItBjYmE,asBiY/D,YtBjYiF,KAAiB,EsBiYhD,YtBjY8E,KAA9B,CsBiY/D,IAAJ,C;QAAiC,MAAM,gCAAYB,oDAAiD,YAAjD,8BAAoF,YAApF,MAAZB,C;MACvC,ItBiYmE,asBkY/D,StBiYiF,KAAiB,EsBkYxD,YtBiYsF,KAA9B,CsBkY/D,IAAJ,C;QAAyB,OAAO,Y;MAChC,ItBnYmE,asBmY/D,StBnYiF,KAAiB,EsBmYxD,YtBnYsF,KAA9B,CsBmY/D,IAAJ,C;QAAyB,OAAO,Y;MAChC,OAAO,S;K;IAGX,4D;MAUI,IvCzagF,0BuCya5E,YvC9LkC,KAAL,GAAiB,GA3O8B,EUcya7D,YvC9LmB,KAAL,GAAiB,GA3O8B,CuCya5E,IAAJ,C;QAAiC,MAAM,gCAAYB,oDAAiD,YAAjD,8BAAoF,YAApF,MAAZB,C;MACvC,IvC1agF,0BuC0a5E,SvC/LkC,KAAL,GAAiB,GA3O8B,EUc0arE,YvC/L2B,KAAL,GAAiB,GA3O8B,CuC0a5E,IAAJ,C;QAAyB,OAAO,Y;MAChC,IvC3agF,0BuC2a5E,SvChMkC,KAAL,GAAiB,GA3O8B,EUc2arE,YvChM2B,KAAL,GAAiB,GA3O8B,CuC2a5E,IAAJ,C;QAAyB,OAAO,Y;MAChC,OAAO,S;K;IAGX,4D;MAUI,IrCjbiF,0BqCib7E,YrC7MkC,KAAL,GAAiB,KApO+B,EqCib9D,YrC7MmB,KAAL,GAAiB,KApO+B,CqCib7E,IAAJ,C;QAAiC,MAAM,gCAAYB,oDAAiD,YAAjD,8BAAoF,YAApF,MAAZB,C;MACvC,IrClbiF,0BqCkb7E,SrC9MkC,KAAL,GAAiB,KApO+B,EqCkbtE,YrC9M2B,KAAL,GAAiB,KApO+B,CqCkb7E,IAAJ,C;QAAyB,OAAO,Y;MAChC,IrCnbiF,0BqCmb7E,SrC/MkC,KAAL,GAAiB,KApO+B,EqCmbtE,YrC/M2B,KAAL,GAAiB,KApO+B,CqCmb7E,IAAJ,C;QAAyB,OAAO,Y;MAChC,OAAO,S;K;IAGX,uC;MAcW,Q;MAJP,IAAI,8CAAJ,C;QACI,OAA Y,WAAL,SAAK,EAAe,KAAf,C;OAEhB,IAAI,KAAM,UAAV,C;QAAqB,MAAM,gCAAYB,4CAAyC,KAAzC,MAAZB,C;MAEvB,ItC9b8D,YsC8b9D,StC9b+E,KAAjB,EsC8bvD,KAAM,MtC9b8E,KAA7B,CsC8b9D,K;QAA4B,OAAO,KAAM,M;QAC5B,ItC/b8D,YsC+b9D,StC/b+E,KAAjB,EsC+bvD,KAAM,atC/b8E,KAA7B,CsC+b9D,K;UAAmC,OAAO,KAAM,a;UAC3B,gB;MAHZ,W;K;IAOJ,uC;MAcW,Q;MAJP,IAAI,8CAAJ,C;QACI,OAA Y,WAAL,SAAK,EAAgB,KAHb,C;OAEhB,IAAI,KAAM,UAAV,C;QAAqB,MAAM,gCAAYB,4CAAyC,KAAzC,MAAZB,C;MAEvB,ItB3c+D,asB2c/D,StB3ciF,KAAiB,EsB2cxD,KAAM,MtB3cgF,KAA9B,CsB2c/D,K;QAA4B,OAAO,KAAM,M;QAC5B,ItB5c+D,asB4c/D,StB5ciF,KAAiB,EsB4cxD,KAAM,atB5cgF,KAA9B,CsB4c/D,K;UAAmC,OAAO,KAAM,a;UAC3B,gB;MAHZ,W;K;IC/fJ,2B;MAUoB,Q;MADhB,UAAgB,W;MACA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,MvCoDiD,SuCPdJd,GvCoD2D,KAAK,GuCPdZD,OvCoDoE,KAAAX,IAAf,C;MuClDrD,OAAO,G;K;IAGX,2B;MAUoB,Q;MADhB,UAAiB,2B;MACD,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,MvBuCmD,UuBvCnD,GvBuC8D,KAAK,KuBvC5D,OvBuCuE,KAAAX,cAAhB,C;MuBrCvD,OAAO,G;K;IAGX,2B;MAUoB,Q;MADhB,UAAgB,W;MACA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,MvCoBiD,SuCPbJd,GvCoB2D,KAAK,GA AW,CD2O5C,SwC/PxB,OxC+PkC,KAAL,GAAiB,GAAtB,CC3O4C,MAAX,IAAf,C;MuClBrD,OAAO,G;K;IAGX,2B;MAUoB,Q;MADhB,UAAgB,W;MACA,2B;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACZ,MvClid,SuClJd,GvClid,KAAK,GA AW,CC4O5C,SsChPxB,OtCgPkC,KAAL,GAAiB,KAAtB,CD5O4C,MAAX,IAAf,C;MuCFr



D,OAAO,G;K;;;;ICuCP,iD;MAAA,qE;MAAgB,4B;MANpB,uC;MAMI,Y;K;IACA,4D;MAAA,qE;MAAgC,wBA  
AM,OAAO,Q;MAPpC,uC;MAOI,Y;K;IACA,mE;MAAA,qE;MAAmD,6BAAM,OAAO,EAAE,KAaF,C;MARvD,u  
C;MAQI,Y;K;IACA,0D;MAAA,qE;MAAiC,wBAAM,KAAN,Q;MATrC,uC;MASI,Y;K;ICxGJ,gC;K;;;;ICuBoC,w  
C;8BAAsC,O;K;,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,;yCC0rE,6B;MASI,MAAM,yB;K;,,,,;0CAyDV,sB;MASI,OAAO,I;K;,,,,;  
,,,,,,,,,,,,,,,,;ICnYf,wB;K;kCAEL,Y;MAA4B,sB;K;IAMhC,wB;K;kCAEL,Y;MAA4B,mC;K;IAMhC,yB;K;mCAEL,Y  
;MAA4B,uB;K;IAMhC,uB;K;iCAEL,Y;MAA4B,qB;K;IAMhC,wB;K;kCAEL,Y;MAA4B,sB;K;IAMhC,yB;K;mC  
AEL,Y;MAA4B,uB;K;IAMhC,0B;K;oCAEL,Y;MAA4B,wB;K;IAMhC,2B;K;qCAEL,Y;MAA4B,yB;K;ICtDM,oD  
;MAA2C,uB;MAAjB,gB;MAC5D,sBAAGC,InBkCU,I;MmBjC1C,iBAAmC,YAAO,CAAX,GAAc,SAAS,IAAvB,  
GAAiC,SAAS,I;MACzE,cAA4B,cAA5B,GAAqC,KnBgCK,ImBhC1C,GAAqD,mB;K;gDAErD,Y;MAAkC,qB;K;i  
DAEIC,Y;MACI,YAAAY,W;MACZ,IAAI,UAAAS,mBAAb,C;QACI,IAAI,CAAC,cAAL,C;UAAc,MAAa,6B;QAC3  
B,iBAAU,K;QAGV,4BAAQ,SAAR,I;MAEJ,OAAa,OAAO,KAAM,C;K;IAQgB,mD;MAAyC,sB;MAAjB,gB;M  
ACzD,sBAAGC,I;MACHC,iBAAmC,YAAO,CAAX,GAAc,SAAS,IAAvB,GAAiC,SAAS,I;MACzE,cAA4B,cAAJ,  
GAAa,KAAb,GAAwB,mB;K;+CAEHd,Y;MAAkC,qB;K;+CAELC,Y;MACI,YAAAY,W;MACZ,IAAI,UAAAS,mBA  
Ab,C;QACI,IAAI,CAAC,cAAL,C;UAAc,MAAa,6B;QAC3B,iBAAU,K;QAGV,4BAAQ,SAAR,I;MAEJ,OAAO,  
K;K;IAQuB,oD;MAA4C,uB;MAAIB,gB;MAC5D,sBAAiC,I;MACjC,iBAAmC,uBAAO,CAAX,GAAc,sBAAS,IA  
AT,MAAd,GAAiC,sBAAS,IAAT,M;MACHC,cAA6B,cAAJ,GAAa,KAAb,GAAwB,mB;K;gDAEjD,Y;MAAkC,qB  
;K;iDAELC,Y;MACI,YAAAY,W;MACZ,IAAI,cAAS,mBAAT,CAAJ,C;QACI,IAAI,CAAC,cAAL,C;UAAc,MAAa,  
6B;QAC3B,iBAAU,K;QAGV,8BAAQ,SAAR,C;MAEJ,OAAO,K;K;IC9DX,oD;MA6CA,uC;MatCI,IAAI,SAA  
Q,CAAZ,C;QAAe,MAAa,gCAAyB,wBAAzB,C;MAC5B,IAAI,SAAQ,WAAZ,C;QAA2B,MAAa,gCAAyB,wEAA  
zB,C;MAG5C,aAGyB,K;MAEzB,YAGuF,OAA/D,0BAA0B,KpBcR,IoBdlB,EAAsC,YpBcpB,IoBdlB,EAAYD,IA  
AzD,CAA+D,C;MAEvF,YAGuB,I;K;yCAEvB,Y;MAAwC,mCAAwB,UAAxB,EAA+B,SAA/B,EAAqC,SAArC,C  
;K;wCAExC,Y;MAMqC,OAAI,YAAO,CAAX,GAAc,aAAQ,SAATB,GAAgC,aAAQ,S;K;uCAE7E,iB;MACI,iDA  
A6B,kBAaA,KAAM,UAAAnB,KAC7B,eAAS,KAAM,MAAf,IAAwB,cAAQ,KAAM,KAATC,IAA8C,cAAQ,KAA  
M,KAD/B,CAA7B,C;K;yCAGJ,Y;MACI,OAAI,cAAJ,GAAe,EAAf,GAAwB,OAAM,OAk,UpBRG,IoBQR,UA  
AkB,SpBRV,IoBQR,KAAN,SAAqC,SAArC,I;K;yCAE5B,Y;MAAkC,OAAI,YAAO,CAAX,GAAc,oBAAE,UAAF  
,+BAAU,SAAV,eAAqB,SAAnC,GAA8C,oBAAE,UAAF,qCAAgB,SAAhB,gBAA4B,CAAC,SAAD,IAA5B,C;K;I  
AEhF,qC;MAAA,yC;K;kEACI,sC;MAQ2F,2BAAgB,UAAhB,EAA4B,QAA5B,EAAsC,IAATC,C;K;IAT/F,iD;M  
AAA,gD;QAAA,+B;OAAA,yC;K;IAiBA,mD;MA6CA,sC;MatCI,IAAI,SAAQ,CAAZ,C;QAAe,MAAa,gCAAyB,  
wBAAzB,C;MAC5B,IAAI,SAAQ,WAAZ,C;QAA2B,MAAa,gCAAyB,wEAAzB,C;MAG5C,aAGwB,K;MAExB,Y  
AGuB,0BAA0B,KAAIB,EAAiC,YAAjC,EAA+C,IAA/C,C;MAEvB,YAGuB,I;K;wCAEvB,Y;MAAuC,kCAAuB,  
UAAvB,EAA8B,SAA9B,EAAoC,SAApC,C;K;uCAEvC,Y;MAMqC,OAAI,YAAO,CAAX,GAAc,aAAQ,SAATB,G  
AAgC,aAAQ,S;K;sCAE7E,iB;MACI,gDAA4B,kBAaA,KAAM,UAAAnB,KAC5B,eAAS,KAAM,MAAf,IAAwB,cA  
AQ,KAAM,KAATC,IAA8C,cAAQ,KAAM,KADhC,CAA5B,C;K;wCAGJ,Y;MACI,OAAI,cAAJ,GAAe,EAAf,GA  
AwB,OAAM,MAAK,UAAAL,QAAa,SAAb,IAAN,SAA2B,SAA3B,I;K;wCAE5B,Y;MAAkC,OAAI,YAAO,CAAX,  
GAAgB,UAAF,qBAAU,SAAV,cAAqB,SAAnC,GAAgD,UAAF,2BAAgB,SAAhB,eAA4B,CAAC,SAAD,IAA5B,  
C;K;IAEHf,oC;MAAA,wC;K;IEACI,sC;MAQwF,0BAAE,UAAf,EAA2B,QAA3B,EAAqC,IAArC,C;K;IAT5F,gD  
;MAAA,+C;QAAA,8B;OAAA,wC;K;IAiBA,oD;MA6CA,uC;MatCI,IAAI,gBAAJ,C;QAAgB,MAAa,gCAAyB,w  
BAAzB,C;MAC7B,IAAI,sCAAJ,C;QAA4B,MAAa,gCAAyB,yEAAzB,C;MAG7C,aAGyB,K;MAEzB,YAGwB,4B  
AA0B,KAAIB,EAAiC,YAAjC,EAA+C,IAA/C,C;MAExB,YAGwB,I;K;yCAExB,Y;MAAwC,mCAAwB,UAAxB,  
EAA+B,SAA/B,EAAqC,SAArC,C;K;wCAExC,Y;MAMqC,OAAI,uBAAO,CAAX,GAAc,2BAAQ,SAAR,KAAd,  
GAAgC,2BAAQ,SAAR,K;K;uCAErE,iB;MACI,iDAA6B,kBAaA,KAAM,UAAAnB,KAC7B,mBAAS,KAAM,MAA  
f,KAAwB,kBAAQ,KAAM,KAAd,CAAxB,IAA8C,kBAAQ,KAAM,KAAd,CADjB,CAA7B,C;K;yCAGJ,Y;MACI,  
OAAI,cAAJ,GAAe,EAAf,GAAwB,iCAAM,iCAAM,eAAW,8BAAW,EAAX,CAAX,CAAN,MAAoC,cAAU,6BA  
AU,EAAV,CAAV,CAApC,CAAN,MAAUe,cAAU,6BAAU,EAAV,CAAV,CAAvE,CAAiG,Q;K;yCAE7H,Y;MA  
AkC,OAAI,uBAAO,CAAX,GAAgB,UAAF,qBAAU,SAAV,yBAAqB,SAArB,WAAd,GAAgD,UAAF,2BAAgB,S  
AAhB,yBAA6B,SAAD,AA5B,W;K;IAEHf,qC;MAAA,yC;K;kEACI,sC;MAQ4F,2BAAgB,UAAhB,EAA4B,QA  
A5B,EAAsC,IAATC,C;K;IAThG,iD;MAAA,gD;QAAA,+B;OAAA,yC;K;6CCIKA,iB;MAGkD,+BAAS,UAAU,  
UAAkB,wBAAS,iBAAT,M;K;oCAEpE,Y;MAKgC,oCAAQ,iBAAR,K;K;I7CpBd,wC;MAsBIB,iC;MATsD,2BA

AgB,KAaHb,EAAuB,YAAvB,EAAqC,CAArC,C;K;kFAC7B,Y;MAAQ,8B;K;yFACD,Y;MAAQ,6B;K;2CAExC,i  
B;MAA8C,qBAAS,KAAT,IAAkB,SAAS,S;K;kCAEzE,Y;MAKkC,oBAAQ,S;K;iCAE1C,iB;MACI,2CAAuB,kBA  
Aa,KAAM,UAAAnB,KACvB,eAAS,KAAM,MAAf,IAAwB,cAAQ,KAAM,KADf,CAAvB,C;K;mCAGJ,Y;MACI,O  
AAI,cAAJ,GAAe,EAAf,GAAwB,OAAK,UwBkBS,IxBIBd,UAAkB,SwBkBJ,IxBIBd,K;K;mCAE5B,Y;MAAkC,2  
BAAE,UAAF,+BAAU,SAAV,C;K;IAEIC,+B;MAAA,mC;MACI,aAC8B,cAAY,OAAF,CAAE,CAAZ,EAAwB,O  
AAF,CAAE,CAAxB,C;K;;IAFIC,2C;MAAA,0C;QAAA,yB;OAAA,mC;K;;IASiB,uC;MAsBjB,gC;MatBmD,0BA  
Ae,KAAf,EAAsB,YAAtB,EAAoC,CAApC,C;K;iFAC3B,Y;MAAQ,iB;K;wFACD,Y;MAAQ,gB;K;0CAEvC,iB;M  
AA6C,qBAAS,KAAT,IAAkB,SAAS,S;K;iCAExE,Y;MAKkC,oBAAQ,S;K;gCAE1C,iB;MACI,0CAAsB,kBAaA,  
KAAM,UAAAnB,KACtB,eAAS,KAAM,MAAf,IAAwB,cAAQ,KAAM,KADhB,CAAtB,C;K;kCAGJ,Y;MACI,OA  
AI,cAAJ,GAAe,EAAf,GAAwB,MAAK,UAAAL,QAAa,SAAb,I;K;kCAE5B,Y;MAAkC,OAAE,UAAF,qBAAU,S;K;  
IAE5C,8B;MAAA,kC;MACI,aAC6B,aAAS,CAAT,EAAY,CAAZ,C;K;;IAFjC,0C;MAAA,yC;QAAA,wB;OAAA,  
kC;K;;IASkB,wC;MAsBIB,iC;MatBsD,2BAAGB,KAaHb,EAAuB,YAAvB,K;K;kFAC7B,Y;MAAQ,iB;K;yFACD  
,Y;MAAQ,gB;K;2CAExC,iB;MAA8C,kCAAS,KAAT,UAAkB,sBAAS,SAAT,M;K;kCAEhE,Y;MAKkC,kCAAQ,  
SAAR,K;K;iCAEIC,iB;MACI,2CAAuB,kBAaA,KAAM,UAAAnB,KACvB,mBAAS,KAAM,MAAf,KAAwB,kBAa  
Q,KAAM,KAAd,CADD,CAAvB,C;K;mCAGJ,Y;MACI,OAAI,cAAJ,GAAe,EAAf,GAAwB,iCAAM,eAAW,8BA  
AW,EAAX,CAAX,CAAN,MAAoC,cAAU,6BAAU,EAAY,CAAV,CAApC,CAA8D,Q;K;mCAE1F,Y;MAAkC,O  
AAE,UAAF,qBAAU,SAAV,W;K;IAEIC,+B;MAAA,mC;MACI,aAC8B,qB;K;;IAFIC,2C;MAAA,0C;QAAA,yB;  
OAAA,mC;K;;I8C9EJ,gB;MAAA,oB;K;8BAII,Y;MAA0B,oB;K;;IAJ9B,4B;MAAA,2B;QAAA,U;OAAA,oB;K;I  
CEA,yC;MAAA,e;MAAA,iB;MAAA,uB;K;IAAA,uC;MAAA,0C;O;MAII,kE;MAEA,wF;MAEA,oF;MAEA,wE;  
MAEA,kE;MAEA,oF;MAEA,sF;MAEA,8E;MAEA,wE;MAEA,sF;MAEA,uF;MAEA,iE;MAEA,6E;MAEA,iE;MA  
EA,2E;K;;IA5BA,8C;MAAA,6B;MAAA,sC;K;;IAEA,yD;MAAA,6B;MAAA,iD;K;;IAEA,uD;MAAA,6B;MAAA,  
+C;K;;IAEA,iD;MAAA,6B;MAAA,yC;K;;IAEA,8C;MAAA,6B;MAAA,sC;K;;IAEA,uD;MAAA,6B;MAAA,+C;K  
;;IAEA,wD;MAAA,6B;MAAA,gD;K;;IAEA,oD;MAAA,6B;MAAA,4C;K;;IAEA,iD;MAAA,6B;MAAA,yC;K;;IA  
EA,wD;MAAA,6B;MAAA,gD;K;;IAEA,wD;MAAA,6B;MAAA,gD;K;;IAEA,6C;MAAA,6B;MAAA,qC;K;;IAEA  
,mD;MAAA,6B;MAAA,2C;K;;IAEA,6C;MAAA,6B;MAAA,qC;K;;IAEA,kD;MAAA,6B;MAAA,0C;K;;IAhCJ,m  
C;MAAA,+oB;K;;IAAA,wC;MAAA,a;MAAA,O;UAAA,2C;aAAA,kB;UAAA,sD;aAAA,gB;UAAA,oD;aAAA,U;U  
AAA,8C;aAAA,O;UAAA,2C;aAAA,gB;UAAA,oD;aAAA,iB;UAAA,qD;aAAA,a;UAAA,iD;aAAA,U;UAAA,8C;  
aAAA,iB;UAAA,qD;aAAA,iB;UAAA,qD;aAAA,M;UAAA,0C;aAAA,Y;UAAA,gD;aAAA,M;UAAA,0C;aAAA,  
W;UAAA,+C;gBAAA,uE;;K;;IAqCA,4C;MAAA,e;MAAA,iB;MAAA,uB;K;IAAA,0C;MAAA,6C;O;MAMI,0E;M  
AEA,0E;MAEA,4E;K;;IAJA,kD;MAAA,gC;MAAA,0C;K;;IAEA,kD;MAAA,gC;MAAA,0C;K;;IAEA,mD;MAAA  
,gC;MAAA,2C;K;;IAVJ,sC;MAAA,sI;K;;IAAA,2C;MAAA,a;MAAA,Q;UAAA,+C;aAAA,Q;UAAA,+C;aAAA,S;U  
AAA,gD;gBAAA,0E;;K;;IAwB8B,gC;MAAC,oC;K;;IAQE,0B;MAAC,qB;QAAA,iD;MAAA,kB;K;;IAEIC,sB;K;;I  
AMA,4B;K;;IC/EA,yB;K;;IAQA,6B;K;;ICnBA,mB;MAEI,UAAU,IAAI,C;MACd,OAAW,OAAO,CAAX,GAAc,G  
AAd,GAAuB,MAAM,CAAN,I;K;IAGIC,qB;MACI,UAAU,SAAI,CAAJ,C;MACV,OAAW,kBAAO,CAAX,GAAc,  
GAAd,GAAuB,QAAM,CAAN,C;K;IAGIC,mC;MAEI,OAAO,IAAI,IAAI,CAAJ,EAAO,CAAP,IAAY,IAAI,CAAJ,  
EAAO,CAAP,CAAZ,IAAJ,EAA2B,CAA3B,C;K;IAGX,qC;MACI,OAAO,MAAI,MAAI,CAAJ,EAAO,CAAP,WA  
AY,MAAI,CAAJ,EAAO,CAAP,CAAZ,CAAJ,EAA2B,CAA3B,C;K;IAGX,qD;MAkBI,WAAO,CAAP,C;QAD2E,  
OAC3D,SAAS,GAAb,GAakB,GAAIB,GAA2B,MAAM,iBAAiB,GAAjB,EAA6B,IAA7B,CAAN,  
I;WACvC,WAAO,CAAP,C;QAF2E,OAE3D,SAAS,GAAb,GAakB,GAAIB,GAA2B,MAAM,iBAAiB,KAAjB,EA  
AwB,GAAxB,EAA6B,CAAC,IAAD,IAA7B,CAAN,I;QAC/B,MAAA,gCAAYB,eAAzB,C;K;IAGzB,uD;MAkBI,s  
BAAO,CAAP,C;QAD+E,OAC/D,sBAAS,GAAT,MAAJ,GAakB,GAAIB,GAA2B,aAAM,mBAAiB,GAAjB,EAA6  
B,KAA7B,EAA6B,IAA7B,CAAN,C;WACvC,sBAAO,CAAP,C;QAF+E,OAE/D,sBAAS,GAAT,MAAJ,GAakB,G  
AAIB,GAA2B,QAAM,mBAAiB,KAAjB,EAAwB,GAAxB,EAA8B,IAAD,aAA7B,CAAN,C;;QAC/B,MAAA,gCA  
AyB,eAAzB,C;K;IC7DjB,kD;MAAA,8B;MACI,aAAY,C;K;oDACZ,Y;MAAYB,oBAAQ,gBAAI,O;K;iDACrC,Y;  
MAAgD,Q;MAA1B,IAAI,aAAQ,gBAAI,OAAhB,C;QAAA,OAAsB,iBAAI,iBAAJ,EAAI,yBAAJ,O;;QAakB,MA  
AM,2BAAYB,UAAF,WAAvB,C;K;;IAPhF,oC;MAEI,IAD8D,IAC9D,S;QACI,UAA0B,K;QAF0B,2C;;QAAA,QA  
AM,IAAN,C;eASxD,c;YATwD,OAStC,qBAAqB,KAARb,C;eACIB,W;YAVwD,OAuzC,kBAakB,KAAIB,C;eAC  
f,Y;YAXwD,OAwxC,mBAAMb,KAAAnB,C;eAChB,W;YAZwD,OAYzC,kBAakB,KAAIB,C;eACf,U;YAbwD,O

Aa1C,iBAaIB,KAAjB,C;eACd,W;YAdwD,OAczC,kBAaKB,KAAIB,C;eACf,Y;YAfWd,OAexC,mBAaMB,KAA  
nB,C;eAChB,a;YAhBwD,OAgBvC,oBAaOB,KAApB,C;kBACT,MAAM,6BAAsB,2DAA+C,IAA/C,CAAtB,C;;K;  
IAIuC,2D;MAAA,kC;MAAS,0B;MAC9D,aAAY,C;K;2DACZ,Y;MAAYB,oBAAQ,kBAAM,O;K;+DACvC,Y;MA  
A2D,Q;MAA9B,IAAI,aAAQ,kBAAM,OAAIB,C;QAAA,OAAwB,mBAAM,iBAAN,EAAM,yBAAN,O;;QAAoB,  
MAAM,2BAAYB,UAAF,WAAvB,C;K;;IAJnF,qC;MACyD,oD;K;IAON,wD;MAAA,kC;MAAS,uB;MACxD,aA  
Y,C;K;wDACZ,Y;MAAYB,oBAAQ,kBAAM,O;K;yDACvC,Y;MAAwD,Q;MAA9B,IAAI,aAAQ,kBAAM,OAAIB  
,C;QAAA,OAAwB,mBAAM,iBAAN,EAAM,yBAAN,O;;QAAoB,MAAM,2BAAYB,UAAF,WAAvB,C;K;;IAJhF,  
kC;MACmD,iD;K;IAOE,yD;MAAA,kC;MAAS,wB;MAC1D,aAAY,C;K;yDACZ,Y;MAAYB,oBAAQ,kBAAM,O;  
K;2DACvC,Y;MAAYD,Q;MAA9B,IAAI,aAAQ,kBAAM,OAAIB,C;QAAA,OAAwB,mBAAM,iBAAN,EAAM,yB  
AAN,O;;QAAoB,MAAM,2BAAYB,UAAF,WAAvB,C;K;;IAJf,mC;MACqD,kD;K;IAOF,wD;MAAA,kC;MAAS,  
uB;MACxD,aAAY,C;K;wDACZ,Y;MAAYB,oBAAQ,kBAAM,O;K;yDACvC,Y;MAAwD,Q;MAA9B,IAAI,aAAQ  
,kBAAM,OAAIB,C;QAAA,OAAwB,mBAAM,iBAAN,EAAM,yBAAN,O;;QAAoB,MAAM,2BAAYB,UAAF,WA  
AvB,C;K;;IAJhF,kC;MACmD,iD;K;IAOF,uD;MAAA,kC;MAAS,sB;MACtD,aAAY,C;K;uDACZ,Y;MAAYB,oBA  
AQ,kBAAM,O;K;uDACvC,Y;MAAuD,Q;MAA9B,IAAI,aAAQ,kBAAM,OAAIB,C;QAAA,OAAwB,mBAAM,iB  
AAN,EAAM,yBAAN,O;;QAAoB,MAAM,2BAAYB,UAAF,WAAvB,C;K;;IAJ/E,iC;MACiD,gD;K;IAOI,yD;MAA  
A,kC;MAAS,wB;MAC1D,aAAY,C;K;yDACZ,Y;MAAYB,oBAAQ,kBAAM,O;K;2DACvC,Y;MAAYD,Q;MAA9B  
,IAAI,aAAQ,kBAAM,OAAIB,C;QAAA,OAAwB,mBAAM,iBAAN,EAAM,yBAAN,O;;QAAoB,MAAM,2BAAYB  
,UAAF,WAAvB,C;K;;IAJf,mC;MACqD,kD;K;IAOE,0D;MAAA,kC;MAAS,yB;MAC5D,aAAY,C;K;0DACZ,Y;  
MAAYB,oBAAQ,kBAAM,O;K;6DACvC,Y;MAA0D,Q;MAA9B,IAAI,aAAQ,kBAAM,OAAIB,C;QAAA,OAAwB  
,mBAAM,iBAAN,EAAM,yBAAN,O;;QAAoB,MAAM,2BAAYB,UAAF,WAAvB,C;K;;IAJf,oC;MACuD,mD;K;I  
AOJ,wD;MAAA,kC;MAAS,uB;MACxD,aAAY,C;K;wDACZ,Y;MAAYB,oBAAQ,kBAAM,O;K;yDACvC,Y;MA  
AwD,Q;MAA9B,IAAI,aAAQ,kBAAM,OAAIB,C;QAAA,OAAwB,mBAAM,iBAAN,EAAM,yBAAN,O;;QAAoB,  
MAAM,2BAAYB,UAAF,WAAvB,C;K;;IAJhF,kC;MACmD,iD;K;IAOpB,gC;MAAC,wB;K;;IAEHc,+B;MAC8C,  
MAAM,mC;K;IAEpD,8C;MAEI,IAAI,qBAAJ,C;QACI,OAAO,C5ByIIF,W4BzIrE,U5ByIqE,E4BzIzD,Q5ByIyD,C  
;;Q4BvIxF,OAAS,CAAY,qBAAsB,UAAAtB,EAakC,QAAIC,C;;K;IAI7B,2C;MAEI,IAAI,KAAY,kBAAhB,C;QAG  
I,KAAY,mBAaKB,QAAIB,C;;QAEH,QAAT,SAA+C,CAaIB,IAAJ,C,KAaIC,EAakB,O;;K;IAIvD,sC;MAGwB,Q;  
MADpB,gBAAGB,IAAhB,KAAgB,E;MACI,IAAI,OCnGkB,ODmGT,OAAT,EAaqB,WAArB,CAAJ,C;QACHB,O  
AAI,aAAJ,GAAMB,KAAM,WAAzB,GAAYC,I;;QAEzC,c;;MAHJ,wB;MAKA,kBAaKB,K;MACIB,iBAaIB,W;M  
ACjB,OAAO,S;K;IAIa,sB;MAAC,U;K;iCACrB,iB;MACI,OAAO,mCAAsB,WAAK,KAAM,E;K;mCAG5C,Y;MA  
CI,OAAO,M;K;mCAGX,Y;MACI,OAAuC,oBAAnB,UAA5B,IAAe,EAAa,CAAM,B,C;K;0CAG3C,iB;MACI,OAA  
R,IAAI,EAAW,GAAN,K;K;kCAGL,Y;MAEI,OAAO,M;K;;+DAIf,gB;MAEI,YAAY,MAAY,IAAK,OAAjB,C;M  
ACZ,sBAAU,IAAV,a;QACI,UAAU,KAak,CAAL,C;QACV,IAAI,oBAAJ,C;UACI,MAAM,CAAN,IAAW,EAAS,  
MAAM,MAAK,GAAL,C;;UAE1B,MAAM,CAAN,IAAW,G;;;MAGnB,OAAO,EAAS,OAAO,OAAM,EAAN,EA  
AgB,KAAhB,C;K;IAG3B,2B;MAMW,WAAO,S;MAIbD,YAAY,MAAY,IAAK,OAAjB,C;MACZ,sBAAU,IAAV,  
a;QACI,UAAU,KAak,CAAL,C;QACV,IAAI,oBAAJ,C;UACI,MAAM,CAAN,IAAW,EAAS,MAAM,MAAK,GA  
AL,C;;UAE1B,MAAM,CAAN,IAAW,G;;;MAYnB,OATO,EAAS,OAAO,OAAM,EAAN,EAAGB,KAAhB,C;K;IA  
Y3B,oC;MAWI,WAAqB,S;MACrB,IAAI,qBAAMB,CAAY,OAAAd,KAA2B,SAAhD,C;QAJCA,YAAY,MAkCM,I  
AICW,OAAjB,C;QACZ,sBAiCkB,IAjCIB,a;UACI,UAGcC,IAhCJ,CAAK,CAAL,C;UACV,IAAI,oBAAJ,C;YACI,  
MAAM,CAAN,IAAW,EAAS,MAAM,MAAK,GAAL,C;;YAE1B,MAAM,CAAN,IAAW,G;;;QA4Bf,OAzBG,EA  
S,OAAO,OAAM,EAAN,EAAGB,KAAhB,C;;QA2BnB,WAAW,C;QACX,0BAAU,IAAV,e;UACY,IAAoB,I;UAA  
5B,eAAQ,QAAoB,OAApB,IAAQ,CAAH,GAAG,CAAY,OAApB,oCAAR,K;;QAEJ,aAAa,IAAJB,CAAC,YAAgB,  
CAAH,IAAG,C;QE3FjB,IF4FyB,CE3FhB,OAAL,KAAKB,SAAtB,C;UF4F4B,ME3FxB,UF2FqB,CE3FF,O;SF4Fn  
B,OAAO,C;QACP,0BAAU,IAAV,e;UAE0B,YACX,M;UAFX,YAAU,IAAQ,CAAH,GAAG,C;UACI,SAAJ,KAAI  
,O;UAAAtB,aAAU,CAAV,kB;YACI,OAAO,aAAP,EAAO,qBAAP,YAAiB,MAAI,CAAJ,C;;QAGzB,OAAO,M;;K;  
IAIf,0B;MACgC,WAAS,c;MAAT,YAAhC,EAAE,MAAM,KAAiD,CAA3C,SAA2C,C;MAWrD,eAAiB,I;MAXW,  
OAYrB,K;K;IAVX,uB;MAC6B,WAAS,W;MAAT,YAAsB,IAA/C,WAA+C,CAAnC,EAAE,MAAM,KAAK,CAA  
C,SAAD,CAAsB,C;MAQ/C,eAAiB,I;MARQ,OASIB,K;K;IAPX,uB;MAC6B,WAAS,W;MAAT,YAA7B,EAAE,M  
AAM,KAA2C,CAArC,SAAqC,C;MAK/C,eAAiB,I;MALQ,OAMIB,K;K;2DAJX,uB;MAGI,eAAiB,I;MACjB,OA

AO,K;K;KEG9MX,yB;MAAA,0B;MAAA,uB;QASI,OAAoB,OAAb,ItD0Q+B,KAAL,GAAiB,KsD1Q9B,C;O;KA  
TxB,C;ICIqC,2C;MAAC,8C;MACIC,eAAsB,C;MACtB,wBAA+B,C;MAC/B,gBAA6B,I;MAC7B,mBAAsC,I;MA  
CtC,qBAAYC,I;MAEzC,yBAAGD,yBAAMb,Q;MAEnE,sBAAGD,I;K;wFAFhD,Y;MAAA,6B;K;OCAIA,Y;MAEY  
,kBADr,M;MAAA,U;MAAA,2C;QAAA,e;;QAES,gBADD,2CAAQ,yCAAR,gDAAwD,IAAxD,6BAAiE,I;QACz  
D,sB1CwEd,S;Q0C1EF,S1C2EG,S;;M0C3EH,a;K;iDAIJ,kB;MACI,kBAAC,IAAd,C;MACiC,oB;MCuBrB,Q;MAD  
R,IDtBsB,MCsBtB,W;QADJ,mBACiB,I;;QADjB,mBAEY,QDvBc,MCuBd,+D;;MDvBZ,yC;MACA,2BAAMC,M  
AAO,kBAA1C,C;MAGA,OAAO,IAAP,C;Q1CoCY,gB0CnCH,S;;QACD,iBAAiB,8B;QAGjB,IAAI,0BAAJ,C;UA  
Cl,qBAAC,e;;UAEd,oBAAQ,0B;UACR,wBAAY,kB;;UAIZ,cAAc,oB;UACd,IAAI,YAAy,yBAAhB,C;YAAqC,M  
;UACrC,kBAAGB,O;UACHB,qBAAMb,I;;UAEnB,kBAAGB,I;UACHB,qBAAMb,S;;QAGvB,gC;QAEA,IAAI,wC  
AAJ,C;UAEl,YAAU,U;;UAGV,U;UAAA,0C;YETHB,8BDgDQ,WAAO,qBAAP,CChDR,C;YFSgB,a;;YAAA,a;U  
AAA,mB;YAEK,UEpBrB,oBDgDQ,WD5B+B,eC4B/B,CChDR,C;WFqBgB,M;;K;mDAMhB,Y;MACI,kBAAkB,  
mB;MACIB,IAAI,uBAAuB,gBAAGB,IAA3C,C;QACI,uCAAQ,yCAAR,EAAMC,wCAA+B,WAA/B,C;OAEvC,sB  
AAoB,mC;K;;IAM5B,iC;MAAA,qC;K;gGAEQ,Y;M7C0DyC,MAAM,6B6C1DjC,uC7C0D+D,WAA9B,C;K;yD6  
CxDnD,kB;M7CwD6C,MAAM,6B6CvDzC,uC7CuDuE,WAA9B,C;K;+C6CpDnD,Y;MAAkC,8C;K;;IARtC,6C;  
MAAA,4C;QAAA,2B;OAAA,qC;K;IGyDA,mG;IAAA,yH;IAAA,6F;MAKW,kC;MAAS,4C;K;IALpB,sEAMQ,Y;  
MACI,Q;MAAA,sC;QAAiB,U;OACjB,OAAO,oB;K;IARnB,6G;sJAjIA,iC;MAgBU,OAAK,SAAL,CAAiB,UAAj  
B,EAA6B,KAA7B,C;K;wJAEV,2C;MAiBU,OAAK,SAAL,CAAiB,QAAjB,EAA2B,UAA3B,EAAuC,KAAvC,C;K  
;wJAEV,kD;MAKU,OAAK,SAAL,CAAiB,QAAjB,EAA2B,KAA3B,EAAkC,UAAIC,EAA8C,KAA9C,C;K;IAGC6  
C,oG;MAAA,mB;QAC3C,OAAK,iCAAL,CAAiB,kBAAjB,C;O;K;IA/BZ,6D;MA0BI,IAAS,SAAY,OAAjB,IAA2  
B,CAA/B,C;QAAA,OAES,SAAL,CAAiB,UAAjB,EAA6B,IAA7B,C;;QA8D0B,Q;QAhE9B,4DAImD,0DAJnD,E  
AgE8B,qBA5DS,UA4DT,qCAhE9B,C;;K;IAwCmD,wH;MAAA,mB;QAC3C,OAAK,iCAAL,CAAiB,gBAAjB,EA  
A2B,kBAA3B,C;O;K;IAhCZ,yE;MA2BI,IAAS,SAAY,OAAjB,IAA2B,CAA/B,C;QAAA,OAES,SAAL,CAAiB,Q  
AAjB,EAA2B,UAA3B,EAAuC,IAAvC,C;;QA0B0B,Q;QA5B9B,4DAImD,sEAJnD,EA4B8B,qBAxBS,UAWBT,q  
CA5B9B,C;;K;IASJ,gC;MAWK,kBAAD,M;MAAA,kBAAC,qEAAD,4DAA2C,S;K;6CAG/C,yB;MAAA,mG;MA  
AA,yH;MAAA,6F;QAKW,kC;QAAS,4C;O;MALpB,sEAMQ,Y;QACI,Q;QAAA,sC;UAAiB,U;SACjB,OAAO,oB;  
O;MARnB,6G;MAAA,oC;QAKkC,Q;QAA9B,mEAA8B,oEAA9B,C;O;KALJ,C;IFC7HA,a;MAC6C,OAAA,MAA  
a,YAAW,CAAX,C;K;ICM3B,iC;;MAA6E,Q;MAAA,+BAAS,I;sCAAIB,O,2DAAA,O;;;K;;IAC/F,2B;MAAA,  
iD;MAAuB,oBAAK,IAAL,EAAW,IAAX,C;MAAvB,Y;K;IACA,sC;MAAA,iD;MAAuC,oBAAK,OAAL,EAAC,IA  
Ad,C;MAAvC,Y;K;IACA,oC;MAAA,iD;MAAwC,oBAAK,SAAL,EAAGB,KAAhB,C;MAAxC,Y;K;IAI+B,mC;;  
MAA6E,Q;MAAA,+BAAS,I;sCAAIB,O,2DAAA,O;;;K;;IACnG,+B;MAAA,mD;MAAuB,sBAAK,IAAL,EA  
AW,IAAX,C;MAAvB,Y;K;IACA,0C;MAAA,mD;MAAuC,sBAAK,OAAL,EAAC,IAAd,C;MAAvC,Y;K;IACA,w  
C;MAAA,mD;MAAwC,sBAAK,SAAL,EAAGB,KAAhB,C;MAAxC,Y;K;IAGsC,0C;MAA0D,qBAAU,OAAV,EA  
AmB,KAAhB,C;;K;;IACHg,sC;MAAA,0D;MAAuB,6BAAK,IAAL,EAAW,IAAX,C;MAAvB,Y;K;IACA,iD;MA  
AA,0D;MAAuC,6BAAK,OAAL,EAAC,IAAd,C;MAAvC,Y;K;IACA,+C;MAAA,0D;MAAwC,6BAAK,SAAL,EA  
AGB,KAAhB,C;MAAxC,Y;K;IAG8C,kD;MAA0D,4BAAiB,OAAjB,EAA0B,KAA1B,C;;K;;IACxG,8C;MAAA,kE  
;MAAuB,qCAAK,IAAL,EAAW,IAAX,C;MAAvB,Y;K;IACA,yD;MAAA,kE;MAAuC,qCAAK,OAAL,EAAC,IAA  
d,C;MAAvC,Y;K;IACA,uD;MAAA,kE;MAAwC,qCAAK,SAAL,EAAGB,KAAhB,C;MAAxC,Y;K;IAG2C,+C;M  
AA0D,4BAAiB,OAAjB,EAA0B,KAA1B,C;;K;;IACrG,2C;MAAA,+D;MAAuB,kCAAK,IAAL,EAAW,IAAX,C;M  
AAvB,Y;K;IACA,sD;MAAA,+D;MAAuC,kCAAK,OAAL,EAAC,IAAd,C;MAAvC,Y;K;IACA,oD;MAAA,+D;M  
AAwC,kCAAK,SAAL,EAAGB,KAAhB,C;MAAxC,Y;K;IAG+C,4C;8BAAwD,O;;K;;IACvG,+C;MAAA,mE;MA  
AuB,sCAAK,IAAL,C;MAAvB,Y;K;IAGqD,yD;MAA0D,4BAAiB,OAAjB,EAA0B,KAA1B,C;;K;;IAC/G,qD;MA  
AA,yE;MAAuB,4CAAK,IAAL,EAAW,IAAX,C;MAAvB,Y;K;IACA,gE;MAAA,yE;MAAuC,4CAAK,OAAL,EA  
Ac,IAAd,C;MAAvC,Y;K;IACA,8D;MAAA,yE;MAAwC,4CAAK,SAAL,EAAGB,KAAhB,C;MAAxC,Y;K;IAGm  
D,uD;MAA0D,4BAAiB,OAAjB,EAA0B,KAA1B,C;;K;;IAC7G,mD;MAAA,uE;MAAuB,0CAAK,IAAL,EAAW,I  
AAX,C;MAAvB,Y;K;IACA,8D;MAAA,uE;MAAuC,0CAAK,OAAL,EAAC,IAAd,C;MAAvC,Y;K;IACA,4D;MA  
AA,uE;MAAwC,0CAAK,SAAL,EAAGB,KAAhB,C;MAAxC,Y;K;IAI2C,wC;sCAAGe,O;;K;;IAC3G,2C;MAAA,+  
D;MAAuB,kCAAK,IAAL,C;MAAvB,Y;K;IAI0C,uC;8BAAwD,O;;K;;IACIG,0C;MAAA,8D;MAAuB,iCAAK,IA  
AL,C;MAAvB,Y;K;IAGwC,qC;8BAAwD,O;;K;;IACHg,wC;MAAA,4D;MAAuB,+BAAK,IAAL,C;MAAvB,Y;K;I

AII,wC;MACmD,mBAAM,OAAN,EAAe,KAaf,C;;K;;IAC/C,oC;MAAA,wD;MAAuB,sBAAK,IAAL,Q;MAAvB,  
Y;K;IACA,+C;MAAA,wD;MAAgC,2BAAK,OAAL,EAAC,IAAd,C;MAAhC,Y;K;IACA,+C;MAAA,wD;MAAiD,I  
AAY,I;MAAzB,2BAAa,SAAR,OAAQ,CAAb,EAAyB,sDAAzB,C;MAApC,Y;K;IAG4C,yC;8BAAwD,O;;K;;IACp  
G,4C;MAAA,gE;MAAuB,mCAAK,IAAL,C;MAAvB,Y;K;IAIyC,sC;8BAAwD,O;;K;;IACjG,yC;MAAA,6D;MAA  
uB,gCAAK,IAAL,C;MAAvB,Y;K;IAGkD,sD;MAA0D,4BAaIB,OAAjB,EAA0B,KAA1B,C;;K;;IAC5G,kD;MAA  
A,sE;MAAuB,yCAAK,IAAL,EAAW,IAAX,C;MAAvB,Y;K;IACA,6D;MAAA,sE;MAAuC,yCAAK,OAAL,EAAC  
,IAAd,C;MAAvC,Y;K;IACA,2D;MAAA,sE;MAAwC,yCAAK,SAAL,EAAGB,KAAhB,C;MAAxC,Y;K;IAG0D,8  
D;MAA0D,4BAaIB,OAAjB,EAA0B,KAA1B,C;;K;;IACpH,0D;MAAA,8E;MAAuB,iDAAK,IAAL,EAAW,IAAX,  
C;MAAvB,Y;K;IACA,qE;MAAA,8E;MAAuC,iDAAK,OAAL,EAAC,IAAd,C;MAAvC,Y;K;IACA,mE;MAAA,8E;  
MAAwC,iDAAK,SAAL,EAAGB,KAAhB,C;MAAxC,Y;K;6FCIGJ,yB;MAEI,OAAG,GAAG,CAAC,QAAD,C;K;m  
FAGV,oB;MAEI,OAAJ,GAAl,GAAE,G;K;6ETVN,a;MAK8C,cAAvC,C;K;6EChP,Y;MAG+C,S;K;IA6B/C,2B;M  
AG4D,0BAAe,WAAf,C;K;IAE5D,mC;MAIwF,0BAAe,WAAf,C;K;IAExF,mC;MAKwE,0BAAe,WAAf,C;K;IAG  
xE,4B;MAI8D,Q;MAH1D,aAAkB,GAAl,O;MACtB,aAAkB,GAAl,O;MACtB,YAAiB,C;MACjB,OAAO,QAAQ,  
MAAR,IAAkB,QAAQ,MAAjC,C;QAAyC,IAAI,KAAJ,IAAa,IAAI,YAAJ,EAAl,oBAAJ,O;;MACtD,OAAO,G;K;I  
AIX,wD;MAMuC,Q;MALnC,aAAa,MAAO,OAAM,CAAN,EAAS,OAAT,C;MA0BpB,IAzBc,MAyBL,OAAL,KA  
AkB,SAAtB,C;QAZsB,MA0BIB,UA1BU,MA0BS,O;OAZbVb,YAAiB,MAAO,O;MACxB,IAAI,UAAU,KAAAd,C  
;QACI,gBAAgB,O;QACHB,OAAO,QAAQ,OAAf,C;UAAwB,OAAO,YAAP,EAAO,oBAAP,UAAkB,Y;;OAE9C,  
OAAO,M;K;IAGX,gD;MAKoB,UAAmB,M;MAJnC,aAAa,KAAM,Q;MACnB,MAAO,OAAP,IAAiB,UAAW,K;  
MAc5B,IAbc,KAAaL,OAAL,KAakB,SAAtB,C;QAbqB,MAcJb,UAdU,KAcS,O;OAbvB,YAAiB,KAAM,O;MACP,  
4B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QAAY,OAAO,cAAP,EAAO,sBAAP,YAAkB,O;;MAC9C,OAAO,M;  
K;IAGX,yD;MAEOB,UAGB,M;MADhC,YAAY,U;MACI,4B;MAAhB,OAAGB,cAAhB,C;QAAGB,yB;QAAY,IA  
AI,cAAJ,EAAl,sBAAJ,YAAe,O;;MAC3C,OAAO,G;K;oFAGX,oB;MACI,IAAI,IAAK,OAAL,KAakB,SAAtB,C;  
QACI,YAAc,IAAK,O;Q;0EAI3B,wB;MAA+D,OAAA,MAAa,QAAO,GAAP,EAAY,OAAZ,C;K;IS/F5E,mC;MA  
OI,kBAakB,MAAa,eAAc,SAAd,C;MAC/B,iBAaiB,MAAa,eAAc,IAAd,C;MAC9B,OAAW,gBAAe,UAAAnB,GA  
A+B,SAA/B,GAAYC,CAAC,S;K;0ECUrD,2B;MAKyE,OAAA,MAAa,gBAAe,IAAf,C;K;4EAYbTF,2B;MAKsE,O  
AAA,MAAa,eAAc,IAAd,C;K;kEAGnF,qB;MACgD,OAAA,MAAa,KAakB,UAAS,GAAT,EAAC,IAAd,C;K;wEAC  
hC,qB;MAAQ,OAakB,SAAY,a;K;0EACxB,qB;MAAQ,OAakB,SAAY,c;K;IC3D5D,0D;MAGI,OAAO,I;K;ICHX,s  
C;MAMsD,OAAA,SAAY,UAAS,WAAW,KAAX,CAAT,C;K;ItDKIE,uC;Mf2nBW,Q;MAAA,IernBgB,KfqNBZ,I  
AAS,CAAT,IernBY,KfqNBE,IAAS,wBAA3B,C;QAAA,OAAsC,UernBtB,KfqNBsB,C;;QernBb,MAAM,8BAA0B,i  
CAAuB,gBAAvB,MAA1B,C;;MAAtC,W;K;IAGJ,uC;Mf4nBW,Q;MAAA,IetnBgB,KfsnBZ,IAAS,CAAT,IetnBY,  
KfsnBE,IAAS,0BAA3B,C;QAAA,OAAsC,UetnBtB,KfsnBsB,C;;QetnBb,MAAM,8BAA0B,iCAAuB,gBAAvB,M  
AA1B,C;;MAAtC,W;K;IAGJ,uC;Mf6nBW,Q;MAAA,IevnBgB,KfunBZ,IAAS,CAAT,IevnBY,KfunBE,IAAS,0B  
AA3B,C;QAAA,OAAsC,UevnBtB,KfunBsB,C;;QevnBb,MAAM,8BAA0B,iCAAuB,gBAAvB,MAA1B,C;;MAAtC,  
W;K;IAGJ,uC;Mf8nBW,Q;MAAA,IexnBgB,KfwnBZ,IAAS,CAAT,IexnBY,KfwnBE,IAAS,0BAA3B,C;QAAA,O  
AAsC,UexnBtB,KfwnBsB,C;;QexnBb,MAAM,8BAA0B,iCAAuB,gBAAvB,MAA1B,C;;MAAtC,W;K;IAGJ,uC;M  
f+nBW,Q;MAAA,IeznBgB,KfynBZ,IAAS,CAAT,IeznBY,KfynBE,IAAS,0BAA3B,C;QAAA,OAAsC,UeznBtB,Kf  
ynBsB,C;;QeznBb,MAAM,8BAA0B,iCAAuB,gBAAvB,MAA1B,C;;MAAtC,W;K;IAGJ,uC;MfgoBW,Q;MAAA,I  
e1nBgB,Kf0nBZ,IAAS,CAAT,Ie1nBY,Kf0nBE,IAAS,0BAA3B,C;QAAA,OAAsC,Ue1nBtB,Kf0nBsB,C;;Qe1nBb,  
MAAM,8BAA0B,iCAAuB,gBAAvB,MAA1B,C;;MAAtC,W;K;IAGJ,uC;MfioBW,Q;MAAA,Ie3nBgB,Kf2nBZ,IA  
AS,CAAT,Ie3nBY,Kf2nBE,IAAS,0BAA3B,C;QAAA,OAAsC,Ue3nBtB,Kf2nBsB,C;;Qe3nBb,MAAM,8BAA0B,i  
CAAuB,gBAAvB,MAA1B,C;;MAAtC,W;K;IAGJ,uC;MfkoBW,Q;MAAA,Ie5nBgB,Kf4nBZ,IAAS,CAAT,Ie5nBY  
,Kf4nBE,IAAS,0BAA3B,C;QAAA,OAAsC,Ue5nBtB,Kf4nBsB,C;;Qe5nBb,MAAM,8BAA0B,iCAAuB,gBAAvB,  
MAA1B,C;;MAAtC,W;K;IAGJ,wC;MfmoBW,Q;MAAA,Ie7nBgB,Kf6nBZ,IAAS,CAAT,Ie7nBY,Kf6nBE,IAAS,0  
BAA3B,C;QAAA,OAAsC,Ue7nBtB,Kf6nBsB,C;;Qe7nBb,MAAM,8BAA0B,iCAAuB,gBAAvB,MAA1B,C;;MAA  
tC,W;K;IAGJ,2B;MAII,OAAO,cAAa,SAAb,C;K;oFAGX,yB;MAAA,gD;MAAA,4B;QAKI,OAAsC,OAA/B,SAA  
+B,C;O;KALIC,C;oFAQA,yB;MAAA,gD;MAAA,4B;QAKI,OAAuC,OAAhC,SAAGC,C;O;KAL3C,C;oFAQA,yB  
;MAAA,gD;MAAA,4B;QAKI,OAAqC,OAA9B,SAA8B,C;O;KALzC,C;oFAQA,yB;MAAA,gD;MAAA,4B;QAKI,  
OAAsC,OAA/B,SAA+B,C;O;KALIC,C;oFAQA,yB;MAAA,gD;MAAA,4B;QAKI,OAAuC,OAAhC,SAAGC,C;O;

KAL3C,C;oFAQA,yB;MAAA,gD;MAAA,4B;QAKI,OAAwC,OAAjC,SAAiC,C;O;KAL5C,C;oFAQA,yB;MAAA,  
gD;MAAA,4B;QAKI,OAAyC,OAAiC,SAAkC,C;O;KAL7C,C;IAYW,2C;MAAA,8B;MAAS,uB;K;4FACW,Y;MA  
AQ,OAAA,gBAAY,O;K;6CAC3C,Y;MAAkC,OAAA,gBfunP/B,YAAQ,C;K;oDetnPX,mB;MAAgD,OAAy,WAA  
Z,gBAAY,EAAS,OAAT,C;K;iDAC5D,iB;MACI,oCAAA,2BAAkB,KAAIB,EAAYB,SAAZB,C;MACb,OAAO,6BA  
AY,KAAZ,E;K;mDAEX,mB;MAES,Q;MAAL,IAAI,eAAC,uFAAD,CAAJ,C;QAAgC,OAAO,E;MACvC,OAAmB  
,UAAZ,gBAAY,EAQ,OAAR,C;K;uDAEvB,mB;MAES,Q;MAAL,IAAI,eAAC,uFAAD,CAAJ,C;QAAgC,OAAO  
,E;MACvC,OAAmB,cAAZ,gBAAY,EAAY,OAAZ,C;K;;IApB/B,6B;MAII,0C;K;IAqBJ,+C;MAaI,OAAy,kBAAL,  
SAAK,EAakB,KAAIB,C;K;IAqBhB,0C;MASI,OAAy,oBAAL,SAAK,C;K;IAehB,0C;MAYI,OAAy,oBAAL,SA  
AK,C;K;IAkBhB,2C;MAWI,OAAy,cAAL,SAAK,EAAC,KAAd,C;K;IAGhB,2C;MAWI,OAAy,cAAL,SAAK,EA  
Ac,KAAd,C;K;IAGhB,4C;MAWI,OAAy,cAAL,SAAK,EAAC,KAAd,C;K;IAGhB,4C;MAWI,OAAy,cAAL,SAA  
K,EAAC,KAAd,C;K;IAGhB,4C;MAWI,OAAy,cAAL,SAAK,EAAC,KAAd,C;K;IAGhB,4C;MAWI,OAAy,cAAL,  
SAAK,EAAC,KAAd,C;K;IAGhB,4C;MAWI,OAAy,cAAL,SAAK,EAAC,KAAd,C;K;IAGhB,4C;MAWI,OAAy,c  
AAL,SAAK,EAAC,KAAd,C;K;IAGhB,4C;MAWI,OAAy,cAAL,SAAK,EAAC,KAAd,C;K;IAwHhB,sC;MAOI,OA  
AY,gBAAL,SAAK,C;K;IAGhB,sC;MAOI,OAAy,gBAAL,SAAK,C;K;IAGhB,uC;MAOI,OAAy,gBAAL,SAAK,  
C;K;IAGhB,uC;MAOI,OAAy,gBAAL,SAAK,C;K;IAGhB,uC;MAOI,OAAy,gBAAL,SAAK,C;K;IAGhB,uC;MA  
OI,OAAy,gBAAL,SAAK,C;K;IAGhB,uC;MAOI,OAAy,gBAAL,SAAK,C;K;IAGhB,uC;MAOI,OAAy,gBAAL,S  
AAK,C;K;IAGhB,uC;MAOI,OAAy,gBAAL,SAAK,C;K;IAoFhB,sC;MASI,OAAy,gBAAL,SAAK,C;K;IAGhB,s  
C;MASI,OAAy,gBAAL,SAAK,C;K;IAGhB,uC;MASI,OAAy,gBAAL,SAAK,C;K;IAGhB,uC;MASI,OAAy,gBA  
AL,SAAK,C;K;IAGhB,uC;MASI,OAAy,gBAAL,SAAK,C;K;IAGhB,uC;MASI,OAAy,gBAAL,SAAK,C;K;IAGh  
B,uC;MASI,OAAy,gBAAL,SAAK,C;K;IAGhB,uC;MASI,OAAy,gBAAL,SAAK,C;K;IAGhB,uC;MASI,OAAy,g  
BAAL,SAAK,C;K;wFAsGhB,yB;MAAA,8C;MAAA,kF;QAmB0E,iC;UAAA,oBAAYB,C;QAAG,0B;UAAA,aAA  
kB,C;QAAG,wB;UAAA,WAAgB,gB;QACvI,UAAU,SAAV,EAAgB,WAAhB,EAA6B,iBAA7B,EAAgD,UAAhD,  
EAA4D,QAA5D,C;QACA,OAAO,W;O;KArBX,C;wFAwBA,yB;MAAA,8C;MAAA,kF;QAmBoE,iC;UAAA,oBA  
AyB,C;QAAG,0B;UAAA,aAAkB,C;QAAG,wB;UAAA,WAAgB,gB;QACjI,UAAU,SAAV,EAA0C,WAA1C,EA  
AiF,iBAAjF,EAAG,UAApG,EAAGH,QAAhH,C;QACA,OAAO,W;O;KArBX,C;wFAwBA,yB;MAAA,8C;MAAA,  
kF;QAmBsE,iC;UAAA,oBAAYB,C;QAAG,0B;UAAA,aAAkB,C;QAAG,wB;UAAA,WAAgB,gB;QACnI,UAAU,  
SAAV,EAA2C,WAA3C,EAAMF,iBAAnF,EAASG,UAAAtG,EAAKH,QAAlH,C;QACA,OAAO,W;O;KArBX,C;wF  
AwBA,yB;MAAA,8C;MAAA,kF;QAmBkE,iC;UAAA,oBAAYB,C;QAAG,0B;UAAA,aAAkB,C;QAAG,wB;UA  
A,WAAgB,gB;QAC/H,UAAU,SAAV,EAAyC,WAAzC,EAA+E,iBAA/E,EAAG,UAAIG,EAA8G,QAA9G,C;QA  
CA,OAAO,W;O;KArBX,C;wFAwBA,yB;MAAA,8C;MAAA,kF;QAmBoE,iC;UAAA,oBAAYB,C;QAAG,0B;UA  
AA,aAAkB,C;QAAG,wB;UAAA,WAAgB,gB;QACjI,UAAU,SAAV,EAA0C,WAA1C,EAAlF,iBAAjF,EAAG,  
UAApG,EAAGH,QAAhH,C;QACA,OAAO,W;O;KArBX,C;wFAwBA,yB;MAAA,8C;MAAA,kF;QAmBsE,iC;UA  
A,oBAAYB,C;QAAG,0B;UAAA,aAAkB,C;QAAG,wB;UAAA,WAAgB,gB;QACnI,UAAU,SAAV,EAA2C,WAA3  
C,EAAMF,iBAAnF,EAASG,UAAAtG,EAAKH,QAAlH,C;QACA,OAAO,W;O;KArBX,C;wFAwBA,yB;MAAA,8C;  
MAAA,kF;QAmBwE,iC;UAAA,oBAAYB,C;QAAG,0B;UAAA,aAAkB,C;QAAG,wB;UAAA,WAAgB,gB;QACrI,  
UAAU,SAAV,EAA4C,WAA5C,EAAqF,iBAArF,EAAGW,UAAxG,EAAoH,QAAPh,C;QACA,OAAO,W;O;KArB  
X,C;yFAwBA,yB;MAAA,8C;MAAA,kF;QAmB0E,iC;UAAA,oBAAYB,C;QAAG,0B;UAAA,aAAkB,C;QAAG,w  
B;UAAA,WAAgB,gB;QACvI,UAAU,SAAV,EAA6C,WAA7C,EAAuF,iBAAvF,EAA0G,UAA1G,EAAhH,QAAtH  
,C;QACA,OAAO,W;O;KArBX,C;yFAwBA,yB;MAAA,8C;MAAA,kF;QAmBoE,iC;UAAA,oBAAYB,C;QAAG,0  
B;UAAA,aAAkB,C;QAAG,wB;UAAA,WAAgB,gB;QACjI,UAAU,SAAV,EAA0C,WAA1C,EAAlF,iBAAjF,EA  
AoG,UAApG,EAAGH,QAAhH,C;QACA,OAAO,W;O;KArBX,C;oFAwBA,qB;MAOI,OAAy,SAAY,Q;K;oFAG5B,  
qB;MAOI,OAAy,SAAY,Q;K;oFAG5B,qB;MAOI,OAAy,SAAY,Q;K;qFAG5B,qB;MAOI,OAAy,SAAY,Q;K;IA  
G5B,8B;MAMW,WAAS,W;MAAT,YAA2B,SAAY,Q;MwC17B9C,eAAiB,I;MxCk7BjB,OwCj7BO,K;K;qFxCo7B  
X,qB;MAOI,OAAy,SAAY,Q;K;qFAG5B,qB;MAOI,OAAy,SAAY,Q;K;IAG5B,8B;MAMW,WAAS,c;MAAT,YA  
A8B,SAAY,Q;MwC/8BjD,eAAiB,I;MxC+8BjB,OwC98BO,K;K;IxC9BX,8B;MAMW,WAAS,W;MAAT,YAA2B,  
SAAY,Q;MwCx9B9C,eAAiB,I;MxCw9BjB,OwCv9BO,K;K;IxC09BX,uC;MD5oCI,IAAI,ECspCI,WAAW,CDtpC  
f,CAAJ,C;QACI,cCqpCoB,0C;QDppCpB,MAAM,gCAAyB,OAAQ,WAAjC,C;OCqpCV,OAAO,SAAS,SAAT,EA  
Ae,cAAU,OAAV,CAAf,C;K;IAGX,uC;MD1pCI,IAAI,ECsqCI,WAAW,CDpqCf,CAAJ,C;QACI,cCmqCoB,0C;Q

DIqCpB,MAAM,gCAAYB,OAAQ,WAAJ,C;OCmqCV,OAAO,SAAS,SAAT,EAAe,eAAW,OAAX,CAAf,C;K;IA  
GX,uC;MDXqCI,IAAI,ECkrCI,WAAW,CDlrCf,CAAJ,C;QACI,cCirCoB,0C;QDhrCpB,MAAM,gCAAYB,OAAQ,  
WAAJ,C;OCirCV,OAAO,SAAS,SAAT,EAAe,eAAS,OAAT,CAAf,C;K;IAGX,uC;MDtrCI,IAAI,ECgsCI,WAA  
W,CDhsCf,CAAJ,C;QACI,cC+rCoB,0C;QD9rCpB,MAAM,gCAAYB,OAAQ,WAAJ,C;OC+rCH,WAAW,W;MA  
AT,YAAsB,gBAAGB,SAAhB,EAAAB,OAAtB,K;MwChhC7B,eAAiB,I;MxCghCjB,OwC/gCO,K;K;IxkChCX,uC;  
MDpsCI,IAAI,EC8sCI,WAAW,CD9sCf,CAAJ,C;QACI,cC6sCoB,0C;QD5sCpB,MAAM,gCAAYB,OAAQ,WAAJ  
C,C;OC6sCV,OAAO,SAAS,SAAT,EAAe,iBAAW,OAAX,CAAf,C;K;IAGX,uC;MDltCI,IAAI,EC4tCI,WAAW,C  
D5tCf,CAAJ,C;QACI,cC2tCoB,0C;QD1tCpB,MAAM,gCAAYB,OAAQ,WAAJ,C;OC2tCV,OAAO,SAAS,SAAT,  
EAAe,iBAAY,OAAZ,CAAf,C;K;IAGX,uC;MDhuCI,IAAI,EC0uCI,WAAW,CD1uCf,CAAJ,C;QACI,cCyCoB,0C  
;QDxuCpB,MAAM,gCAAYB,OAAQ,WAAJ,C;OCyuCH,WAAW,c;MAAT,YAAyB,gBAAGB,SAAhB,EAAAB,O  
AAtB,EAA+B,KAA/B,C;MwC1jChC,eAAiB,I;MxC0jCjB,OwCzjCO,K;K;IxC4jCX,uC;MD9uCI,IAAI,ECwvCI,W  
AAW,CDxvCf,CAAJ,C;QACI,cCuvCoB,0C;QDtvCpB,MAAM,gCAAYB,OAAQ,WAAJ,C;OCuvCH,WAAW,W;  
MAAT,YAAsB,SAAS,SAAT,EAAe,iBAAU,OAAY,CAAf,C;MwCxc7B,eAAiB,I;MxCwkCjB,OwCvkCO,K;K;I  
xC0kCX,uC;MD5vCI,IAAI,ECuwCI,WAAW,CDvwCf,CAAJ,C;QACI,cCswCoB,0C;QDrwCpB,MAAM,gCAAYB  
,OAAQ,WAAJ,C;OCswCV,OAAO,gBAAGB,SAAhB,EAAAB,OAAtB,EAA+B,IAA/B,C;K;IAGX,sD;MAWI,oC  
AAa,2BAakB,SAaIB,EAA6B,OAA7B,EAAc,gBAAtC,C;MACb,OAAY,SAAY,OAAM,SAAN,EAAiB,OAAjB,  
C;K;IAG5B,sD;MAUI,oCAAa,2BAakB,SAaIB,EAA6B,OAA7B,EAAc,gBAAtC,C;MACb,OAAY,SAAY,OAAM,  
SAAN,EAAiB,OAAjB,C;K;IAG5B,sD;MAUI,oCAAa,2BAakB,SAaIB,EAA6B,OAA7B,EAAc,gBAAtC,C;M  
ACb,OAAY,SAAY,OAAM,SAAN,EAAiB,OAAjB,C;K;IAG5B,sD;MAUI,oCAAa,2BAakB,SAaIB,EAA6B,OAA  
7B,EAAc,gBAAtC,C;MACb,OAAY,SAAY,OAAM,SAAN,EAAiB,OAAjB,C;K;IAG5B,sD;MAUI,oCAAa,2BA  
AkB,SAaIB,EAA6B,OAA7B,EAAc,gBAAtC,C;MACN,WAAW,W;MAAT,YAA2B,SAAY,OAAM,SAAN,EAAi  
B,OAAjB,C;MwC9pC9C,eAAiB,I;MxC8pCjB,OwC7pCO,K;K;IxCgqCX,sD;MAUI,oCAAa,2BAakB,SAaIB,EA  
A6B,OAA7B,EAAc,gBAAtC,C;MACb,OAAY,SAAY,OAAM,SAAN,EAAiB,OAAjB,C;K;IAG5B,sD;MAUI,oC  
AAa,2BAakB,SAaIB,EAA6B,OAA7B,EAAc,gBAAtC,C;MACb,OAAY,SAAY,OAAM,SAAN,EAAiB,OAAjB,  
C;K;IAG5B,uD;MAUI,oCAAa,2BAakB,SAaIB,EAA6B,OAA7B,EAAc,gBAAtC,C;MACN,WAAW,c;MAAT,Y  
AA8B,SAAY,OAAM,SAAN,EAAiB,OAAjB,C;MwCxsCjD,eAAiB,I;MxCwsCjB,OwCvsCO,K;K;IxC0sCX,uD;M  
AUI,oCAAa,2BAakB,SAaIB,EAA6B,OAA7B,EAAc,gBAAtC,C;MACN,WAAW,W;MAAT,YAA2B,SAAY,OA  
AM,SAAN,EAAiB,OAAjB,C;MwCttC9C,eAAiB,I;MxCstCjB,OwCrtCO,K;K;IxCwtCX,wD;MAWgD,yB;QAAA,  
YAAiB,C;MAAG,uB;QAAA,UAAe,gB;MAC/E,oCAAa,2BAakB,SAaIB,EAA6B,OAA7B,EAAc,gBAAtC,C;M  
ACR,SAAY,MAAK,OAAL,EAAC,SAAd,EAAyB,OAAzB,C;K;IAGrB,wD;MAWgD,yB;QAAA,YAAiB,C;MAAG  
,uB;QAAA,UAAe,gB;MAC/E,oCAAa,2BAakB,SAaIB,EAA6B,OAA7B,EAAc,gBAAtC,C;MACR,SAAY,MAA  
K,OAAL,EAAC,SAAd,EAAyB,OAAzB,C;K;IAGrB,wD;MAWkD,yB;QAAA,YAAiB,C;MAAG,uB;QAAA,UAAe  
,gB;MACjF,oCAAa,2BAakB,SAaIB,EAA6B,OAA7B,EAAc,gBAAtC,C;MACR,SAAY,MAAK,OAAL,EAAC,S  
AAd,EAAyB,OAAzB,C;K;IAGrB,wD;MAW8C,yB;QAAA,YAAiB,C;MAAG,uB;QAAA,UAAe,gB;MAC7E,oCA  
Aa,2BAakB,SAaIB,EAA6B,OAA7B,EAAc,gBAAtC,C;MACR,SAAY,MAAK,OAAL,EAAC,SAAd,EAAyB,OA  
AzB,C;K;IAGrB,wD;MAWgD,yB;QAAA,YAAiB,C;MAAG,uB;QAAA,UAAe,gB;MAC/E,oCAAa,2BAakB,SA  
IB,EAA6B,OAA7B,EAAc,gBAAtC,C;MACR,SAAY,MAAK,OAAL,EAAC,SAAd,EAAyB,OAAzB,C;K;IAGrB,  
wD;MAWkD,yB;QAAA,YAAiB,C;MAAG,uB;QAAA,UAAe,gB;MACjF,oCAAa,2BAakB,SAaIB,EAA6B,OA  
7B,EAAc,gBAAtC,C;MACR,SAAY,MAAK,OAAL,EAAC,SAAd,EAAyB,OAAzB,C;K;IAGrB,wD;MAWoD,yB;  
QAAA,YAAiB,C;MAAG,uB;QAAA,UAAe,gB;MACnF,oCAAa,2BAakB,SAaIB,EAA6B,OAA7B,EAAc,gBAA  
tC,C;MACR,SAAY,MAAK,OAAL,EAAC,SAAd,EAAyB,OAAzB,C;K;IAGrB,yD;MAWsD,yB;QAAA,YAAiB,C;  
MAAG,uB;QAAA,UAAe,gB;MACrF,oCAAa,2BAakB,SAaIB,EAA6B,OAA7B,EAAc,gBAAtC,C;MACR,SAA  
Y,MAAK,OAAL,EAAC,SAAd,EAAyB,OAAzB,C;K;IAGrB,yD;MAWgD,yB;QAAA,YAAiB,C;MAAG,uB;QAA  
A,UAAe,gB;MAC/E,oCAAa,2BAakB,SAaIB,EAA6B,OAA7B,EAAc,gBAAtC,C;MACR,SAAY,MAAK,OAAL  
,EAAC,SAAd,EAAyB,OAAzB,C;K;iFAGrB,8B;MAKI,OAAY,SAAY,QAAO,CAAQ,OAAR,CAAP,C;K;iFAG5B,  
yB;MAwIA,iD;MAxIA,qC;QAKI,OAwIO,gCAxIK,eAAY,OAAZ,EAwIL,C;O;KA7IX,C;iFAQA,yB;MAwIA,iD;  
MAxIA,qC;QAKI,OAwIO,gCAxIK,gBAaA,OAAb,EAwIL,C;O;KA7IX,C;iFAQA,yB;MAwIA,iD;MAxIA,qC;QA  
KI,OAwIO,gCAxIK,gBAAW,OAAX,EAwIL,C;O;KA7IX,C;iFAQA,yB;MAwIA,iD;MAxIA,qC;QAKI,OAwIO,gC

AxIK,mBAAY,OAAZ,CAwIL,C;O;KA7IX,C;iFAQA,yB;MAwIA,iD;MAxIA,qC;QAKI,OAwIO,gCAxIK,kBAaA, OAAb,EAwIL,C;O;KA7IX,C;gFAQA,yB;MAwIA,iD;MAxIA,qC;QAKI,OAwIO,gCAxIK,kBAAc,OAAAd,EAwIL, C;O;KA7IX,C;iFAQA,yB;MAwIA,iD;MAxIA,qC;QAKI,OAwIO,gCAxIK,sBAaE,OAAf,CAwIL,C;O;KA7IX,C;iF AQA,yB;MAwIA,iD;MAxIA,qC;QAKI,OAwIO,gCAxIK,mBAAY,OAAZ,CAwIL,C;O;KA7IX,C;IAQA,sC;MAKI ,OAAO,oBAaOB,SAAPB,EAA0B,QAA1B,C;K;IAGX,sC;MAII,OAAO,mBAAwB,UAAAL,SAAK,EAAO,mBAAO ,QAAS,KAAhB,IAAP,CAAxB,EAAsD,SAAK,OAA3D,EAAiE,QAAjE,C;K;IAGX,sC;MAII,OAAO,mBAAwB,U AAAL,SAAK,EAAO,mBAAO,QAAS,KAAhB,IAAP,CAAxB,EAAsD,SAAK,OAA3D,EAAiE,QAAjE,C;K;IAGX,s C;MAII,OAAO,mBAAwB,UAAAL,SAAK,EAAO,mBAAO,QAAS,KAAhB,IAAP,CAAxB,EAAsD,SAAK,OAA3D, EAAiE,QAAjE,C;K;IAGX,sC;MAII,OAAO,oBAaOB,SAAPB,EAA0B,QAA1B,C;K;IAGX,sC;MAII,OAAO,mBA AwB,UAAAL,SAAK,EAAO,mBAAO,QAAS,KAAhB,IAAP,CAAxB,EAAsD,SAAK,OAA3D,EAAiE,QAAjE,C;K;I AGX,sC;MAII,OAAO,mBAAwB,UAAAL,SAAK,EAAO,mBAAO,QAAS,KAAhB,IAAP,CAAxB,EAAsD,SAAK,O AA3D,EAAiE,QAAjE,C;K;IAGX,sC;MAII,OAAO,oBAaOB,SAAPB,EAA0B,QAA1B,C;K;IAGX,sC;MAII,OAA O,mBAAwB,UAAAL,SAAK,EAAO,mBAAO,QAAS,KAAhB,IAAP,CAAxB,EAAsD,SAAK,OAA3D,EAAiE,QAAj E,C;K;iFAGX,+B;MAKI,OAAy,SAAY,QAAO,QAAP,C;K;iFAG5B,yB;MAAA,iD;MAAA,sC;QAKI,OAAO,qBA AqB,SAArB,EAA2B,QAA3B,C;O;KALX,C;iFAQA,yB;MAAA,iD;MAAA,sC;QAKI,OAAO,qBAaQb,SAArB,EA A2B,QAA3B,C;O;KALX,C;iFAQA,yB;MAAA,iD;MAAA,sC;QAKI,OAAO,qBAaQb,SAArB,EAA2B,QAA3B,C; O;KALX,C;iFAQA,yB;MAAA,iD;MAAA,sC;QAKI,OAAO,qBAaQb,SAArB,EAA2B,QAA3B,C;O;KALX,C;iFA QA,yB;MAAA,iD;MAAA,sC;QAKI,OAAO,qBAaQb,SAArB,EAA2B,QAA3B,C;O;KALX,C;iFAQA,yB;MAAA,i D;MAAA,sC;QAKI,OAAO,qBAaQb,SAArB,EAA2B,QAA3B,C;O;KALX,C;iFAQA,yB;MAAA,iD;MAAA,sC;Q AKI,OAAO,qBAaQb,SAArB,EAA2B,QAA3B,C;O;KALX,C;iFAQA,yB;MAAA,iD;MAAA,sC;QAKI,OAAO,qB AAqB,SAArB,EAA2B,QAA3B,C;O;KALX,C;8FAQA,8B;MAKI,OAAy,SAAY,QAAO,CAAQ,OAAR,CAAP,C; K;IAoBL,2B;MAAsB,OAAA,CAAE,iBAAU,CAAV,C;K;IAP/C,2B;MAOI,IAAI,mBAAO,CAAX,C;QAwQY,eAx QO,WAwQP,C;Q;IANhB,2B;MAQI,IAAI,mBAAO,CAAX,C;QAAC,UAAU,SAAV,C;K;IAGIB,wC;MAQI,IAAI, mBAAO,CAAX,C;QAAC,cAAc,SAAd,EAAoB,UAApB,C;K;IAGIB,gD;MAewD,yB;QAAA,YAAiB,C;MAAG,uB ;QAAA,UAAe,gB;MACvF,oCAAA,2BAaKB,SAaIB,EAA6B,OAA7B,EAAsC,gBAAtC,C;MACb,gBAAc,SAAd,E AAoB,SAAPB,EAA+B,OAA/B,EAawC,cAAxC,C;K;IAGJ,gD;MAaiC,yB;QAAA,YAAiB,C;MAAG,uB;QAAA,U AAe,gB;MACHe,oCAAA,2BAaKB,SAaIB,EAA6B,OAA7B,EAAsC,gBAAtC,C;MACb,eAAoB,SAAY,UAAS,SA AT,EAAoB,OAAPB,C;MACvB,KAAT,QAAS,C;K;IAGb,gD;MAakC,yB;QAAA,YAAiB,C;MAAG,uB;QAAA,U AAe,gB;MACjE,oCAAA,2BAaKB,SAaIB,EAA6B,OAA7B,EAAsC,gBAAtC,C;MACb,eAAoB,SAAY,UAAS,SA AT,EAAoB,OAAPB,C;MACvB,KAAT,QAAS,C;K;IAGb,gD;MAagC,yB;QAAA,YAAiB,C;MAAG,uB;QAAA,U AAe,gB;MAC/D,oCAAA,2BAaKB,SAaIB,EAA6B,OAA7B,EAAsC,gBAAtC,C;MACb,eAAoB,SAAY,UAAS,SA AT,EAAoB,OAAPB,C;MACvB,KAAT,QAAS,C;K;IAGb,gD;MAaiC,yB;QAAA,YAAiB,C;MAAG,uB;QAAA,U AAe,gB;MACHe,oCAAA,2BAaKB,SAaIB,EAA6B,OAA7B,EAAsC,gBAAtC,C;MACb,eAAoB,SAAY,UAAS,SAAT,EAAoB, OAAPB,C;MACvB,KAAT,QAAS,C;K;IAGb,gD;MAamC,yB;QAAA,YAAiB,C;MAAG,uB;QAAA,UAAe,gB;M ACIE,oCAAA,2BAaKB,SAaIB,EAA6B,OAA7B,EAAsC,gBAAtC,C;MACb,eAAoB,SAAY,UAAS,SAAT,EAAoB ,OAAPB,C;MACvB,KAAT,QAAS,C;K;IAGb,gD;MAaiC,yB;QAAA,YAAiB,C;MAAG,uB;QAAA,UAAe,gB;MA ChE,oCAAA,2BAaKB,SAaIB,EAA6B,OAA7B,EAAsC,gBAAtC,C;MACb,eAAoB,SAAY,UAAS,SAAT,EAAoB, OAAPB,C;MACvB,KAAT,QAAS,C;K;iFAGb,iC;MAOI,SAAY,MAAK,UAAAL,C;K;iFAGhB,iC;MAOI,SAAY,M AAK,UAAAL,C;K;iFAGhB,iC;MAOI,SAAY,MAAK,UAAAL,C;K;iFAGhB,iC;MAOI,SAAY,MAAK,UAAAL,C;K;iF AGhB,iC;MAOI,SAAY,MAAK,UAAAL,C;K;iFAGhB,iC;MAOI,SAAY,MAAK,UAAAL,C;K;iFAGhB,iC;MAOI,SA AY,MAAK,UAAAL,C;K;IAGhB,yC;MAMI,IAAI,mBAAO,CAAX,C;QAAC,gBAAC,SAAd,EAAoB,UAApB,C;K;I AGIB,+D;MAa0E,yB;QAAA,YAAiB,C;MAAG,uB;QAAA,UAAe,gB;MACzG,oCAAA,2BAaKB,SAaIB,EAA6B, OAA7B,EAAsC,gBAAtC,C;MACb,gBAAc,SAAd,EAAoB,SAAPB,EAA+B,OAA/B,EAawC,UAAxC,C;K;IAGJ, mC;MAII,OAAO,EAAS,MAAM,MAAK,SAAL,C;K;IAG1B,mC;MAII,OAAO,EAAS,MAAM,MAAK,SAAL,C;K ;IAG1B,mC;MAII,OAAO,EAAS,MAAM,MAAK,SAAL,C;K;IAG1B,mC;MAII,OAAO,EAAS,MAAM,MAAK,S AAL,C;K;IAG1B,mC;MAII,OAAO,EAAS,MAAM,MAAK,SAAL,C;K;IAG1B,mC;MAII,OAAO,EAAS,MAAM,



MAAK,SAAL,C;K;IAG1B,mC;MAII,OAAO,EAAS,MAAM,MAAK,SAAL,C;K;IAOH,kD;MAAA,wB;QAAW,q  
CAAK,KAAL,E;O;K;IAJIC,oC;MAII,OAAO,iBAAM,gBAAN,EAAY,gCAAZ,C;K;IuDnpEX,oB;MAAA,wB;MA  
EI,6B;MACA,gC;MAKuB,UAAT,MAAS,EAAT,MAAS,EAAT,M;MAFV,eAAe,kE;MACf,iBAAiB,eAAS,GAAT,  
C;MACE,sBAAT,QAAS,C;MAAT,mB;MAAA,kB;MAAA,kB;MAAV,8C;QACI,WAAW,oBAAS,CAAT,CzC2Bu  
B,IyC3BIC,IAA+B,C;;MAInC,qBAAqB,48C;MACrB,WAAW,mBAAmB,cAAAnB,EAAmC,UAAAnC,EAA+C,IAA/  
C,C;MACX,YAAY,eAAS,IAAK,OAAAL,GAAY,CAAZ,IAAT,C;MACZ,0BAAU,IAAV,e;QACI,MAAM,MAAI,C  
AAJ,IAAN,IAAe,MAAM,GAAN,IAAW,KAAK,GAAL,CAAX,I;;MAEnB,yBAAoB,K;MAGpB,oBAAoB,m/D;M  
ACpB,4BAAuB,mBAAmB,aAAAnB,EAAkC,UAAIC,EAA8C,IAA9C,C;K;;IAvB/B,gC;MAAA,+B;QAAA,c;OAA  
A,wB;K;IA2BA,qC;MAKkB,IAJP,I;MACH,WAAO,EAAP,C;QAAe,W;WACf,WAAO,IAAP,C;QAAgB,OAAI,C  
AAC,KAAO,CAAR,MAAc,CAAlB,GAAqB,QAAS,CAA9B,GAAqC,OAAS,E;;QAEID,QAAM,KAAK,CAAX,C;  
eACI,C;YAAK,eAAS,E;YAAd,K;eACA,C;YAAK,OAAC,QAAS,CAAV,GAAiB,E;YAATB,K;kBACQ,cAAS,E;Y  
AHrB,K;;MAJR,W;K;IAYJ,qC;MAII,SAAS,SzCRiC,I;MyCUIC,YAAY,kBAaKb,sBAAS,kBAA3B,EAA8C,EA  
A9C,C;MACZ,YAAY,sBAAS,kBAAT,CAA2B,KAA3B,C;MACZ,WAAW,sBAAS,qBAAT,CAA8B,KAA9B,C;M  
ACX,YAAY,kBAaKb,IAAlB,EAawB,KAAK,KAAL,IAAxB,C;MAEZ,OAAW,UAAAS,EAAb,GAAYC,mDAAzC,  
GAAoD,K;K;IAG/D,8D;MAKiB,UAIE,M;MARf,aAAa,eAAS,YAAT,C;MACb,YAAY,C;MACZ,UAAU,C;MAC  
V,YAAY,C;MACC,yB;MAAb,OAAa,cAAb,C;QAAa,iC;QACT,aAAa,WAAW,IzCxBc,IyCwBzB,C;QACb,MAA  
M,MAAQ,CAAC,SAAW,EA AZ,KAA sB,K;QACpC,IAAI,SAAS,EAAb,C;UACI,OAAO,cAAP,EAAO,sBAAP,Y  
AAkB,G;UACIB,MAAM,C;UACN,QAAQ,C;;UAER,gBAAS,CAAT,I;;MAGR,OAAO,M;K;ICIEX,+B;MAII,eA  
Ae,CAAC,iBAAO,CAAP,IAAD,IAAa,CAAb,I;MACf,IAAI,WAAW,CAAF,C;QAAkB,M;MACIB,mBAAmB,2B;  
MACnB,iBAAc,CAAd,WAAiB,QAAjB,U;QACI,UAAU,sBAAK,KAAL,C;QACV,sBAAK,KAAL,EAAC,sBAAK,  
YAAL,CAAd,C;QACA,sBAAK,YAAL,EAAqB,GAAR,C;QACA,mC;;K;IrDbR,wB;MAOI,OAAW,oBAAK,CAA  
L,MAAJ,GAAY,CAAZ,GAAM,B,C;K;mFAG9B,yB;MAkBA,iB;MAIbA,uB;QAMI,OakBO,MAAO,KAIBC,CAk  
BD,EAIBY,CAkBZ,C;O;KAXBIB,C;mFASA,yB;MASA,iB;MATA,uB;QAMI,OASO,MAAO,KATC,CASD,EATY  
,CASZ,C;O;KAFiB,C;mFASA,yB;MAAA,iB;MAAA,uB;QAMI,OAAO,MAAO,KAAI,CAAJ,EAAO,CAAP,C;O;K  
ANIB,C;mFASA,gB;MAMI,OAAW,kBAAK,CAAL,MAAJ,GAAY,CAAZ,GAAM,B,C;K;mFAG9B,yB;MAAA,iB;  
MAAA,uB;QAQI,OAAO,MAAO,KAAI,CAAJ,EAAO,CAAP,C;O;KARIB,C;mFAWA,yB;MAAA,iB;MAAA,uB;  
QAQI,OAAO,MAAO,KAAI,CAAJ,EAAO,CAAP,C;O;KARIB,C;IAWA,2B;MAOI,OAAO,SAAM,CAAN,EAAS,  
SAAM,CAAN,EAAS,CAAT,CAAT,C;K;mFAGX,yB;MAAA,iB;MAAA,0B;QAMI,OAAO,MAAO,KAAI,CAA  
N,EAAiB,CAAjB,EAA4B,CAA5B,C;O;KANIB,C;mFASA,yB;MAAA,iB;MAAA,0B;QAMI,OAAO,MAAO,KAA  
M,CAAN,EAAiB,CAAjB,EAA4B,CAA5B,C;O;KANIB,C;mFASA,yB;MAAA,iB;MAAA,0B;QAMI,OAAO,MAA  
O,KAAI,CAAJ,EAAO,CAAP,EAAU,CAAV,C;O;KANIB,C;mFASA,mB;MAMW,UAAe,CAPeX,iBAoEc,CAPeD  
,MAAJ,GAoEe,CAPeF,GAoEkB,C;MAAZB,OAAa,CAPeF,iBAAK,GAAL,MAAJ,GAoEM,CAPeN,GAAM,B,G;K;  
mFAuE9B,yB;MAAA,iB;MAAA,0B;QAQI,OAAO,MAAO,KAAI,CAAJ,EAAO,CAAP,EAAU,CAAV,C;O;KARI  
B,C;mFAWA,yB;MAAA,iB;MAAA,0B;QAQI,OAAO,MAAO,KAAI,CAAJ,EAAO,CAAP,EAAU,CAAV,C;O;KA  
RIB,C;IAWA,4B;MAQc,Q;MADV,UAAU,C;MACV,wBAAU,KAAV,gB;QAAU,QAAA,KAAV,M;QAAiB,MAA  
M,SAAM,GAAN,EA AW,CAAX,C;;MACvB,OAAO,G;K;IAGX,4B;MAMc,Q;MADV,UAAU,C;MACV,wBAAU,  
KAAV,gB;QAAU,QAAA,KAAV,M;QAAiB,MAxHV,MAAO,KAwHe,GAxHf,EAwHoB,CAxHpB,C;;MAyHd,O  
AAO,G;K;IAGX,4B;MAMc,Q;MADV,UAAU,C;MACV,wBAAU,KAAV,gB;QAAU,QAAA,KAAV,M;QAAiB,M  
AIIV,MAAO,KAkIe,GAIIf,EAKIoB,CAlIpB,C;;MAMId,OAAO,G;K;IAGX,4B;MAMc,Q;MADV,UAAU,C;MAC  
V,wBAAU,KAAV,gB;QAAU,QAAA,KAAV,M;QAAiB,MA5IV,MAAO,KA4Ie,GA5If,EA4IoB,CA5IpB,C;;MA6I  
d,OAAO,G;K;IAGX,4B;MAMc,Q;MADV,UAAU,C;MACV,wBAAU,KAAV,gB;QAAU,QAAA,KAAV,M;QAAu  
B,UAAAM,G;QAAZ,MA7IN,oBA6IuB,CA7IvB,MAAJ,GAAY,GA AZ,GA6I2B,C;;MACiC,OAAO,G;K;IAGX,4B;  
MAQc,Q;MADV,UAAU,C;MACV,wBAAU,KAAV,gB;QAAU,QAAA,KAAV,M;QAAiB,MA9IV,MAAO,KA8Ie,  
GA9If,EA8IoB,CA9IpB,C;;MA+Id,OAAO,G;K;IAGX,4B;MAQc,Q;MADV,UAAU,C;MACV,wBAAU,KAAV,gB  
;QAAU,QAAA,KAAV,M;QAAiB,MA/IV,MAAO,KA+Ie,GA/If,EA+IoB,CA/IpB,C;;MAGJd,OAAO,G;K;IAGX,w  
B;MAOI,OAAW,oBAAK,CAAL,MAAJ,GAAY,CAAZ,GAAM,B,C;K;mFAG9B,yB;MAkBA,iB;MAIbA,uB;QAM  
I,OakBO,MAAO,KAIBC,CAkBD,EAIBY,CAkBZ,C;O;KAXBIB,C;mFASA,yB;MASA,iB;MATA,uB;QAMI,OAS  
O,MAAO,KATC,CASD,EATY,CASZ,C;O;KAFiB,C;mFASA,yB;MAAA,iB;MAAA,uB;QAMI,OAAO,MAAO,K

AAI,CAAJ,EAAO,CAAP,C;O;KANIB,C;mFASA,gB;MAMI,OAAW,kBAAK,CAAL,MAAJ,GAAY,CAAZ,GAA  
mB,C;K;mFAG9B,yB;MAAA,iB;MAAA,uB;QAQI,OAAO,MAAO,KAAI,CAAJ,EAAO,CAAP,C;O;KARIB,C;mF  
AWA,yB;MAAA,iB;MAAA,uB;QAQI,OAAO,MAAO,KAAI,CAAJ,EAAO,CAAP,C;O;KARIB,C;IAWA,2B;MA  
OI,OAAO,SAAM,CAAN,EAAS,SAAM,CAAN,EAAS,CAAT,CAAT,C;K;mFAGX,yB;MAAA,iB;MAAA,0B;QA  
MI,OAAO,MAAO,KAAI,CAAN,EAAiB,CAAjB,EAA4B,CAA5B,C;O;KANIB,C;mFASA,yB;MAAA,iB;MAAA  
,0B;QAMI,OAAO,MAAO,KAAI,CAAN,EAAiB,CAAjB,EAA4B,CAA5B,C;O;KANIB,C;mFASA,yB;MAAA,iB  
;MAAA,0B;QAMI,OAAO,MAAO,KAAI,CAAJ,EAAO,CAAP,EAAU,CAAV,C;O;KANIB,C;mFASA,mB;MAM  
W,UAAe,CAPeX,iBAoEc,CAPeD,MAAJ,GAoEe,CAPeF,GAoEkB,C;MAAzB,OAAa,CAPeF,iBAAK,GAAL,MA  
AJ,GAoEM,CAPeN,GAAMB,G;K;mFAuE9B,yB;MAAA,iB;MAAA,0B;QAQI,OAAO,MAAO,KAAI,CAAJ,EAA  
O,CAAP,EAAU,CAAV,C;O;KARIB,C;mFAWA,yB;MAAA,iB;MAAA,0B;QAQI,OAAO,MAAO,KAAI,CAAJ,E  
AAO,CAAP,EAAU,CAAV,C;O;KARIB,C;IAWA,4B;MAQc,Q;MADV,UAAU,C;MACV,wBAAU,KAAV,gB;QA  
AU,QAAA,KAAV,M;QAAiB,MAAM,SAAM,GAAN,EAAW,CAAX,C;;MACvB,OAAO,G;K;IAGX,4B;MAMc,Q  
;MADV,UAAU,C;MACV,wBAAU,KAAV,gB;QAAU,QAAA,KAAV,M;QAAiB,MAxHV,MAAO,KAwHe,GAxH  
f,EAwHoB,CaxHpB,C;;MAyHd,OAAO,G;K;IAGX,4B;MAMc,Q;MADV,UAAU,C;MACV,wBAAU,KAAV,gB;  
QAAU,QAAA,KAAV,M;QAAiB,MAiV,MAAO,KakIe,GAIf,EAkIoB,CAIpB,C;;MAMId,OAAO,G;K;IAGX,4B  
;MAMc,Q;MADV,UAAU,C;MACV,wBAAU,KAAV,gB;QAAU,QAAA,KAAV,M;QAAiB,MA5IV,MAAO,KA4I  
e,GA5If,EA4IoB,CA5IpB,C;;MA6Id,OAAO,G;K;IAGX,4B;MAMc,Q;MADV,UAAU,C;MACV,wBAAU,KAAV,  
gB;QAAU,QAAA,KAAV,M;QAAuB,UAAAM,G;QAAZ,MA7IN,oBA6IuB,CA7IvB,MAAJ,GAAY,GAAZ,GA6I2B  
,C;;MACIC,OAAO,G;K;IAGX,4B;MAQc,Q;MADV,UAAU,C;MACV,wBAAU,KAAV,gB;QAAU,QAAA,KAAV,  
M;QAAiB,MA9IV,MAAO,KA8Ie,GA9If,EA8IoB,CA9IpB,C;;MA+Id,OAAO,G;K;IAGX,4B;MAQc,Q;MADV,U  
AAU,C;MACV,wBAAU,KAAV,gB;QAAU,QAAA,KAAV,M;QAAiB,MA/IV,MAAO,KA+Ie,GA/If,EA+IoB,CA/I  
pB,C;;MAGJd,OAAO,G;K;IsDvaX,iB;MAAA,qB;MAEI,0BAA0B,gBACtB,EADsB,EACd,IADc,EACN,IADM,EA  
CE,IADF,EACU,IADV,EACkB,IADIB,EAC0B,IAD1B,EACkC,IADIC,EAC0C,IAD1C,EACkD,IADID,EAC0D,I  
AD1D,EACkE,IADIE,EAC0E,IAD1E,EACkF,IADIF,EAC0F,IAD1F,EACkG,IADIG,EAC0G,IAD1G,EACkH,IAD  
IH,EAC0H,IAD1H,EACkI,IADII,EAEtB,IAFsB,EAEd,IAFc,EAEN,IAFM,EAEe,IAFF,EAEU,IAFV,EAeKB,IAFI  
B,EAE0B,IAF1B,EAekC,IAFIC,EAE0C,IAF1C,EAekD,KAFID,EAE0D,KAF1D,EAekE,KAFIE,EAE0E,KAF1E,  
EAekF,KAFIF,EAE0F,KAF1F,EAekG,KAFIG,EAE0G,KAF1G,E;K;;IAF9B,6B;MAAA,4B;QAAA,W;OAAA,qB  
;K;IAQA,0C;MAKI,aAAa,C;MACb,UAAU,KAAAM,OAAN,GAAa,CAAb,I;MACV,aAAa,E;MACb,YAAY,C;MA  
CZ,OAAO,UAAU,GAAjB,C;QACI,SAAS,CAAC,SAAS,GAAT,IAAD,IAAiB,CAAjB,I;QACT,QAAQ,MAAM,M  
AAN,C;QACR,IAAI,SAAS,KAAb,C;UACI,SAAS,SAAS,CAAT,I;aACR,IAAI,WAAU,KAAAd,C;UACD,OAAO,M  
;;UAEP,MAAM,SAAS,CAAT,I;;MAEd,OAAO,UAAc,SAAS,KAAb,GAAoB,CAAPB,GAA2B,CAArC,K;K;IAG  
X,mC;MAKI,SAAS,S3CCiC,I;M2CA1C,YAAY,kBAAkB,mBAAM,mBAAxB,EAAoC,EAAPC,C;MACZ,WAAW  
,KAAK,mBAAM,mBAAN,CAAiB,CAAjB,CAAL,I;MACX,OAAW,OAAO,EAAX,GAAe,IAAf,GAAyB,E;K;IAG  
pC,gC;MAII,OAAO,6BAAoB,C;K;IC7C/B,kB;MAAA,sB;MAEI,6B;MACA,8B;MACA,gC;MAKuB,UAAT,MAA  
S,EAAT,MAAS,EAAT,M;MAFV,eAAe,kE;MACf,iBAAiB,eAAS,GAAT,C;MACE,sBAAT,QAAS,C;MAAT,mB;  
MAAA,kB;MAAA,kB;MAAV,8C;QACI,WAAW,oBAAS,CAAT,C5C0BuB,I4C1BIC,IAA+B,C;;MAInC,qBAAq  
B,sW;MACrB,WAAW,mBAAmB,cAAnB,EAAmC,UAAnc,EAA+C,GAA/C,C;MACX,YAAY,eAAS,IAAK,OAA  
d,C;MACZ,0BAAU,IAAV,e;QACI,IAAI,QAAC,CAAT,C;UAAy,MAAM,GAAN,IAAW,KAAK,GAAL,C;;UACI  
B,MAAM,GAAN,IAAW,MAAM,MAAI,CAAJ,IAAN,IAAe,KAAK,GAAL,CAAf,I;;MAEpB,yBAAoB,K;MAGpB  
,kBAAkB,0U;MACIB,0BAAqB,mBAAmB,WAAnc,EAAgC,UAAhC,EAA4C,GAA5C,C;MAGrB,oBAAoB,i8B;  
MACpB,4BAAuB,mBAAmB,aAAnB,EAakC,UAAIC,EAA8C,GAA9C,C;K;;IA7B/B,8B;MAAA,6B;QAAA,Y;O  
AAA,sB;K;IAiCA,iC;MAII,OAAO,6BAAmB,C;K;IAG9B,oC;MAIW,wCAAmB,C;MAAnB,U;QAA6B,wB5CRM  
,a4CQN,C;OAApC,W;K;IAGJ,oC;MAIW,wCAAmB,C;MAAnB,U;QAA6B,wB5CfM,a4CeN,C;OAApC,W;K;IAG  
J,kC;MAQI,SAAS,S5C1BiC,I;M4C2B1C,YAAY,kBAAkB,oBAAO,kBAAzB,EAA4C,EAA5C,C;MAEZ,iBAAiB,  
oBAAO,kBAAP,CAAYB,KAAzB,C;MACjB,eAAe,aAAa,oBAAO,mBAAP,CAA0B,KAA1B,CAAb,GAAGD,CAA  
hD,I;MACf,WAAW,oBAAO,qBAAP,CAA4B,KAA5B,C;MAEX,IAAI,KAAK,QAAT,C;QACI,OAAO,C;OAGX,k  
BAAkB,OAAS,C;MAE3B,IAAI,gBAAE,CAAnB,C;QACI,YAAY,C;QACZ,gBAAGB,U;QACb,aAAU,CAAV,O  
AAa,CAAb,M;UACI,yBAAc,QAAS,KAAV,GAAqB,GAAIC,K;UACA,IAAI,YAAY,EAAb,C;YACI,OAAO,C;

WAEX,gBAAS,CAAT,I;UACA,yBAAc,QAAS,KAAV,GAAqB,GAAIC,K;UACA,IAAI,YAAAY,EAAhB,C;YACI,  
OAAO,C;WAEX,gBAAS,CAAT,I;;QAEJ,OAAO,C;OAGX,IAAI,QAAQ,CAAZ,C;QACI,OAAO,W;OAGX,eAAG  
B,KAAK,UAAL,I;MACHb,cAAgB,QAAQ,EAAZ,GAAkB,WAAW,CAA7B,GAAoC,Q;MACHd,OAAQ,SAAU,I  
AAI,OAAJ,IAAV,CAAD,GAA2B,C;K;ICnGtC,0B;MAAA,8B;MACI,+BAA+B,gBAC3B,GAD2B,EACnB,GADm  
B,EACX,GADW,EACH,GADG,EACK,GADL,EACa,GADb,EACqB,GADrB,EAC6B,IAD7B,EACqC,IADrC,EA  
C6C,IAD7C,EACqD,IADrD,EAC6D,IAD7D,EACqE,IADrE,EAC6E,IAD7E,EACqF,IADrF,EAC6F,KAD7F,EAC  
qG,KADrG,EAC6G,KAD7G,EACqH,KADrH,EAC6H,KAD7H,E;MAG/B,gCAAqC,gBAC5B,CAD4B,EACzB,C  
ADyB,EACtB,CADsB,EACnB,CADmB,EACHb,CADgB,EACb,CADa,EACV,CADU,EACP,EADO,EACH,CAD  
G,EACA,EADA,EACI,CADJ,EACO,CADP,EACU,EADV,EACc,EADd,EACKB,EADiB,EACsB,CADtB,EACyB,  
CADzB,EAC4B,CAD5B,EAC+B,CAD/B,EACkC,CADiC,E;K;;;IAJpC,sC;MAAA,qC;QAAA,oB;OAAA,8B;K;IA  
SA,qC;MACI,YAAAY,kBAakB,4BAAe,wBAAjC,EAakD,SAaID,C;MACZ,OAAO,SAAS,CAAT,IAAc,aAAO,4B  
AAe,wBAAf,CAA+B,KAA/B,IAAwC,4BAAe,yBAAf,CAAqC,KAAhC,CAAxC,IAAP,C;K;ICXzB,qC;MACI,OA  
Ae,IAAR,8BAAgB,IAAhB,KACY,IAAR,8BAAgB,IADpB,C;K;ICCX,wC;M5CiBW,Q;MAAA,I4CXgB,K5CWZ,I  
AAS,CAAT,I4CXY,K5CWE,IAAS,2BAA3B,C;QAAA,OAAc,qB4CXtB,K5CWsB,C;;Q4CXb,MAAM,8BAA0B,  
mCAAYB,gBAAzB,MAA1B,C;;MAAtC,W;K;ICRJ,sC;MAEI,WAAW,ShDkC+B,I;MgDhC1C,IAAY,GAAR,oBA  
AgB,GAAhB,KAAkC,GAAR,oBAAgB,GAA1C,CAAJ,C;QACI,OAA8B,OAAtB,KAAK,CAAC,OAAO,CAAP,IA  
AD,IAAa,CAAb,IAAL,KAAcB,C;OAGIC,IAAY,IAAR,oBAAgB,IAAhB,KAAkC,IAAR,oBAAgB,IAA1C,CAAJ,  
C;QACI,OAAO,S;OAEX,OAAO,wB;K;ICPX,wC;MxCqTe,WwC7SY,KxC6SZ,IAAS,C;MAAT,S;QAAc,OwC7S  
F,KxC6SE,IAqgHT,gBAAR,iBAAQ,C;OArgHT,U;MAAA,S;QAAA,SAAsC,sBwC7StB,KxC6SsB,C;;QwC7Sb,M  
AAM,8BAA0B,iCAAuB,cAAvB,MAA1B,C;;MAAtC,a;K;IAGJ,wC;MxCsTe,WwC9SY,KxC8SZ,IAAS,C;MAAT,  
S;QAAc,OwC9SF,KxC8SE,IAigHT,gBAAR,iBAAQ,C;OajgHT,U;MAAA,S;QAAA,SAAsC,sBwC9StB,KxC8Ss  
B,C;;QwC9Sb,MAAM,8BAA0B,iCAAuB,cAAvB,MAA1B,C;;MAAtC,a;K;IAGJ,wC;MxCuTe,WwC/SY,KxC+SZ  
,IAAS,C;MAAT,S;QAAc,OwC/SF,KxC+SE,IA6/GT,gBAAR,iBAAQ,C;OA7/GT,U;MAAA,S;QAAA,SAAsC,sBw  
C/StB,KxC+SsB,C;;QwC/Sb,MAAM,8BAA0B,iCAAuB,cAAvB,MAA1B,C;;MAAtC,a;K;IAGJ,wC;MxCwTe,Ww  
ChTY,KxCgTZ,IAAS,C;MAAT,S;QAAc,OwChTF,KxCgTE,IAy/GT,gBAAR,iBAAQ,C;OAz/GT,U;MAAA,S;QA  
AA,SAAsC,sBwChTtB,KxCgTsB,C;;QwChTb,MAAM,8BAA0B,iCAAuB,cAAvB,MAA1B,C;;MAAtC,a;K;IASO,  
6C;MAAA,8B;MAAS,uB;K;8FACW,Y;MAAQ,OAAA,gBAAY,K;K;+CAC3C,Y;MAAkC,OAAA,gBAAY,U;K;s  
DAC9C,mB;MAAGD,OAAA,gBAAY,gBAAS,OAAT,C;K;mDAC5D,iB;MACI,oCAAA,2BAakB,KAAIB,EAAYB,  
SAAzB,C;MACb,OAAO,6BAAY,KAAZ,C;K;qDAEX,mB;MAES,Q;MAAL,IAAI,eAAC,0EAAD,OAAJ,C;QAAg  
C,OAAO,E;MACvC,OxCsrBO,UwCtrBA,gBxCsrBR,QAAQ,EwCtrBoB,O3EgOF,KmCsdIB,C;K;yDwCprBX,mB;  
MAES,Q;MAAL,IAAI,eAAC,0EAAD,OAAJ,C;QAAgC,OAAO,E;MACvC,OxCy6BO,cwCz6BA,gBxCy6BR,QA  
AQ,EwCz6BwB,O3E2NN,KmC8sBIB,C;K;;IwC/7BnB,6B;MAMI,4C;K;IA2BO,6C;MAAA,8B;MAAS,uB;K;8FA  
CW,Y;MAAQ,OAAA,gBAAY,K;K;+CAC3C,Y;MAAkC,OAAA,gBAAY,U;K;sDAC9C,mB;MAAiD,OAAA,gBA  
AY,gBAAS,OAAT,C;K;mDAC7D,iB;MACI,oCAAA,2BAakB,KAAIB,EAAYB,SAAzB,C;MACb,OAAO,6BAAY,  
KAAZ,C;K;qDAEX,mB;MAES,Q;MAAL,IAAI,eAAC,0EAAD,QAAJ,C;QAAiC,OAAO,E;MACxC,OxCqqBO,U  
wCrqBA,gBxCqqBR,QAAQ,EwCrqBoB,O3DgNA,KmBqdpB,C;K;yDwCnqBX,mB;MAES,Q;MAAL,IAAI,eAAC  
,0EAAD,QAAJ,C;QAAiC,OAAO,E;MACxC,OxCw5BO,cwCx5BA,gBxCw5BR,QAAQ,EwCx5BwB,O3D2MJ,K  
mB6sBpB,C;K;;IwC96BnB,6B;MAMI,4C;K;IA2BO,6C;MAAA,8B;MAAS,uB;K;8FACW,Y;MAAQ,OAAA,gBA  
AY,K;K;+CAC3C,Y;MAAkC,OAAA,gBAAY,U;K;sDAC9C,mB;MAAiD,OAAA,gBAAY,gBAAS,OAAT,C;K;m  
DAC7D,iB;MACI,oCAAA,2BAakB,KAAIB,EAAYB,SAAzB,C;MACb,OAAO,6BAAY,KAAZ,C;K;qDAEX,mB;  
MAES,Q;MAAL,IAAI,eAAC,0EAAD,QAAJ,C;QAAiC,OAAO,E;MACxC,OxCopBO,UwCppBA,gBxCopBR,QA  
AQ,EwCppBoB,O5EkIA,KoCkhBpB,C;K;yDwClpBX,mB;MAES,Q;MAAL,IAAI,eAAC,0EAAD,QAAJ,C;QAAi  
C,OAAO,E;MACxC,OxCu4BO,cwCv4BA,gBxCu4BR,QAAQ,EwCv4BwB,O5E6HJ,KoC0wBpB,C;K;;IwC75BnB  
,8B;MAMI,4C;K;IA2BO,6C;MAAA,8B;MAAS,uB;K;8FACW,Y;MAAQ,OAAA,gBAAY,K;K;+CAC3C,Y;MAAk  
C,OAAA,gBAAY,U;K;sDAC9C,mB;MAAkD,OAAA,gBAAY,gBAAS,OAAT,C;K;mDAC9D,iB;MACI,oCAAA,2  
BAakB,KAAIB,EAAYB,SAAzB,C;MACb,OAAO,6BAAY,KAAZ,C;K;qDAEX,mB;MAES,Q;MAAL,IAAI,eAAC  
,0EAAD,SAAJ,C;QAAkC,OAAO,E;MACzC,OxCmoBO,UwCnoBA,gBxCmoBR,QAAQ,EwCnoBoB,O1EkHE,Kk  
CihBtB,C;K;yDwCjoBX,mB;MAES,Q;MAAL,IAAI,eAAC,0EAAD,SAAJ,C;QAAkC,OAAO,E;MACzC,OxCs3B

O,cwCt3BA,gBxCs3BR,QAAQ,EwCt3BwB,O1E6GF,KkCywBtB,C;K;;IwC54BnB,8B;MAMI,4C;K;ICtIJ,qC;MAI  
I,SAAS,SID+BiC,I;MkD9B1C,OAAa,CAAN,gBAAC,EAAd,KACU,EAAN,gBAAC,EADIB,KAEL,OAAM,GAFV,  
KAGI,KAAK,IAAL,KACC,OAAM,IAAN,KACS,IAAN,gBAAC,IADjB,KAEG,OAAM,IAFT,IAGG,OAAM,IAHT  
,IAIG,OAAM,IAJT,IAKG,OAAM,IALT,IAMG,OAAM,KAPV,CAHJ,C;K;;;mCCTP,gB;;K;;ICAJ,wB;K;;IAIA,w  
B;K;;IAIA,wB;K;;IAKiC,uB;MAAC,oB;QAAA,OAA0B,E;MAA1B,gB;K;;IAEIC,kB;K;;IAqCqC,sB;MAAC,gB;K  
;;IAGCN,4B;MAAC,sB;K;;IAEjC,uB;K;;IA8DmC,4B;MAAC,kB;K;;IAEpC,oB;K;;ICpJA,oB;K;;IAIA,wB;K;;oF7  
DLA,qB;MAKqE,uCoCHtB,E;K;iGpCK/C,yB;MAAA,kD;MAAA,4B;QAQsE,mBAAy,SAAZ,C;O;KARtE,C;IAU  
A,iC;MAGI,OAAsB,UAAy,QAAvB,KAAmC,SAA9C,GACe,UAAy,UAD3B,GAGI,gBAAGB,UAAhB,C;K;IAG  
R,qC;MAEL,YoC1B2C,E;MpC2B3C,eAAe,UAAW,W;MAC1B,OAAO,QAAS,UAAhB,C;QACU,KAAy,MAAK,  
QAAS,OAAo,C;MACtB,OAAO,K;K;IAGX,8C;MAQc,Q;MANV,IAAI,KAAM,OAAN,GAAa,UAAW,KAA5B,C;  
QACI,OAAO,gBAAGB,UAAhB,C;OAEX,eAAe,UAAW,W;MAC1B,YAAy,C;MACZ,OAAO,QAAS,UAAhB,C;  
QACI,MAAM,YAAN,EAAM,oBAAN,UAAiB,QAAS,O;;MAE9B,IAAI,QAAQ,KAAM,OAAIB,C;QACI,MAAM,  
KAAN,IAAe,I;OAEhB,OAAO,K;K;IAIX,yB;MAG6C,sBAAy,OAAZ,E;K;wGAE7C,yB;MAAA,+D;MAAA,gC;Q  
AI0B,gBAAf,gB;QAAqB,aJW5B,W;QIXA,OJYO,SIZoC,Q;O;KAJ/C,C;yGAOA,yB;MAAA,4E;MAAA,gE;MAA  
A,0C;QAI,qBAaQb,QAARb,C;QAC8B,gBAAvB,eAAa,QAAb,C;QAA6B,aJGpC,W;QIHA,OJIO,SII4C,Q;O;KA  
LvD,C;IASA,wB;MAG2C,oBAAU,OAAV,E;K;sGAE3C,yB;MAAA,uE;MAAA,gC;QAI8B,gBAAnB,oB;QAAyB,  
aJVhC,W;QIUA,OJTO,SISwC,Q;O;KAJnD,C;wGAOA,yB;MAAA,wE;MAAA,0C;QAIcC,gBAA3B,mBAAiB,QA  
AjB,C;QAAiC,aJbXc,W;QIiBA,OJhBO,SIgBgD,Q;O;KAJ3D,C;IAQA,qB;MAIuD,oBAAU,IAAV,E;K;sGAEvD,  
yB;MAAA,wE;MAAA,gC;QAIiC,gBAAtB,oB;QAA4B,aJ/BnC,W;QI+BA,OJ9BO,SI8B2C,Q;O;KAJtD,C;uGAOA  
,yB;MAAA,uE;MAAA,0C;QAIyC,gBAA9B,mBAAoB,QAAPb,C;QAAoC,aJtC3C,W;QIsCA,OJrCO,SIqCmD,Q;  
O;KAJ9D,C;IAQA,mC;MAOqB,Q;MAAA,kC;MAAjB,iBAAC,CAAd,yB;QACI,sBAAK,KAAL,EAAC,KAAd,C;;  
K;IAIR,+B;MAMuD,sBAAQ,4BAAR,C;K;IAEvD,6B;MAIwE,kBAAhB,0B;MAAwB,uB;MAAxB,OJJE7C,W;K;II  
mEX,4B;MAQI,gBAAGB,SAAhB,EAAsB,cAAtB,C;K;IAGJ,2C;MAQI,gBAAGB,SAAhB,EAAsB,UAAtB,C;K;IA  
GJ,2C;MACI,IAAI,IAAK,KAAL,IAAa,CAAjB,C;QAAoB,M;MAEpB,YAAy,YAAy,IAAZ,C;MACZ,gBAAC,KA  
Ad,EAAqB,UAArB,C;MAEA,aAAU,CAAV,MAAkB,KAAM,OAAxB,M;QACI,iBAAK,CAAL,EAAU,MAAM,C  
AAN,CAAV,C;;K;IAIR,uC;MACI,OAAO,gBAAkB,IAAlB,O;K;IAGX,iF;MAII,oCAAA,2BAAkB,UAAIB,EAA8B  
,QAA9B,EAAwC,MAAO,OAA/C,C;MACb,gBAAGB,WAAW,UAAx,I;MACHb,oCAAA,2BAAkB,iBAAlB,EAAq  
C,oBAAoB,SAAPb,IAArC,EAAoE,WAAy,OAAhF,C;MAEb,IAAI,WAAB,QAAO,WAAP,CAAIB,IAAyC,WA  
AkB,QAAO,MAAP,CAA/D,C;QACI,eAAsB,MAAY,UAAS,UAAT,EAAqB,QAARb,C;QACtB,WAAy,KAAL,QA  
AJ,EAAC,iBAAd,C;;QAExB,IAAI,WAAW,WAAx,IAA0B,qBAaQb,UAAAnD,C;UACI,iBAAC,CAAd,UAAAsB,SA  
AtB,U;YACI,YAAy,oBAAoB,KAAPb,IAAZ,IAAyC,OAAO,aAAa,KAAb,IAAP,C;;;UAG7C,mBAAC,YAAy,CA  
AZ,IAAd,aAAmC,CAAnC,Y;YACI,YAAy,oBAAoB,OAAPb,IAAZ,IAAyC,OAAO,aAAa,OAAb,IAAP,C;;;K;8G  
AMzD,qB;MAEGf,gB;K;kGAehF,yB;MAAA,4D;MAAA,4B;QAC8E,OAAK,aAAL,SAAK,C;O;KADnF,C;sGAI  
A,gC;MAEL,OAAI,SAAJ,GAEL,SAFJ,GAIL,SN83BoB,Q;K;IM13B5B,mC;MAEL,IAAI,QAAQ,CAAZ,C;QACI,oB  
;OAEJ,OAAO,K;K;IAGX,mC;MAEL,IAAI,QAAQ,CAAZ,C;QACI,oB;OAEJ,OAAO,K;K;IAIX,mC;MAIqD,mB;K  
;IAErD,wC;MPzNI,IAAI,EOgOI,YAAy,CPhOhB,CAAJ,C;QACI,cO+NqB,gC;QP9NrB,MAAM,gCAAYB,OAAQ,  
WAAjC,C;Q;IOiOd,8C;MAAoE,Y;K;I8D1PV,qC;MAAiC,6B;K;uDAIvF,mB;MACI,qB;MACA,eAAe,e;MACf,O  
AAO,QAAS,UAAhB,C;QACI,IAAI,OAAA,QAAS,OAAT,EAAMB,OAAnB,CAAJ,C;UACI,QAAS,S;UACT,OAA  
O,I;;MAGf,OAAO,K;K;yDAGX,oB;MAGoB,Q;MAFhB,qB;MACA,eAAe,K;MACC,0B;MAAhB,OAGb,cAAhB  
,C;QAAgB,yB;QACZ,IAAI,eAAI,OAAJ,CAAJ,C;UAAkB,WAAW,I;;MAEjC,OAAO,Q;K;IAKuC,sE;MAAA,qB;  
QAAE,OAAM,gBAAN,mB;O;K;4DAFpD,oB;MAEY,Q;MADR,qB;MACA,OAAoC,YAA5B,iEAA4B,EAAU,oD  
AAV,C;K;IAKU,sE;MAAA,qB;QAAE,QAAO,gBAAP,mB;O;K;4DAFpD,oB;MAEY,Q;MADR,qB;MACA,OAAo  
C,YAA5B,iEAA4B,EAAU,oDAAV,C;K;gDAGxC,Y;MACI,qB;MACA,eAAe,IAAK,W;MACpB,OAAO,QAAS,U  
AAhB,C;QACI,QAAS,O;QACT,QAAS,S;;K;iDAIjB,Y;MAE8B,OAAA,IAAK,U;K;yDAGnC,Y;K;;IC3CgD,+B;M  
AAiC,oC;MACjF,gBAA8B,C;K;8CAM9B,mB;MAMI,qB;MACA,iBAAI,SAAJ,EAAU,OAAV,C;MACA,OAAO,I  
;K;mDAGX,2B;MAMc,UACF,M;MANR,oCAAA,4BAAMb,KAANB,EAA0B,SAAI1B,C;MAEb,qB;MACA,aAAa,  
K;MACb,cAAc,K;MACJ,0B;MAAV,OAAU,cAAV,C;QAAU,mB;QACN,kBAAI,eAAJ,EAAI,uBAAJ,WAAc,CA  
Ad,C;QACA,UAAU,I;;MAEd,OAAO,O;K;0CAGX,Y;MACI,qB;MACA,yBAAy,CAAZ,EAAe,SAAf,C;K;IAKiB,

gE;MAAA,qB;QAAE,OAAM,gBAAN,mB;O;K;sDAFvB,oB;MACI,qB;MACA,OAAO,kBAAU,8CAAV,C;K;IAK  
U,gE;MAAA,qB;QAAE,QAAO,gBAAP,mB;O;K;sDAFvB,oB;MACI,qB;MACA,OAAO,kBAAU,8CAAV,C;K;6C  
AIX,Y;MAAqD,iD;K;mDAErD,mB;MAAoD,0BAAQ,OAAR,KAAoB,C;K;kDAExE,mB;MACqB,Q;MAAA,6B;  
MAAjB,iBAAc,CAAd,yB;QACI,IAAI,wBAAI,KAAJ,GAAC,OAAd,CAAJ,C;UACI,OAAO,K;;MAGf,OAAO,E;K;  
sDAGX,mB;MACI,iBAAc,sBAAd,WAA+B,CAA/B,U;QACI,IAAI,wBAAI,KAAJ,GAAC,OAAd,CAAJ,C;UACI,O  
AAO,K;;MAGf,OAAO,E;K;iDAGX,Y;MAA6D,iCAAA,CAAb,C;K;yDAC7D,iB;MAAuE,sDAAiB,KAAjB,C;K;o  
DAGvE,8B;MAA4E,uCAAQ,IAAR,EAAC,SAAd,EAAyB,OAAzB,C;K;wDAE5E,8B;MAII,eAAe,0BAAa,SAAb,  
C;MACf,YAAO,UAAU,SAAV,I;MnEuDX,iBAAc,CAAd,UAAsB,KAAtB,U;QmEtDiB,e;QACA,iB;;K;2CAIjB,iB  
;MAMI,IAAI,UAAU,IAAd,C;QAAoB,OAAO,I;MAC3B,IAAI,2BAAJ,C;QAAuB,OAAO,K;MAE9B,OAAO,oCA  
Aa,uBAAc,IAAd,EAAoB,KAApB,C;K;6CAGxB,Y;MAG+B,OAAA,oCAAA,yBAAGB,IAAhB,C;K;IAG5C,kD;M  
AAA,oB;MACI,eAcSb,C;MACtB,cAIqB,E;K;yDAErB,Y;MAAkC,sBAAQ,gB;K;sDAE1C,Y;MAEW,Q;MADP,I  
AAI,CAAC,cAAL,C;QAAgB,MAAM,6B;MACtB,eAAO,mBAAP,EAAO,2BAAP,O;MACA,OAAO,wBAAI,WA  
AJ,C;K;wDAGX,Y;MtE5CJ,IAAI,EsE6CU,gBAAQ,EtE7CIB,CAAJ,C;QACI,csE4CwB,sE;QtE3CxB,MAAM,6BA  
AsB,OAAQ,WAA9B,C;OsE6CF,6BAAS,WAAT,C;MACA,eAAQ,W;MACR,cAAO,E;K;;IAOqB,6D;MAHpC,oB;  
MAGmD,wD;MAG3C,oCAAA,4BAAmB,KAAAnB,EAA0B,WAAyB,KAAAnD,C;MACb,eAAa,K;K;iEAGjB,Y;MA  
AsC,sBAAQ,C;K;+DAE9C,Y;MAAGC,mB;K;8DAEhC,Y;MACI,IAAI,CAAC,kBAAL,C;QAAoB,MAAM,6B;MA  
E1B,eAAO,mCAAP,EAAO,YAAP,C;MACA,OAAO,wBAAI,WA AJ,C;K;mEAGX,Y;MAAoC,sBAAQ,CAAR,I;K  
;+DAEpC,mB;MACI,wBAAI,YAAJ,EAAW,OAA X,C;MACA,mC;MACA,cAAO,E;K;+DAGX,mB;MtEIFJ,IAAI,  
EsEmFU,gBAAQ,EtEnFIB,CAAJ,C;QACI,csEkFwB,4E;QtEjFxB,MAAM,6BAAsB,OAAQ,WAA9B,C;OsEkFF,w  
BAAI,WA AJ,EAAU,OAAV,C;K;;IAIgb,+D;MAAuF,8B;MAAtF,kB;MAA0C,4B;MAC/D,eAAyB,C;MAGrB,oC  
AAa,2BAAkB,gBAAIB,EAA6B,OAA7B,EAAc,WAAK,KAA3C,C;MACb,eAAa,UAAU,gBAAV,I;K;wDAGjB,  
0B;MACI,oCAAA,4BAAmB,KAAAnB,EAA0B,YAA1B,C;MAEb,WAAK,aAAI,mBAA Y,KAAZ,IAAJ,EAAuB,OA  
AvB,C;MACL,mC;K;wDAGJ,iB;MACI,oCAAA,2BAAkB,KAAIB,EAAyB,YAAzB,C;MAEb,OAAO,wBAAK,mB  
AAY,KAAZ,IAAL,C;K;6DAGX,iB;MACI,oCAAA,2BAAkB,KAAIB,EAAyB,YAAzB,C;MAEb,aAAa,WAAK,kB  
AAS,mBAA Y,KAAZ,IAAT,C;MACIB,mC;MACA,OAAO,M;K;wDAGX,0B;MACI,oCAAA,2BAAkB,KAAIB,EA  
AyB,YAAzB,C;MAEb,OAAO,WAAK,aAAI,mBAA Y,KAAZ,IAAJ,EAAuB,OAAvB,C;K;mGAGO,Y;MAAQ,mB  
;K;2DAE/B,Y;MAA+C,WAAK,iB;K;;ICxMN,8B;MAAiC,sB;MAwCnF,uBAAoC,I;MA+CpC,yBAA6C,I;K;IAIF  
R,oD;MAAC,wB;MAGIC,gBAAqB,K;K;IFAHa,Y;MAAA,yB;K;uGAKZ,Y;MAAQ,oB;K;8DAE9B,oB;MAKI,eA  
Ae,IAAK,S;MACpB,gBAAc,Q;MACd,OAAO,Q;K;wDAGX,Y;MAA+B,iEAAC,IAAd,C;K;wDAC/B,Y;MAAkC,i  
EAAC,IAAd,C;K;sDACIC,iB;MAA4C,+DAAY,IAAZ,EAakB,KAAIB,C;K;;IAIB5C,8E;MAAA,wE;MAAsC,2CA  
AK,KAAAM,IAAX,EAAGB,KAAAM,MAAtB,C;MAAtC,Y;K;IASBJ,+C;MACsE,6B;K;mEACIE,mB;MAAmD,kCA  
Ac,OAAd,C;K;iEAEnD,mB;MAAiD,gCAAY,OAAZ,C;K;;yCAIrD,Y;MACI,YAAQ,Q;K;IAOQ,+F;MAAA,sD;M  
AAS,6B;K;uFACb,mB;MAAwC,MAAM,qCAA8B,8BAA9B,C;K;mFAC9C,Y;MACI,4BAAwB,Q;K;4FAG5B,mB  
;MAAsD,sDAAY,OAAZ,C;K;IAI3C,oH;MAAA,kD;K;4GACH,Y;MAAkC,OAAA,0BAAc,U;K;yGACHd,Y;MAA  
yB,OAAA,0BAAc,OAAO,I;K;2GAC9C,Y;MAAwB,0BAAc,S;K;;sFAL9C,Y;MACI,oBAAoB,oCAAQ,W;MAC5  
B,6G;K;0FAOJ,mB;MACI,qB;MACA,IAAI,+CAAY,OAAZ,CAAJ,C;QACI,4BAAwB,cAAO,OAAP,C;QACxB,O  
AAO,I;OAEX,OAAO,K;K;oIAGY,Y;MAAQ,OAAA,4BAAwB,K;K;4FAEvD,Y;MAAsC,4BAAwB,iB;K;;0FA9B  
1E,Y;MACI,IAAI,4BAAJ,C;QACI,6F;OA+BJ,OAAO,mC;K;kDAKf,gB;MAEyB,Q;MADrB,qB;MACqB,OAAA,I  
9E8Q2D,QAAQ,W;M8E9QxF,OAAqB,cAArB,C;QAAqB,wB;QAAf,U9EiMsD,U;Q8EjMjD,Y9E8MiD,Y;Q8E7M  
xD,iBAAI,GA AJ,EAAS,KAA T,C;;K;IAQc,iG;MAAA,sD;MAAS,oC;K;yFACf,mB;MAAwC,MAAM,qCAA8B,gC  
AA9B,C;K;qFAC9C,Y;MAAuB,4BAAwB,Q;K;8FAE/C,mB;MAAsD,wDAAC,OAAd,C;K;IAI3C,sH;MAAA,kD;  
K;8GACH,Y;MAAkC,OAAA,0BAAc,U;K;2GACHd,Y;MAAyB,OAAA,0BAAc,OAAO,M;K;6GAC9C,Y;MAAw  
B,0BAAc,S;K;;wFAL9C,Y;MACI,oBAAoB,oCAAQ,W;MAC5B,+G;K;sIAOmB,Y;MAAQ,OAAA,4BAAwB,K;K  
;8FAEvD,Y;MAAsC,4BAAwB,iB;K;;4FAnB1E,Y;MACI,IAAI,8BAAJ,C;QACI,iG;OAoBJ,OAAO,qC;K;gDAGf,e  
;MACI,qB;MACA,WAAW,YAAQ,W;MACnB,OAAO,IAAK,UAAZ,C;QACI,YAAY,IAAK,O;QACjB,QAAQ,KAA  
AM,I;QACd,IAAI,YAAO,CAAP,CAAJ,C;UACI,YAAY,KAAAM,M;UACIB,IAAK,S;UACL,OAAO,K;;MAGf,OA  
AO,I;K;kDAIX,Y;K;;IC3I+C,8B;MAAiC,oC;K;0CAEHf,iB;MAMI,IAAI,UAAU,IAAd,C;QAAoB,OAAO,I;MAC3  
B,IAAI,0BAAJ,C;QAAsB,OAAO,K;MAC7B,OAAO,mCAAY,mBAAU,IAAV,EAAGB,KAAhB,C;K;4CAGvB,Y;

MAG+B,OAAA,mCAAY,2BAAkB,IAAIB,C;K;;ICbT,0B;MAAuD,8B;MAAIC,4B;MACvD,4BAAkC,K;K;gCAk  
BIC,Y;MAEI,qB;MACA,4BAAa,I;MACb,OAAO,I;K;qCAGX,Y;K;iDAGA,uB;K;iFAG8B,Y;MAAQ,OAAA,oBA  
AM,O;K;sCAC5C,iB;MACyC,Q;MAAA,oCAAM,0BAAW,KAAX,CAAN,4D;K;sCACzC,0B;MAIW,IAAa,I;MA  
HpB,qB;MACA,0BAAW,KAAX,C;MAEoB,gBAAb,qBAAM,KAAN,C;MAAqB,qC;MAA5B,OAAO,CAAA,OfE8  
BjB,SsE9BI,2D;K;oCAGX,mB;MACI,qB;MACM,oBAAY,MAAK,OAAL,C;MACIB,qC;MACA,OAAO,I;K;sCA  
GX,0B;MACI,qB;MACM,oBAAY,QAAO,mCAAoB,KAAPB,CAAP,EAAMC,CAAnC,EAAsC,OAATC,C;MACIB  
,qC;K;yCAGJ,oB;MACI,qB;MACA,IAAI,QAAS,UAAb,C;QAAwB,OAAO,K;MAE/B,uBAAA,oBxEioDoB,QMjr  
D0C,YkEgDrD,QIEhDqD,CNirD1C,C;MwEhoDpB,qC;MACA,OAAO,I;K;yCAGX,2B;MACI,qB;MACA,mCAAo  
B,KAAPB,C;MAEA,IAAI,UAAS,SAAb,C;QAAmB,OAAO,oBAAO,QAAP,C;MAC1B,IAAI,QAAS,UAAb,C;QA  
AwB,OAAO,K;MAE3B,IADE,KACf,e;QAAQ,OAAO,oBAAO,QAAP,C;WAcF,IAFE,KAEF,O;QAAK,uBIE7Dq  
D,YkE6D7C,QIE7D6C,CNirD1C,QwEpnD6B,oBxEonD7B,C;;QwEnnDR,uBAAoC,cAA5B,oBAA4B,EA AV,CA  
AU,EAAP,KAAO,CAAY,QIE9DE,YkE8DK,QIE9DL,CkE8DF,EAA4C,cAAN,oBAAM,EAAY,KAAZ,EAAMB,S  
AAnB,CAA5C,C;;MAG5D,qC;MACA,OAAO,I;K;2CAGX,iB;MACI,qB;MACA,0BAAW,KAAX,C;MACA,qC;M  
ACA,OAAW,UAAS,sBAAb,GACG,oBAAY,MADf,GAGG,oBAAY,QAAO,KAAP,EAAC,CAAd,CAAI,CAAm  
C,CAAnC,C;K;uCAGR,mB;MAEkB,Q;MADd,qB;MACc,2B;MAAd,mD;QACI,IAAI,4BAAM,KAAN,GAAgB,O  
AAhB,CAAJ,C;UACU,oBAAY,QAAO,KAAP,EAAC,CAAd,C;UACIB,qC;UACA,OAAO,I;;MAGf,OAAO,K;K;8  
CAGX,8B;MACI,qB;MACA,qC;MACM,oBAAY,QAAO,SAAP,EAAb,UAAU,SAAV,IAAIB,C;K;gCAGtB,Y;M  
ACI,qB;MACA,uB9BhHuC,E;M8BiHvC,qC;K;wCAIJ,mB;MAA+C,OAAM,QAAN,oBAAM,EAQ,OAAR,C;K;  
4CAErD,mB;MAAmD,OAAM,YAAN,oBAAM,EAAY,OAAZ,C;K;mCAEzD,Y;MAA0B,uBAAC,oBAAd,C;K;OC  
AE1B,iB;MAGe,UAGL,MAHK,EAMO,M;MAPIB,IAAI,KAAM,OAAN,GAAa,SAAjB,C;QACI,OAAO,2D;OAG  
c,gBAAxB,eAAK,SAAL,IAAK,gBAAL,yB;MxEuwBL,UAAU,SAAV,EwEvwBsC,KxEuwBtC,EAD+F,CAC/F,E  
ADoH,CACpH,EADuI,gBACvI,C;MwErwBI,IAAI,KAAM,OAAN,GAAa,SAAjB,C;QACI,MAAM,SAAN,IAAc,6  
E;OAGIB,OAAO,K;K;kCAGX,Y;MACI,OAAO,EAAS,MAAM,MAAK,oBAAL,C;K;yCAI1B,Y;MACI,IAAI,yBA  
AJ,C;QAAGB,MAAM,oC;K;+CAG1B,iB;MACI,oCAAa,kCAAYB,SAAZB,C;MADoB,Y;K;wDAIrC,iB;MACI,oC  
AAa,mCAA0B,SAA1B,C;MAD6B,Y;K;;IAI9C,+B;MAAA,mD;MAG8B,sB9BRa,E8BQb,C;MAH9B,Y;K;IAKA,  
kD;MAAA,mD;MAIKD,sB9BdP,E8BcO,C;MAJID,Y;K;IAMA,2C;MAAA,mD;MAGqD,sBIENa,YkEMR,QIENQ,  
CkEmB,C;MAHrD,Y;K;ICrBJ,0C;MACI,IAAI,6BAAJ,C;QACU,KAAY,MAAK,UAAL,C;;QAEIB,UAAU,KA AV  
,EAAwC,CAAxC,EAAD,cAAN,KAAM,CAAjD,EAA4D,eAAW,UAAAX,CAA5D,C;;K;IAMiB,kD;MAAA,uB;QA  
AgB,OAAA,kBAAW,SAAQ,CAAR,EA AW,CAAX,C;O;K;IAFPD,4C;MACI,IAAI,6BAAJ,C;QACI,iBAAiB,gC;Q  
ACX,KAAY,MAAK,UAAL,C;;QAEIB,UAAU,KA AV,EAAwC,CAAxC,EAAD,cAAN,KAAM,CAAjD,EAA4D,  
UAA5D,C;;K;IAIR,gE;MACI,IAAI,aAAY,UAAU,CAAV,IAAZ,CAAJ,C;QACI,UAAU,KA AV,EAAwC,SAAXC,  
EAAMD,UAAU,CAAV,IAAnD,EAAG,EAAhE,C;Q;IAMiB,gC;MAAGB,OAAE,iBAAF,CAAE,EAAU,CAAV,C;  
K;IAF3C,0B;MACI,IAAI,6BAAJ,C;QACI,iBAAiB,gB;QACX,KAAY,MAAK,UAAL,C;;QAEIB,UAAU,KA AV,E  
AAwC,CAAxC,EAAD,cAAN,KAAM,CAAjD,EAA4D,cAA5D,C;;K;IAaa,kD;MAAoB,QAAC,IAAM,CAAP,KA  
Aa,IAAM,CAAnB,K;K;IARzC,uC;MACI,sC;QAAiC,OAAjC,yB;OACA,4BAA4B,K;MAE5B,YAAY,E;MAGZ,iB  
AAc,CAAd,UAAAsB,GAATB,U;QAAiC,KAAY,MAAK,KAAL,C;MAC7C,iBAAiB,kC;MACX,KAAY,MAAK,UA  
AL,C;MACIB,mBAAC,CAAd,YAAsB,KAAM,OAA5B,Y;QACI,QAAQ,MAAM,UAAQ,CAAR,IAAN,C;QACR,Q  
AAQ,MAAM,OAAN,C;QACR,IAAI,CAAC,IAAM,CAAP,OAAc,IAAM,CAAPB,KAA0B,KAAC,CAAnC,C;UA  
AsC,OAAO,K;;MAEjD,4BAA4B,I;MAC5B,OAAO,I;K;IAIX,2D;MACI,aAAa,gBAAMB,KAAM,OAAzB,O;MAC  
b,aAAa,YAAU,KA AV,EAAiB,MAAjB,EAAYB,KAzB,EAAGC,YAAhC,EAA8C,UAA9C,C;MACb,IAAI,WAA  
W,KAAf,C;QACI,aAAU,KA AV,OAAiB,YAAjB,M;UAA+B,MAAM,CAAN,IAAW,OAAO,CAAP,C;Q;IAIID,4D;  
MAEI,IAAI,UAAS,GAAb,C;QACI,OAAO,K;OAGX,aAAa,CAAC,QAAQ,GAAR,IAAD,IAAgB,CAAhB,I;MACb  
,WAAW,YAAU,KA AV,EAAiB,MAAjB,EAAYB,KAzB,EAAGC,MAAhC,EAAwC,UAAxC,C;MACX,YAAY,Y  
AAU,KA AV,EAAiB,MAAjB,EAAYB,SAAS,CAAT,IAAZB,EAAGC,GAAR,C,EAA0C,UAA1C,C;MAEZ,aAAiB,S  
AAS,MAAb,GAAqB,KAArB,GAAGC,M;MAG7C,gBAAGB,K;MACHb,iBAAiB,SAAS,CAAT,I;MACjB,aAAU,K  
AAV,OAAiB,GAAjB,M;QAEQ,iBAAa,MAAb,IAAuB,cAAc,GAAR,C;UACI,gBAAGB,KAAC,SAAL,C;UACHb  
,iBAAiB,MAAM,UAAN,C;UAEjB,IAAI,UAAW,SAAQ,SAAR,EAAMB,UAAAnB,CAAX,IAA6C,CAAjD,C;YACI  
,OAAO,CAAP,IAAY,S;YACZ,6B;;YAEA,OAAO,CAAP,IAAY,U;YACZ,+B;;eAGR,iBAAa,MAAb,C;UACI,OA

AO,CAAP,IAAY,KAACK,SAAL,C;UACZ,6B;;UAGA,OAAO,CAAP,IAAY,MAAM,UAAN,C;UACZ,+B;;;MAMZ ,OAAO,M;K;ICrGX,4C;MAMoB,UACM,M;MAHtB,IAAI,iBAAJ,C;QAAkB,OAAO,C;MACzB,aAAa,C;MACb, wBAAgB,SAAhB,gB;QAAgB,cAAA,SAAhB,M;QAEQ,oB;UAAmB,U;;UACnB,I1BFiC,MAAa,Y0BEnC,O1BFm C,C0BE9C,C;YAAwD,iCAAhC,OAAgC,C;iBAExD,uC;YAAmC,2BAAR,OAAQ,C;eACnC,wC;YAAmC,2BAAR ,OAAQ,C;eACnC,sC;YAAmC,2BAAR,OAAQ,C;eACnC,uC;YAAmC,2BAAR,OAAQ,C;;YAEA,kBAAR,OAAQ, C;;QATvC,wB;QAYA,SAAS,MAAK,MAAL,QAAC,WAAd,I;;MAEb,OAAO,M;K;;ICTP,uC;MAAA,2C;K;2DAC I,0B;MAA2D,sBAAU,MAAV,C;K;gEAE3D,iB;MAA6C,Q;MAAA,wEAAqB,C;K;;IAHtE,mD;MAAA,kD;QAA A,iC;OAAA,2C;K;;MC0BA,iC;MAKA,8B;MA6CA,0BAAmE,I;;IAzEnE,kC;MAAA,oB;MAA+B,8C;K;2CAE3B, mB;MAAYd,MAAM,qCAA8B,iCAA9B,C;K;uCAC/D,Y;MACI,WAAa,Q;K;uDAGjB,mB;MAAgE,OAAA,WAAa ,uBAAc,OAAc,C;K;0CAE7E,Y;MAAwE,OAAA,iCAAY,W;K;qDAEpF,mB;MACI,IAAI,iBAAS,OAAT,CAAJ,C; QACI,WAAa,cAAO,OAAQ,IAAf,C;QACb,OAAO,I;OAEX,OAAO,K;K;wFAGY,Y;MAAQ,OAAA,WAAa,K;K;; 8BA6ChD,Y;MACI,0BAAY,Q;K;0CAIhB,e;MAAmD,OAAA,0BAAY,gBAAS,GAAT,C;K;4CAE/D,iB;MAAmE, gBAAZ,0B;MAAY,c;;QvE+mDnD,Q;QADhB,IAAI,wCAAsB,mBAA1B,C;UAAqC,aAAO,K;UAAP,e;SACrB,2B; QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UAAm,IuE/mDmD,uBAAS,gBvE+mD9C,OuE/mDwD,MAAV,QvE+mD 5D,C;YAAwB,aAAO,I;YAAP,e;;QAC9C,aAAO,K;;MuEhnDgD,iB;K;kFAInD,Y;MACI,IAAI,+BAAJ,C;QACI,0 BAAW,qB;OAEf,OAAO,sC;K;uCAGf,Y;MAAgF,iC;K;kCAEHf,e;MAA+C,OAAA,0BAAY,WAAI,GAAJ,C;K;o CAE3D,sB;MAAgD,OAAA,0BAAY,aAAI,GAAJ,EAAS,KAAT,C;K;qCAE5D,e;MAAYC,OAAA,0BAAY,cAAO, GAAP,C;K;+EAEvB,Y;MAAQ,OAAA,0BAAY,K;K;;IA5DID,0C;MAAA,iD;MAAuD,8B;MAvC3D,mB;MAwCQ ,8BAAmB,W;MACnB,2BAAgB,WAAy,S;MAFhC,Y;K;IAKA,+B;MAAA,iD;MAGuB,aAAK,kEAAL,Q;MAHvB ,Y;K;IAKA,4D;MAAA,iD;MAQ8D,qB;M7EpC9D,IAAI,E6EsCQ,mBAAmB,C7EtC3B,CAAJ,C;QACI,c6EqCgC, +C;Q7EpChC,MAAM,gCAAYB,OAAQ,WAAjC,C;OAFV,IAAI,E6EuCQ,cAAc,C7EvCtB,CAAJ,C;QACI,gB6EsC 2B,yC;Q7ErC3B,MAAM,gCAAYB,SAAQ,WAAjC,C;O6E0BV,Y;K;IAcA,gD;MAAA,iD;MAA2C,eAAK,eAAL,E AAsB,GAAtB,Q;MAA3C,Y;K;IAGA,yC;MAAA,iD;MAG8C,qB;MAC1C,KAACK,gBAAO,QAAP,C;MAJT,Y;K;I AqCJ,4B;MAK8E,gBAAnE,aAmB,gEAAnB,C;MAA2E,wB;MAAIF,O1EvCO,S;K;;M2EjEP,uB;;kCAyCA,mB; MACI,UAAU,gBAAI,aAAI,OA AJ,EA Aa,IAAb,C;MACd,OAAO,W;K;8BAGX,Y;MACI,gBAAI,Q;K;uCAOR,mB ;MAA6D,OAAA,gBAAI,mBAAY,OAAZ,C;K;gCAEjE,Y;MAAYC,OAAA,gBAAI,U;K;iCAE7C,Y;MAAqD,OAA A,gBAAI,KAACK,W;K;qCAE9D,mB;MAAkD,OAAA,gBAAI,cAAO,OAAP,CAAJ,Q;K;+EAEpB,Y;MAAQ,OAA A,gBAAI,K;K;;IA5D1C,6B;MAAA,iD;MAGoB,8B;MAZxB,mB;MAAq,oBAAM,gB;MAJV,Y;K;IAOA,yC;MAA A,iD;MAG2C,8B;MAnB/C,mB;MAoBQ,oBAAM,eAAgB,QAAS,KAazB,C;MACN,qBAAO,QAAP,C;MALJ,Y;K ;IAQA,4D;MAAA,iD;MAQ2D,8B;MAhC/D,mB;MAiCQ,oBAAM,eAAgB,eAAhB,EAaiC,UAAjC,C;MATV,Y;K; IAYA,gD;MAAA,iD;MAA2C,eAAK,eAAL,EAAsB,GAAtB,Q;MAA3C,Y;K;IAEA,oC;MAAA,iD;MAM0C,8B;M A5C9C,mB;MA6CQ,oBAAW,G;MAPf,Y;K;IAMCJ,+B;MAKuC,gBAA5B,eAAQ,eAAR,C;MAAoC,6B;MAA3C, O3ENO,S;K;I4EzD6B,uC;MAAC,kC;MAErC,oBAAkC,kB;MACIC,sBAAyB,C;K;2EAHY,Y;MAAA,8B;K;2FAG rC,Y;MAAA,0B;K,OAAA,gB;MAAA,0B;K;gDAGA,sB;MACI,eAAe,aAAS,qBAAy,GAAZ,C;MACxB,mBAAm B,6BAAsB,QAAtB,C;MACnB,IAAI,oBAAJ,C;QAEI,kBAAW,QAAX,IAAuB,mCAAY,GAAZ,EAaiB,KAAjB,C; ;QAEvB,IAAI,6BAAJ,C;UAEI,YAA+B,Y;UAC/B,IAAI,aAAS,gBAAO,KAAM,IAAb,EAakB,GAaIB,CAAb,C;Y ACI,OAAO,KAAM,gBAAS,KAAT,C;;YAEb,kBAAW,QAAX,IAAuB,CAAQ,KAAR,EA Ae,mCAAY,GAAZ,EA AiB,KAAjB,CAAf,C;YACvB,6B;YACA,OAAO,I;;UAIX,YAAuC,Y;UACvC,cAAkB,wBAAN,KAAM,EAaiB,G AAjB,C;UACIB,IAAI,eAAJ,C;YACI,OAAO,OAAM,gBAAS,KAAT,C;WAEX,KAAy,MAAK,mCAAY,GAAZ,EA AiB,KAAjB,CAAL,C;;MAG1B,6B;MAEA,OAAO,I;K;iDAGX,e;MAEuB,Q;MADnB,eAAe,aAAS,qBAAy,GA AZ,C;MACL,oCAAsB,QAAtB,C;MAAA,iB;QAAmC,OAAO,I;OAA7D,mBAAmB,I;MACnB,IAAI,6BAAJ,C;QA CI,YAAgC,Y;QACHC,IAAI,aAAS,gBAAO,KAAM,IAAb,EAakB,GAaIB,CAAb,C;U5BzDR,O4B0D6B,iB5B1D vB,C4B0DmC,Q5B1DnC,C;U4B2DM,6B;UACA,OAAO,KAAM,M;;UAEb,OAAO,I;;QAGX,YAAuC,Y;QACvC, 8BAAc,KAAd,iB;UACI,cAAy,MAAM,KAAN,C;UACZ,IAAI,aAAS,gBAAO,GAAP,EAAY,OAAM,IAAI,CAA b,C;YACI,IAAI,KAAM,OAAN,KAAc,CAAI,C;cACU,KAAN,UAA2B,C;c5BtE/C,O4BwEqC,iB5BxE/B,C4BwE 2C,Q5BxE3C,C;;c4B2EoB,KAAy,QA AO,KAAP,EAAC,CAAd,C;;YAEtB,6B;YAEA,OAAO,OAAM,M;;MAIzB, OAAO,I;K;0CAGX,Y;MACI,oBAAa,kB;MACb,YAAO,C;K;mDAGX,e;MAAYC,uBAAS,GAAT,S;K;8CAEzC,e; MAA+B,Q;MAAA,+BAAS,GAAT,8B;K;+CAE/B,e;MACuB,Q;MAAA,oCAAsB,aAAS,qBAAy,GAAZ,CAA/B,C

;MAAA,iB;QAAoD,OAAO,I;OAA9E,mBAAMb,I;MACnB,IAAI,6BAAJ,C;QACI,YAAgC,Y;QAChC,IAAI,aAAS ,gBAAO,KAAM,IAAb,EAakB,GAAIB,CAAb,C;UACI,OAAO,K;;UAEP,OAAO,I;;QAGX,YAAuC,Y;QACvC,O AaA,wBAAN,KAAM,EAAiB,GAAjB,C;;K;uDAlrB,0B;MACI,sB;;Q7F+nCY,Q;QAAhB,iD;UAAgB,cAAhB,e;U AAsB,I6F/nCK,aAAS,gB7F+nCA,O6F/nCa,IAAb,M7F+nCd,C;YAAwB,qBAAO,O;YAAP,uB;;QAC9C,qBAAO,I; ;M6FhoCH,yB;K;IAIO,8E;MAAA,wD;MACH,aAAy,E;MAEZ,YAA0B,MAAa,MAAK,qCAAL,C;MACvC,gBA Ae,E;MAEf,oBAA4B,I;MAC5B,eAAc,K;MACd,iBAAgB,E;MACHb,iBAAqC,I;K;yEAERc,Y;MACI,IAAI,6BAA wB,YAA5B,C;QACI,gBAAqB,iBAAqD,O;QAC1E,IAAI,4DAAc,SAaIB,C;UACI,OAAO,C;OAGf,IAAI,yDAAa, SAAK,OAAiB,C;QACI,oBAAe,2CAAW,UAAK,aAAL,CAAX,C;QACf,eAAU,iC;QACV,iBAAy,C;QACZ,OAA O,C;;QAEp,oBAAe,I;QACf,OAAO,C;;K;mEAIf,Y;MACI,IAAI,eAAS,EAAb,C;QACI,aAAQ,oB;MACZ,OAAO,e AAS,C;K;gEAGpB,Y;MAEoB,Q;MADhB,IAAI,CAAC,cAAL,C;QAAGB,MAAM,6B;MACN,IAAI,YAAJ,C;QAC Z,yBAAqD,cAArD,C;;QAEa,OAAb,iB;;MAHJ,oB;MAKA,iBAAiB,S;MACjB,aAAQ,E;MACR,OAAO,S;K;kEAG X,Y;M/E/CR,I+EgDyB,c/EhDrB,QAAJ,C;QACI,cAhByB,0B;QAIbZB,MAAM,6BAAsB,OAAQ,WAA9B,C;O+E+ CE,6BAAyB,cAAO,6BAAy,IAAnB,C;MACzB,iBAAy,I;MAEZ,uC;K;;6CAtdZ,Y;MAEI,2D;K;4DAyDJ,oB;MA CI,mBAAMb,kBAAW,QAAX,C;MACnB,OAAW,iBAAiB,SAArB,GAAgC,IAAhC,GAA0C,Y;K;;;wCCtKrD,Y; MACI,aAAR,MAAM,OAAe,CAAP,IAAO,C;MAEb,OAAO,KAAP,IAAgB,C;M7BXpB,O6BYqB,M7Bzf,C6BYu B,K7BzVb,C;M6BaF,OAAO,M;K;;ICNuB,qC;MAAC,kC;MAEnC,oBAAkC,kB;MACIC,sBAAYB,C;K;yEAHU,Y ;MAAA,8B;K;yFAGnC,Y;MAAA,0B;K,OAAA,gB;MAAA,0B;K;iDAWA,e;MACI,IAAI,0BAAJ,C;QAAoB,OAA O,K;MAC3B,OAAO,kBAAW,GAAX,MAAoB,S;K;4CAG/B,e;MACI,IAAI,0BAAJ,C;QAAoB,OAAO,I;MAC3B, YAAy,kBAAW,GAAX,C;MACZ,OAAW,UAAU,SAArB,GAAgC,KAAhC,GAA2D,I;K;8CAI/D,sB;MjFVA,IAAI ,EiFWQ,uBjFXR,CAAJ,C;QACI,cAda,qB;QAeb,MAAM,gCAAYB,OAAQ,WAAjC,C;OiFUN,eAAe,kBAAW,GA AX,C;MACf,kBAAW,GAAX,IAAkB,K;MAEIB,IAAI,aAAa,SAAjB,C;QACI,6B;QAEA,OAAO,I;;QAGP,OAAO, Q;;K;+CAIf,e;MACI,IAAI,0BAAJ,C;QAAoB,OAAO,I;MAC3B,YAAy,kBAAW,GAAX,C;MACZ,IAAI,UAAU,S AAd,C;Q9BnDJ,O8BoDyB,iB9BpDnB,C8BoD+B,G9BpD/B,C;Q8BqDE,6B;QAEA,OAAO,K;;QAGP,OAAO,I;;K ;wCAkf,Y;MACI,oBAAa,kB;MACb,YAAO,C;K;IAKA,0E;MAAA,oD;MACH,cAAkC,MAAa,MAAK,mCAAL,C ;MAC/C,kBAA4B,qBAAL,WAAK,C;MAC5B,iBAA+B,I;K;iEAE/B,Y;MAAkC,OAAA,eAAS,U;K;8DAE3C,Y;M AIuB,gB;MAHnB,UAAU,eAAS,O;MACnB,iBAAU,G;MAES,+E;MAAnB,OAAO,iD;K;gEAGX,Y;MAEkC,UAA 9B,M;MAAA,oC;MAA8B,YAAa,c;MjFchD,uB;MAeP,IAfoB,KAehB,QAAJ,C;QACI,cAhByB,0B;QAIbZB,MAA M,6BAAsB,OAAQ,WAA9B,C;;QAEN,sBAnBgB,K;;MiFde,oBAAO,sFAAP,C;K;;2CAjBnC,Y;MACI,yD;K;IAqB kD,0F;MAAA,8B;MAAA,oD;K;kHAC9B,Y;MAAQ,uB;K;oHACN,Y;MAAQ,6CAAuB,gBAAvB,C;K;2EAE9B,o B;MAAwC,OAAA,2BAAuB,aAAI,gBAAJ,EAAS,QAAT,C;K;qEAE/D,Y;MAA+B,OAAA,mCAAY,uBAAc,IAAd ,C;K;qEAC3C,Y;MAAkC,OAAA,mCAAY,uBAAc,IAAd,C;K;mEAC9C,iB;MAA4C,OAAA,mCAAY,qBAAy,IA AZ,EAakB,KAAlB,C;K;;gDAR5D,e;MAAsD,iE;K;;MCItD,sBAOsC,I;MA6CtC,yB;MAOA,4BAAkC,K;;IARIE,s D;MAZpC,oB;MAYyD,0CAAqC,GAARc,EAA0C,KAA1C,C;MACrD,oBAAuC,I;MACvC,oBAAuC,I;K;wDAEv C,oB;MACI,WAAmB,iB;MACnB,OAAa,mEAAS,QAAT,C;K;;IAIrB,wC;MAAA,oB;MAA+B,8C;K;IAE3B,sD;M AAA,oB;MACI,cAcS,C,I;MAEtC,cAcS,C,I;MAGIC,cAAO,iC;K;6DAIX,Y;MACI,OAAO,gBAAS,I;K;0DAGpB,Y; MAEI,IAAI,CAAC,cAAL,C;QAAGB,MAAM,6B;MAEtB,cAAc,0B;MACd,cAAO,O;MACa,gBAAb,OAAQ,a;;M AAF,c/E0DS,S+E1DoB,KAAO,iC/E0DzC,GAAqB,SAArB,GAA+B,I;M+EzD1B,OAAO,O;K;4DAGX,Y;MIFwBR ,IAAI,EkFvBc,eAAQ,IIFuBtB,CAAJ,C;QACI,cAdW,e;QAEX,MAAM,6BAAsB,OAAQ,WAA9B,C;OkFxBE,WA Ac,iB;MAGP,oCAAP,0BAAO,C;MACP,gCAAI,cAAO,0BAAO,IAAd,C;MAEJ,cAAO,I;K;;iDAIf,mB;MAAyD,M AAM,qCAA8B,iCAA9B,C;K;6CAC/D,Y;MACI,WAAmB,Q;K;6DAGvB,mB;MAAgE,OAAA,WAAmB,uBAAc, OAAAd,C;K;gDAEnF,Y;MAAwE,qD;K;2DAExE,mB;MACI,qB;MACA,IAAI,iBAAS,OAAT,CAAJ,C;QACI,WAA mB,cAAO,OAAQ,IAAf,C;QACnB,OAAO,I;OAEX,OAAO,K;K;8FAGY,Y;MAAQ,OAAA,WAAmB,K;K;sDAEI D,Y;MAAsC,WAAmB,iB;K;;iDAa7D,qB;MIFrBA,IAAI,EkF0BM,0BAAQ,IAAR,IAAgB,0BAAQ,IIF1B9B,CAAJ ,C;QACI,cAdW,e;QAEX,MAAM,6BAAsB,OAAQ,WAA9B,C;OkF0BN,YAAy,mB;MACZ,IAAI,SAAS,IAAb,C; QACI,sBAAO,S;QACP,yBAAO,S;QACP,yBAAO,S;;QAGK,YAAa,KAAM,a;QIFIBhC,uB;QAEp,IAfoB,KAehB, QAAJ,C;UACI,gBAhByB,0B;UAIbZB,MAAM,6BAAsB,SAAQ,WAA9B,C;;UAEN,sBAnBgB,K;;QkFkBZ,+B;Q AEA,yBAAO,K;QACP,yBAAO,K;QAEp,qBAAa,S;QACb,qBAAa,S;;K;+CAIrB,qB;MAII,IAAI,SAAK,aAAL,KA Ac,SAaIB,C;QAEI,sBAAO,I;;QAEp,IAAI,wBAAS,SAAb,C;UAEI,sBAAO,sB;SAEX,qDAAc,sB;QACd,qDAAc,s



B;;MAEIB,yBAAO,I;MACP,yBAAO,I;K;oCA8CX,Y;MAEI,qB;MACA,4BAAa,I;MACb,OAAO,I;K;oCAGX,Y;  
MACI,qB;MACA,kBAAI,Q;MACJ,sBAAO,I;K;gDASX,e;MAAmD,OAAA,kBAAI,mBAAY,GAAZ,C;K;kDAEvd  
D,iB;MACiC,Q;MAAA,0B;MAAA,iB;QAAQ,OAAO,K;OAA5C,WAA6B,I;;QAEzB,IAAI,OAAA,IAAK,MAAL,  
EAAc,KAAAd,CAAJ,C;UACI,OAAO,I;SAEX,OAAO,cAAA,IAAK,aAAL,C;;MACF,iBAAS,mBAAT,C;MACT,O  
AAO,K;K;6CAIX,Y;MAAoF,uC;K;wCAEpF,e;MAAmD,Q;MAAJ,QAAI,OAAJ,kBAAI,WAAI,GAAJ,CAAJ,6B;  
K;0CAE/C,sB;MACI,qB;MAEA,UAAU,kBAAI,WAAI,GAAJ,C;MACd,IAAI,OAAO,IAAX,C;QACI,eAAe,mCA  
AW,GAAx,EAAGB,KAAhB,C;QACf,kBAAI,aAAI,GAAJ,EAAS,QAAT,C;QACK,wBAAT,QAAS,C;QACT,OA  
AO,I;;QAEp,OAAO,GAAI,gBAAS,KAAT,C;;K;2CAInB,e;MACI,qB;MAEA,YAAy,kBAAI,cAAO,GAAP,C;MA  
ChB,IAAI,SAAS,IAAb,C;QACU,sBAAN,KAAM,C;QACN,OAAO,KAAM,M;OAEjB,OAAO,I;K;qFAGmB,Y;M  
AAQ,OAAA,kBAAI,K;K;6CAE1C,Y;MACI,IAAI,yBAAJ,C;QAAGB,MAAM,oC;K;;IAng1B,mC;MAAA,uD;MA  
GuB,qB;MA9J3B,yB;MA+JQ,sBAAM,gB;MAJV,Y;K;IAOA,iD;MAAA,uD;MAAoD,qB;MAIKxD,yB;MAoKc,Q;  
MAAN,sBAAM,+D;MAFV,Y;K;IAKA,kE;MAAA,uD;MAQ8D,eAAM,eAAN,EAAuB,UAAvB,Q;MA/KIE,yB;M  
AgLQ,sBAAM,gB;MATV,Y;K;IAYA,sD;MAAA,uD;MAA2C,qBAAK,eAAL,EAASB,GAAtB,Q;MAA3C,Y;K;IA  
EA,+C;MAAA,uD;MAG2C,qB;MAxL/C,yB;MAyLQ,sBAAM,gB;MACN,KAAGB,gBAAO,QAAP,C;MALT,Y;K;I  
A6EJ,kC;MAKwD,gBAA7C,qBAAYB,eAAzB,C;MAAqD,wB;MAA5D,O/EjMO,S;K;;;oCgFvCP,Y;MAEK,Q;MA  
A8B,CAA9B,2EAA8B,S;MAC/B,OAAO,I;K;6CAGX,Y;MAA+C,gBAAI,iB;K;;IAhCnD,wC;MAAA,uD;MAAmD  
eAAM,GAAN,Q;MAPvD,yB;MAOI,Y;K;IAEA,qC;MAAA,uD;MAGuB,eAAM,oBAAN,Q;MAZ3B,yB;MASI,Y;  
K;IAKA,+C;MAAA,uD;MAG8C,eAAM,oBAAN,Q;MAjBID,yB;MAkBQ,qBAAO,QAAP,C;MAJJ,Y;K;IAOA,kE;  
MAAA,uD;MAQ8D,eAAM,qBAASB,eAAtB,EAAuC,UAAvC,CAAN,Q;MA7BIE,yB;MAqBI,Y;K;IAUA,sD;MA  
AA,uD;MAA2C,qBAAK,eAAL,EAASB,GAAtB,Q;MAA3C,Y;K;IAGBJ,qC;MAKMD,gBAAXC,mBAAC,qBAAD,C  
;MAAGD,6B;MAAvD,OhFoBO,S;K;;;kFiFzEX,uB;MAQI,OAAO,O;K;ICXX,sB;K;mCACI,Y;MACI,mBAAM,IA  
AN,C;K;2CAGJ,mB;MACI,mBAAM,OAAN,C;MACA,c;K;iCAKJ,Y;K;;IAKuB,oC;MAA8B,qB;MAA7B,gC;K;2  
CACxB,mB;MAEI,oBA+DyC,OA/Dd,OA+Dc,C;MA9DzC,iBAAa,OAAM,aAAN,C;K;;IAIrB,8B;MAEoC,qB;K;i  
DACHC,mB;MACI,OAAQ,KAAI,OAAJ,C;K;mDAGZ,mB;MACI,OAAQ,KAAI,OAAJ,C;K;2CAGZ,Y;MACI,OA  
AQ,KAAI,EAJ,C;K;;IAIhB,0B;MAEqC,qB;MACjC,cAAa,E;K;6CAEb,mB;MACI,eAoCyC,OApCxB,OAcwB,  
C;K;qCAjC7C,Y;MACI,cAAS,E;K;;IAIjB,sC;MAE4C,yB;K;yDACxC,mB;MACI,QAwByC,OAxB1B,OAwB0B,C  
;MAvBzC,QAAQ,CxEqJof,awErJhE,IxEqJgE,EwErJ1D,CxEqJ0D,C;MwEpJ5F,IAAI,KAAG,CAAT,C;QACI,4BA  
AU,CxE+J0E,WwE/J9D,CxE+J8D,EwE/J3D,CxE+J2D,C;QwE9JpF,Y;QACA,IAAI,CxE0JIE,WwE1JrD,IAAI,CA  
AJ,IxE0JqD,C;OwExJzE,4BAAU,C;K;iDAGd,Y;MACI,OAAQ,KAAI,WAAJ,C;MACR,cAAS,E;K;;IAWjB,yB;M  
ACiD,cAAa,KAAb,C;K;IAEjD,mB;MAEI,MAAO,U;K;IAGX,4B;MAEI,MAAO,iBAAQ,OAAR,C;K;IAGX,wB;  
MAEI,MAAO,eAAM,OAAN,C;K;IAGX,kB;MACqC,MAAM,qCAA8B,sCAA9B,C;K;IAE3C,wB;MAC4C,MAA  
M,qCAA8B,4CAA9B,C;K;ICIGID,mD;MACI,0B;MASA,gBAA2B,a;K;2FAFvB,Y;MAAQ,OAAA,eAAS,Q;K;oD  
AIrB,kB;MACI,UAAU,IAAK,S;MAEX,YAAQ,2CAAR,C;QACI,gBAAC,MAAO,M;WAEzB,YAAQ,yBAAR,C;Q  
ACI,gBAAC,yC;QACd,eAAS,oBAAW,MAAX,C;;QAEI,MAAM,6BAASB,iBAAtB,C;K;4CAItB,Y;MAOW,Q;M  
ALP,IAAI,kBAAW,2CAAF,C;QACI,gBAAS,yB;QACT,OAAO,yB;OAEX,aAAa,IAAK,S;MAEd,eAAW,yCAAX,  
C;QAASB,gC;WACTb,0C;QAA4B,MAAM,MAAO,U;;QACjC,a;MAHZ,W;K;;IA7BJ,gD;MAAA,0D;MACyD,6B  
AAK,QAAL,EAAe,2CAAF,C;MADzD,Y;K;;;ICRA,2C;MAAA,+D;MAAuB,iC;MAF3B,iC;MAEI,Y;K;IACA,sD  
;MAAA,+D;MAAuC,6BAAM,OAAN,Q;MAH3C,iC;MAGI,Y;K;IACA,6D;MAAA,+D;MAAmD,kCAAM,OAAN,  
EAAe,KAAf,C;MAJvD,iC;MAII,Y;K;IACA,oD;MAAA,+D;MAAiC,6BAAM,KAAN,Q;MALrC,iC;MAKI,Y;K;Ix  
C4CJ,yE;MASI,sC;MAAA,4C;K;IATJ,iGAWY,Y;MAAQ,2B;KAXpB,E;IAAA,0DAaQ,kB;MACI,wBAAW,MAA  
X,C;K;IAdZ,sF;IyC5C2E,0C;M1CkKhE,Q;MADP,e0ChKA,M1CgKA,C;MACO,Q0CjKP,M1CiKO,+D;M0ChKX,  
W;K;;+FCuHA,gB;MACI,aAAa,IAAb,MAAA,E;MACb,KAAG,MAAL,C;MACA,OAAO,M;K;wFC3HX,yB;MAA  
A,uD;MAAA,wC;QAWqG,OAAG,cAAL,SAAG,EAaiB,IAAJB,EAAuB,IAAvB,C;O;KAX1G,C;wFAaA,yB;MAA  
A,uD;MAAA,wC;QAWoG,OAAG,cAAL,SAAG,EAaiB,IAAJB,EAAuB,IAAvB,C;O;KAXzG,C;8ECbA,yB;MAA  
A,6C;MAAA,sC;QAOyD,OAAG,SAAL,SAAG,EAAY,QAAG,C;O;KAP9D,C;8EASA,yB;MAAA,6C;MAAA,wC;  
QAWkE,OAAG,SAAL,SAAG,EAaa,UAAb,S;O;KAXvE,C;oFAaA,yB;MAAA,mD;MAAA,wC;QAWqE,OAAG,  
YAAL,SAAG,EAAGB,UAAhB,S;O;KAXIE,C;kFCZI,yB;MAAA,iD;MAAA,4B;QAAG,OAAG,WAAL,SAAG,C;  
O;KAApB,C;wFAYA,yB;MAAA,uD;MAAA,4B;QAAG,OAAG,cAAL,SAAG,C;O;KAApB,C;IC5BJ,gC;MAAoE,

gCAAqB,OAArB,C;K;IAEIC,uC;MAAC,wB;K;iDAC/B,iB;MACI,eAAQ,KAAR,C;K;8CAGJ,Y;MAAyC,iCAAuB  
,cAAvB,M;K;;ICCO,6C;MAAA,8B;MAAS,uB;K;8FACIC,Y;MAAQ,OAAA,gBAAY,O;K;mDAE3C,iB;MACI,IA  
DoC,KACpC,IAAG,CAAH,IADoC,KACpC,IAAM,sBAAN,C;QAD8B,OACX,gBAAY,MAAK,KAAL,C;;QACvB  
,MAAM,8BAA0B,WAAQ,KAAR,6BAAmC,sBAAnC,MAA1B,C;K;;IARtB,8B;MAGoD,4C;K;wECFpD,yB;MA  
AA,uC;MAAA,4B;QAOsC,MAAL,SAAK,C;O;KAPtC,C;kFASA,yB;MAAA,iD;MAAA,kC;QAWuD,OAAK,WA  
AL,SAAK,EAAC,IAAd,C;O;KAX5D,C;+ECfA,qB;MAI8C,gB;K;iFAE9C,qB;MAIsE,OAAK,S;K;kFAE3E,qB;MA  
MyE,gB;K;IAEzE,6B;MAiBa,UAPF,M;MAFP,QAAC,S;MAGV,cAAK,UAAL,U;QACI,mBAAK,UAAL,G;;QACJ  
,I/CzBqC,MAAA,Y+CyBvC,C/CzBuC,C+CyBID,C;UAC6B,8BAAzB,CAAyB,C;;UAGN,UAAIB,uDAaKB,Y;;MA  
P3B,a;K;IC9BJ,2B;MAEI,MAAM,yBAAqB,OAArB,C;K;IAGV,sB;MAEI,MAAM,uBAAmB,cAAAnB,C;K;IAGV,2  
B;MAEI,MAAM,6BAAsB,OAAtB,C;K;IAGV,iC;MAEI,MAAM,4CAAqC,uBAAqB,YAArB,8BAArC,C;K;ICIBV  
,8B;MC8CW,kB1GqBiD,oB;M0GM9C,Q;MAAA,OAAK,0B;MAAf,OAAU,cAAV,C;QAAU,mB;QACN,UAAU,s  
BAAM,CAAN,C;QACV,kBAaKB,sBAAY,GAAZ,C;QAKFiD,U;QAJFnE,W1GuKJ,a0GvKgB,G1GuKhB,EyG1Oo  
B,CCmEkC,uBAAuB,CAAC,WAAy,mBAAY,GAAZ,CAiFhD,GDpJrC,CCoJqC,GAA6B,UajFjC,WaiFiC,6DDp  
JnD,IAAM,CAAN,IzG0OpB,C;;MyG1OA,OCqEO,W;K;;;ICjCX,qB;MAK0B,Q;MADtB,UAAmB,E;MACnB,wB  
AAsB,KAAtB,gB;QAAsB,aAAA,KAAtB,M;QAAK,IAAC,0BAAD,EAAO,2B;QACR,IAAI,IAAJ,IAAY,K;;MAE  
hB,OAAO,G;K;IAGX,+B;MAMgB,Q;MADZ,WAA0B,MAAA,MAAK,KAAL,C;MACvC,wBAAY,IAAZ,gB;QAA  
Y,UAAA,IAAZ,M;QACI,IAAU,KAAy,gBAAe,GAAf,CAAtB,C;UACI,UAAK,GAAL,IAAY,MAAM,GAAN,C;;  
MAGpB,OAAO,S;K;qEC5DX,yB;MAAA,iB;MAAA,oB;QAOkD,OAAA,MAAW,KAAI,CAAJ,C;O;KAP7D,C;qE  
ASA,yB;MAAA,iB;MAAA,oB;QAOkD,OAAA,MAAW,KAAI,CAAJ,C;O;KAP7D,C;qEASA,yB;MAAA,iB;MA  
AA,oB;QAOkD,OAAA,MAAW,KAAI,CAAJ,C;O;KAP7D,C;uEASA,yB;MAAA,iB;MAAA,oB;QASmD,OAAA,  
MAAW,MAAK,CAAL,C;O;KAT9D,C;uEAWA,yB;MAAA,iB;MAAA,oB;QASmD,OAAA,MAAW,MAAK,CAA  
L,C;O;KAT9D,C;uEAWA,yB;MAAA,iB;MAAA,oB;QASmD,OAAA,MAAW,MAAK,CAAL,C;O;KAT9D,C;yEA  
WA,yB;MAAA,iB;MAAA,uB;QAKB+D,OAAA,MAAW,OAAM,CAAN,EAAS,CAAT,C;O;KAIB1E,C;uEAoBA,y  
B;MAAA,iB;MAAA,oB;QAUmD,OAAA,MAAW,MAAK,CAAL,C;O;KAV9D,C;uEAYA,yB;MAAA,iB;MAAA,  
oB;QASmD,OAAA,MAAW,MAAK,CAAL,C;O;KAT9D,C;uEAWA,yB;MAAA,iB;MAAA,oB;QAUmD,OAAA,  
MAAW,MAAK,CAAL,C;O;KAV9D,C;yEAYA,yB;MAAA,iB;MAAA,oB;QAYoD,OAAA,MAAW,OAAM,CAA  
N,C;O;KAZ/D,C;yEAcA,yB;MAAA,iB;MAAA,oB;QAYoD,OAAA,MAAW,OAAM,CAAN,C;O;KAZ/D,C;yEAc  
A,yB;MAAA,iB;MAAA,oB;QAaoD,OAAA,MAAW,OAAM,CAAN,C;O;KAb/D,C;yEAeA,yB;MAAA,iB;MAAA,  
uB;QAS+D,OAAA,MAAW,OAAM,CAAN,EAAS,CAAT,C;O;KAT1E,C;uEAWA,yB;MAAA,iB;MAAA,oB;QA  
QmD,OAAA,MAAW,MAAK,CAAL,C;O;KAR9D,C;qEAUUA,yB;MAAA,iB;MAAA,oB;QAUkD,OAAA,MAAW,  
KAAI,CAAJ,C;O;KAV7D,C;yEAYA,yB;MAAA,iB;MAAA,oB;QacoD,OAAA,MAAW,OAAM,CAAN,C;O;KAd  
/D,C;IAGBA,sB;MAcI,IAAI,QAAQ,GAAR,IAAe,SAAQ,GAA3B,C;QAAgC,OAAO,wCAAo,I;MAC9C,OAAO,I  
AAW,KAAI,CAAJ,CAAX,GAAoB,IAAW,KAAI,IAAJ,C;K;mEAG1C,yB;MAAA,iB;MAAA,oB;QAWiD,OAAA,  
MAAW,KAAI,CAAJ,C;O;KAX5D,C;yEAaA,yB;MAAA,iB;MAAA,oB;QAOoD,OAAA,MAAW,OAAM,CAAN,  
C;O;KAP/D,C;uEASA,yB;MAAA,iB;MAAA,oB;QAOmD,OAAA,MAAW,MAAK,CAAL,C;O;KAP9D,C;uEASA  
,yB;MAAA,iB;MAAA,oB;QAgBmD,OAAA,MAAW,OAAM,CAAN,C;O;KAhB9D,C;uEakBA,yB;MAAA,iB;M  
AAA,oB;QAUmD,OAAA,MAAW,MAAK,CAAL,C;O;KAV9D,C;yEAYA,yB;MAAA,iB;MAAA,oB;QAUoD,OA  
AA,MAAW,OAAM,CAAN,C;O;KAV/D,C;+EAYA,yB;MAAA,iB;MAAA,oB;QAUuD,OAAA,MAAW,OAAM,C  
AAN,C;O;KAVIE,C;IAYA,kB;MAQI,IAAI,IAAI,GAJJ,KAAW,GAAf,C;QACI,OAAO,IAAW,OAAM,CAAN,C;  
OAEtB,YAzBgD,MAAW,OAYBzC,CAzByC,C;MA0B3D,OAAW,QAAQ,CAAR,KAAa,GAAxB,GAA6B,KAA7B  
,GAtC+C,MAAW,MAcB,CAtCa,C;K;qEAyC9D,yB;MAAA,iB;MAAA,oB;QAUkD,OAAA,MAAW,KAAI,CAAJ  
,C;O;KAV7D,C;uEAYA,yB;MAAA,iB;MAAA,oB;QAWmD,OAAA,MAAW,MAAK,CAAL,C;O;KAX9D,C;wEA  
cA,yB;MAAA,iB;MAAA,uB;QAO6D,OAAA,MAAW,KAAI,CAAJ,EAAO,CAAP,C;O;KAPxE,C;wEASA,yB;MA  
AA,iB;MAAA,uB;QAO6D,OAAA,MAAW,KAAI,CAAJ,EAAO,CAAP,C;O;KAPxE,C;qEAWA,yB;MAAA,iB;M  
AAA,+B;QAayD,OAAA,MAAW,KAAI,SAAJ,EAAU,CAAV,C;O;KAbpE,C;uEAeA,yB;MAAA,iB;MAAA,+B;Q  
AOsD,OAAA,MAAW,KAAI,SAAJ,EAAy,CAAZ,C;O;KAPjE,C;iGAmBsD,yB;MAAA,iB;MAAA,4B;QAAQ,OA  
AA,MAAW,KAAI,SAAJ,C;O;KAAAnB,C;+EAAT,yB;MAAA,iB;MAAA,4B;QAAQ,OAAA,MAAW,MAAK,SAAL  
,C;O;KAAAnB,C;iFAE7C,yB;MAAA,6C;MAAA,kC;QAK8D,OAAK,SAAL,SAAK,EAAC,IAAd,C;O;KALnE,C;IA

kBqC,4B;MACjC,gBAAO,CAAP,C;QADyC,OACrB,QAAP,CAAC,SAAM,C;WACpB,IAAK,QAAL,SAAK,CAA  
L,IAAgB,cAAQ,wCAAO,kBAA/B,C;QAFyC,OAEW,S;WACpD,kBAAQ,wCAAO,UAAf,C;QAHyC,OAGb,YAA  
Y,SAAL,SAAK,C;;QAHC,OAI5B,OAAL,SAAK,CAAL,GAAGB,S;K;IAG5B,2B;MAKI,IAAK,QAAL,SAAK,CA  
AL,IAAgB,cAAQ,wCAAO,kBAA/B,C;QADwC,OACY,S;WACpD,kBAAQ,GAAR,C;QAFwC,OAEzB,wCAAO,  
U;;QACP,WAAc,UAAAL,SAAK,CAAL,yBAAuB,YAAO,CAAX,GAAC,CAAd,GAAqB,EAAxC,E;QAHgB,OhDhb  
6B,MAAA,gBA Ae,IAAf,C;;K;IgDsbF,6B;MAKI,IAAK,QAAL,SAAK,CAAL,IAAgB,cAAQ,wCAAO,kBAA/B,C;  
QAD0C,OACU,S;WACpD,kBAAQ,GAAR,C;QAF0C,OAE3B,CAAC,wCAAO,U;;QACR,WAAc,UAAAL,SAAK,C  
AAL,yBAAuB,YAAO,CAAX,GAAC,EAAd,GAAsB,CAAzC,E;QAHkB,OhD1b2B,MAAA,gBA Ae,IAAf,C;;K;IgDi  
ctF,oC;MAUI,IAAK,QAAL,SAAK,CAAL,IAAmB,QAAH,EAAG,CAAnB,C;QADuD,OACzB,wCAAO,I;WACrC  
,WAAM,SAAN,C;QAFuD,OAEzC,E;WACd,SAAK,SAAL,C;QAHuD,OAGrC,OAAL,SAAK,C;;QAHqC,OAI1B,  
SAAL,SAAK,C;K;IAIjC,+B;MAYI,uB;QAAW,MAAM,gCAAYB,yBAAzB,C;WACjB,gBAAO,UAAp,C;QAFyC,  
OAEjB,U;WACxB,gBAAO,WAAp,C;QAHyC,OAGjB,W;;QAHiB,OAIv,YAAvB,IAAW,OAAM,SAAN,CAAY,  
C;K;IAGnC,gC;MAYI,uB;QAAW,MAAM,gCAAYB,yBAAzB,C;WACjB,oD;QAF2C,+B;WAG3C,oD;QAH2C,+B  
;;QAAA,OAIz,uBAAvB,IAAW,OAAM,SAAN,CAAY,C;K;uEASnC,yB;MAAA,iB;MAAA,oB;QAOgD,OAAA,  
MAA6B,KAAZ,CAAY,C;O;KAP7E,C;uEASA,yB;MAAA,iB;MAAA,oB;QAOgD,OAAA,MAA6B,KAAZ,CAAY  
,C;O;KAP7E,C;uEASA,yB;MAAA,iB;MAAA,oB;QAOgD,OAAA,MAA6B,KAAZ,CAAY,C;O;KAP7E,C;yEASA  
,yB;MAAA,iB;MAAA,oB;QASiD,OAAA,MAA8B,MAAZ,CAAY,C;O;KAT/E,C;yEAWA,yB;MAAA,iB;MAAA,  
oB;QASiD,OAAA,MAA8B,MAAZ,CAAY,C;O;KAT/E,C;yEAWA,yB;MAAA,iB;MAAA,oB;QASiD,OAAA,MA  
A8B,MAAZ,CAAY,C;O;KAT/E,C;2EAWA,yB;MAAA,iB;MAAA,uB;QAKB4D,OAAA,MAA6C,OAA1B,CAA0  
B,EA AZ,CAAY,C;O;KAIBzG,C;yEAoBA,yB;MAAA,iB;MAAA,oB;QAUiD,OAAA,MAA8B,MAAZ,CAAY,C;O  
;KAV/E,C;yEAYA,yB;MAAA,iB;MAAA,oB;QASiD,OAAA,MAA8B,MAAZ,CAAY,C;O;KAT/E,C;yEAWA,yB;  
MAAA,iB;MAAA,oB;QAUiD,OAAA,MAA8B,MAAZ,CAAY,C;O;KAV/E,C;2EAYA,yB;MAAA,iB;MAAA,oB;  
QAYkD,OAAA,MAA+B,OAAZ,CAAY,C;O;KAZjF,C;2EAcA,yB;MAAA,iB;MAAA,oB;QAYkD,OAAA,MAA+  
B,OAAZ,CAAY,C;O;KAZjF,C;2EAcA,yB;MAAA,iB;MAAA,oB;QAakD,OAAA,MAA+B,OAAZ,CAAY,C;O;K  
AbjF,C;2EAeA,yB;MAAA,iB;MAAA,uB;QAS4D,OAAA,MAA6C,OAA1B,CAA0B,EA AZ,CAAY,C;O;KATzG,C  
;yEAWA,yB;MAAA,iB;MAAA,oB;QAQiD,OAAA,MAA8B,MAAZ,CAAY,C;O;KAR/E,C;uEAUa,yB;MAAA,iB  
;MAAA,oB;QAUgD,OAAA,MAA6B,KAAZ,CAAY,C;O;KAV7E,C;2EAYA,yB;MAAA,iB;MAAA,oB;QACKD,O  
AAA,MAA+B,OAAZ,CAAY,C;O;KAdjF,C;uEA gBA,yB;MAAA,mC;MAAA,0B;QAc6D,OAAmC,IAA7B,CAA6  
B,EA AZ,IAAY,C;O;KAdhG,C;qEA gBA,yB;MAAA,iB;MAAA,oB;QAW+C,OAAA,MAA6B,KAAZ,CAAY,C;O;  
KAX5E,C;2EAaA,yB;MAAA,iB;MAAA,oB;QAOKD,OAAA,MAA+B,OAAZ,CAAY,C;O;KAPjF,C;yEASA,yB;  
MAAA,iB;MAAA,oB;QAOiD,OAAA,MAA8B,MAAZ,CAAY,C;O;KAP/E,C;yEASA,yB;MAAA,iB;MAAA,oB;Q  
AgBiD,OAAA,MAA+B,OAAZ,CAAY,C;O;KAhBhF,C;yEAkBA,yB;MAAA,iB;MAAA,oB;QAUiD,OAAA,MAA  
8B,MAAZ,CAAY,C;O;KAV/E,C;2EAYA,yB;MAAA,iB;MAAA,oB;QAUkD,OAAA,MAA+B,OAAZ,CAAY,C;O;  
KAVjF,C;iFAYA,yB;MA3gBA,iB;MA2gBA,oB;QAUqD,OA3gBE,MAAW,OA2gBF,CA3gBE,C;O;KAigBIE,C;2  
EAYA,yB;MAAA,uC;MAAA,oB;QAQkD,OAAoB,MAAZ,CAAY,C;O;KARtE,C;uEAWA,yB;MAAA,iB;MAAA,  
oB;QAUgD,OAAA,MAA6B,KAAZ,CAAY,C;O;KAV7E,C;yEAYA,yB;MAAA,iB;MAAA,oB;QAWiD,OAAA,M  
AA8B,MAAZ,CAAY,C;O;KAX/E,C;wEAeA,yB;MAAA,iB;MAAA,uB;QAO0D,OAAA,MAAW,KAAI,CAAJ,EA  
AO,CAAP,C;O;KAPrE,C;wEASA,yB;MAAA,iB;MAAA,uB;QAO0D,OAAA,MAAW,KAAI,CAAJ,EAAO,CAAP,  
C;O;KAPrE,C;sEAYA,yB;MAAA,iB;MAAA,+B;QAasD,OAAA,MAA8C,KAA1B,SAA0B,EA AZ,CAAY,C;O;K  
AbpG,C;uEAeA,yB;MAAA,iB;MAAA,+B;QAOoD,OAAA,MAA8C,KAA1B,SAA0B,EA AZ,CAAY,C;O;KAPIG,  
C;kGAmBoD,yB;MAAA,iB;MAAA,4B;QAAQ,OAAA,MAAgC,KAAZ,SAAY,C;O;KAAxC,C;gFAaT,yB;MAAA  
,iB;MAAA,4B;QAAQ,OAAA,MAAiC,MAAZ,SAAY,C;O;KAAzC,C;gFAE3C,yB;MAAA,6C;MAAA,kC;QAO8D  
,OAA0C,SAArC,SAAQc,EA AZ,IAAY,C;O;KAPxG,C;iFASA,yB;MAAA,6C;MAAA,kC;QAK4D,OAA0C,SAArC  
,SAAQc,EA AZ,IAAY,C;O;KALtG,C;oFAQA,yB;MAAA,iD;MAAA,4B;QAYmD,OAAW,WAAx,SAAW,C;O;K  
AZ9D,C;sFAcA,yB;MAAA,mD;MAAA,4B;QAYqD,OAAW,YAAX,SAAW,C;O;KAZhE,C;IAoBA,kB;MAUqC,  
OAAI,IAAI,CAAR,GAAY,CAAC,CAAD,OAAM,CAAIB,GAA0B,C;K;wEAE/D,yB;MAAA,iB;MAAA,uB;QAK  
oD,OAAA,MAAW,KAAI,CAAJ,EAAO,CAAP,C;O;KAL/D,C;wEAOA,yB;MAAA,iB;MAAA,uB;QAKoD,OAAA  
,MAAW,KAAI,CAAJ,EAAO,CAAP,C;O;KAL/D,C;mGaiBgD,yB;MAAA,mC;MAAA,4B;QAAQ,WAAI,SAAJ,C

;O;KAAR,C;IAShB,+B;MAC5B,gBAAO,CAAP,C;QADoC,OACxB,E;WACZ,gBAAO,CAAP,C;QAFoC,OAExB,  
C;;QAFwB,OAG5B,C;K;IAKZ,kB;MASuC,OAAI,eAAI,CAAR,GAAY,CAAD,aAAX,GAAMb,C;K;wEAE1D,gB;  
MAKuD,OAAI,kBAAK,CAAL,MAAJ,GAAY,CAAZ,GAAMb,C;K;wEAE1E,gB;MAKuD,OAAI,kBAAK,CAAL,  
MAAJ,GAAY,CAAZ,GAAMb,C;K;mGAYxB,yB;MAAA,mC;MAAA,4B;QAAQ,WAAI,SAAJ,C;O;KAAR,C;IA  
SjB,+B;MAC7B,2BAAO,CAAP,C;QADqC,OACzB,E;WACZ,2BAAO,CAAP,C;QAFqC,OAEzB,C;;QAFyB,OAG  
7B,C;K;IC1kCZ,4B;MAI4C,qBAAQ,S;K;IAEpD,4B;MAI2C,qBAAQ,S;K;IAEnD,+B;MAGiD,qBAAQ,wCAAO,k  
BAAf,IAAoC,cAAQ,wCAAO,kB;K;IAEpG,iC;MAGgD,qBAAQ,uCAAM,kBAAd,IAAmC,cAAQ,uCAAM,kB;K;I  
AEjG,6B;MAG+C,QAAC,qBAAD,IAAiB,CAAC,kB;K;IAEjE,+B;MAG8C,QAAC,uBAAD,IAAiB,CAAC,kB;K;I  
AGhE,iC;MAOI,QAAQ,S;MACR,IAAI,CAAC,IAAM,UAAp,KAAAsB,CAAE,KAAK,CAAP,GAAc,UAApC,K;M  
ACJ,IAAI,CAAC,IAAM,SAAP,KAAAsB,CAAE,KAAK,CAAP,GAAc,SAApC,K;MACJ,IAAI,CAAC,IAAM,SAAP  
,KAAAsB,CAAE,KAAK,CAAP,GAAc,SAApC,K;MACJ,IAAI,CAAC,IAAM,QAAP,KAAAsB,CAAE,KAAK,CAAP,  
GAAc,QAAPC,K;MACJ,IAAI,CAAC,IAAM,KAAP,KAAAsB,CAAE,KAAK,EAA7B,K;MACJ,OAAO,C;K;kGAG  
X,yB;MAAA,iB;MAAA,4B;QAM2D,OAAA,MAAO,OAAM,SAAN,C;O;KANIE,C;IAQA,0C;MAOI,YATuD,MA  
AO,OAS9B,EAAf,aAAQ,CAAC,SAAD,IAAR,CAAE,CAT8B,CAS9D,I;K;IAEJ,sC;MAOI,OAAI,cAAQ,CAAZ,G  
AAe,CAAf,GAAAsB,CAAE,IAAI,EAAJ,GAIB+B,MAAO,iB;K;IAoBIE,qC;MAQI,oBAAS,CAAC,SAAD,IAAT,C;  
K;IAEJ,yC;MAAI,oBAAI,QAAJ,GAAiB,cAAK,EAAL,GAAqB,Q;K;IAG1C,0C;MAAI,oBAAI,EAAJ,GAAoB,QA  
ApB,GAAiC,cAAK,Q;K;IAG1C,mC;MAMI,OAAK,ajDhEmD,uBiDgEnD,CAAL,GAA0B,ajDjE6B,sBiDiE7B,CA  
A1B,I;K;IAEJ,2C;MAMU,WAAW,SjDxEuC,c;MiDyEpD,e;QADJ,OACS,KA7E8C,MAAO,OjDGP,sBiDHO,CA6  
ErD,I;;QADT,OA5EuD,MAAO,OA8EID,IA9EkD,C;;K;IAiFIE,4C;MAMU,UAAU,SjDpFuC,a;MiDqFnD,c;QADJ,  
OACS,KAAqB,sBjDpF0B,uBiDoF1B,CAArB,I;;QADT,OAEgB,sBAAJ,GAAI,C;K;IAGpB,wC;MAOU,WAAW,S  
jD/FuC,c;MiDgGpD,e;QAAK,UAAAs,kBjDjGqC,sBiDiGrC,C;QADIB,OjDjG4C,MAAA,KAAK,UAAAs,GAAT,EiD  
kGvB,CjDlGuB,C;;QiDmGID,aAAa,kBAAL,IAAK,C;QAFzB,OjDjG4C,MAAA,KAAK,UiDmG7C,CjDnG6C,EA  
Ac,MAAd,C;;K;liDsGIE,uC;MAOU,UAAU,SjD5GuC,a;MiD6GnD,c;QAAK,WAAa,iBjD5GkC,uBiD4GIC,C;QA  
DtB,OjD7G4C,MAAA,KAAK,UiD8GhD,CjD9GgD,EAAc,IAAd,C;;QiD+GID,YAAS,iBAAJ,GAAI,C;QAFrB,OjD  
7G4C,MAAA,KAAK,UAAAs,KAAT,EiD+GrB,CjD/GqB,C;;K;liDkHIE,2C;MAAI,IAAI,CAAC,WAAa,EAAd,MAA  
qB,CAAzB,C;QACI,UAAU,SjD/HyC,a;QiDgInD,WAAW,SjD/HyC,c;QiDgIpD,aAAa,GAAI,IAAI,QAAR,GAAqB  
,IAAK,MAAK,CAAC,QAAD,IAAL,C;QACvC,cAAc,IAAK,IAAI,QAAT,GAAAsB,GAAI,MAAK,CAAC,QAAD,I  
AAL,C;QACxC,OAAW,CAAC,WAAa,EAAd,MAAqB,CAAhC,GjDpIwC,MAAA,KAAK,UiDollB,MjDpIkB,EiDo  
IV,OjDpIU,CiDoI1D,GjDpIwC,MAAA,KAAK,UiDoIS,OjDpIT,EiDoIkB,MjDpIIB,C;;QiDsInD,Q;QAAA,IAAI,CA  
AC,WAAa,EAAd,MAAqB,CAAzB,C;UAAA,OAA4B,S;;uBjDpIiB,uB;UiDoIP,ajDrIM,sB;UiDqI5C,OjDtlIC,MA  
Aa,KAAK,kBAAc,MAAd,C;;QiDsI1D,W;;K;kFAKR,yB;MAAA,4C;MAAA,sC;QAaiE,6BAAW,CAAC,QAAD,I  
AAX,C;O;KAbjE,C;qECzKA,kC;MAII,OAAO,SAA8B,MAAK,WAAL,C;K;uEAGzC,8C;MAII,OAAO,SAA8B,M  
AAK,WAAL,EAAb,UAAIB,C;K;ICpCzC,iC;MACI,gBAAH,IAAI,OAAO,EAAG,GAAE,IAAI,IAAI,CAAC,CA  
AD,EAAI,EAAJ,CAAd,GAAyB,CAAhC,C;K;;IAKJ,sC;MACI,cAAO,QAAP,GAAKB,QAAQ,Q;K;ICP9B,yC;K;;I  
AWA,+B;K;;4GAYA,yB;MAAA,gC;MAAA,yD;MAAA,sC;QAQI,OAAK,qBAAL,SAAK,iB;O;KART,C;ICP1,2B;  
MAAS,Q;MAAD,OAAwB,CAAvB,iEAAuB,Q;K;IAMhC,+B;MAAQ,iBAAU,SAAV,C;K;;;ICtB+B,4B;MACv  
C,8B;K;gEAAA,Y;MAAA,4B;K;2FAII,Y;MxGO4B,MAAM,yB;K;kCwGLiC,iB;MACI,OAAO,oCAA0B,oBAAU,  
KAAM,OAAhB,C;K;oCAGrC,Y;MAC+B,gB;MAAA,8FAA0B,C;K;oCAEzD,Y;MAEI,OAAO,oBAAQ,eAAR,C;  
K;;IAIyB,kC;MAAuB,sBAAc,MAAd,C;MACL,Q;MAAtD,4BAAmC,CAAmB,OAAZ,MAAY,WAAAnB,kC;K;8FA  
AnC,Y;MAAA,gC;K;oDAEA,iB;MACW,cAAGB,W;MAAvB,OhEoEuD,MAAA,QgEpEpD,KhEoEoD,EAAy,OA  
AZ,C;K;;IgeHjC,0E;MAIvC,sBAAc,MAAd,C;MAFA,wC;MACA,8C;K;2CAEA,iB;MACI,IAAI,0CAAJ,C;QAAs  
C,OAAO,K;MAC7C,OAAa,uCAAO,KAAP,CAAN,IAAuB,+BAAmB,KAAM,kBAAzB,C;K;iGAGD,Y;MAAQ,6  
B;K;uDAEzC,iB;MACI,OAAO,0BAAmB,KAAAnB,C;K;;IAIf,6B;MAAA,iC;MAAoC,sBAAoB,MAApB,C;MACH  
C,4BAaK,C,S;K;+FAAIC,Y;MAAA,gC;K;qDAEA,iB;MAAGD,Y;K;2FAG5C,Y;MAAQ,MAAM,qCAA8B,6CAA9  
B,C;K;yCAEIB,iB;MAA4C,iBAAU,I;K;2CAEtD,Y;MAA+B,Q;K;;IAVnC,yC;MAAA,wC;QAAA,uB;OAAA,iC;  
K;IAaA,uB;K;yFACqC,Y;M3G0EY,MAAM,6B2G1EJ,oC3G0EkC,WAA9B,C;K;4F2GzEf,Y;M3GyES,MAAM,6  
B2GzED,uC3GyE+B,WAA9B,C;K;+C2GvEnD,iB;M3GuE6C,MAAM,6B2GvEG,uC3GuE2B,WAA9B,C;K;mC2  
GrEnD,iB;MAA4C,iBAAU,I;K;qCAEtD,Y;MAA+B,Q;K;;oHCnE/B,qB;MAAQ,2B;K;;;ICkZ,g

E;MAMI,qBAAU,UAAV,EAAgC,OAAV,WAAU,CAAhC,EAA0C,gBAA1C,C;K;IAEJ,8B;MAC2C,iC;K;IAE3C,kC;MAC+C,qBAAU,cAAA,KAAM,WAAN,CAAV,EAA8B,KAAM,UAApC,EAA+C,IAA/C,C;K;IAE/C,2D;MAM0B,IAAN,I;MAAA,QAAM,QAAN,C;aACZ,I;UAAA,K;aACA,K;UAAA,K;;UAFY,K;;MAAhB,oB;MAMA,OAAO,uBAAMb,IAAnB,EAAqC,OAAZ,WAAY,CAArC,EAA+C,SAA/C,EAA0D,KAA1D,C;K;IAGX,kC;MAEI,OAAA,uCAAkB,K;K;IAEpB,8C;MAEI,OAAA,uCAAkB,mBAAU,IAAV,C;K;IAEpB,8C;MAEI,OAAA,uCAAkB,mBAAU,IAAV,C;K;IAEpB,kD;MAEI,OAAA,uCAAkB,uBAAc,IAAd,C;K;IC/CI,8D;MACpB,sC;MACA,sC;MACA,kD;K;mEAFa,Y;MAAA,gC;K;kEACA,Y;MAAA,+B;K;yEACA,Y;MAAA,sC;K;iCAEA,iB;MACI,0CACQ,wBAAc,KAAM,WAApB,CADR,IAC0C,uBAAa,KAAM,UAAAnB,CAD1C,IAC0E,0BAAoB,KAAM,iB;K;mCAExG,Y;MACI,SAAC,CAAW,SAAX,eAAW,CAAX,GAAwB,EAAxB,QAAuC,SAAV,cAAU,CAAvC,IAAD,IAAsD,EAAtD,QAA4E,SAAjB,qBAAiB,CAA5E,I;K;IAYgD,mD;MAAA,qB;QAAE,OAAG,0BAAH,EAAG,C;O;K;mCAVzD,Y;MACkB,UACO,M;MADrB,aAAc,2D;MAEV,cAAU,IAAV,C;QAA6B,SAAX,eAAW,W;WAC7B,IAAA,MAAO,WAAp,S;QAAoC,SAAP,MAAO,W;;QAC5B,+B;MAHZ,2B;MAMA,WACQ,cAAU,UAAAd,GAAyB,EAazB,GACe,eAAV,cAAU,EAAa,IAAb,EAAMb,GAAAnB,EAawB,GAAxB,kBAA6B,+BAA7B,C;MACnB,eAAmB,qBAAJ,GAAsB,GAAtB,GAA+B,E;MAE9C,OAAO,iBAaiB,IAAjB,GAAwB,Q;K;qCAGnC,qB;MAEI,IAAI,sBAAY,IAAhB,C;QAAsB,OAAO,G;MAC7B,OAAGb,aAAT,kBAAS,CAAT,GAA+B,SAAL,cAAK,C;K;;IAI9C,wB;MAAA,4B;MACI,4BAAwC,I;MACxC,2BAAgD,W;MACHd,kCAAyC,K;K;0FAFzC,Y;MAAA,gC;K;yFACA,Y;MAAA,+B;K;gGACA,Y;MAAA,sC;K;sCACA,Y;MAAkC,gB;K;;IAJtC,oC;MAAA,mC;QAAA,kB;OAAA,4B;K;IAOA,iC;MACI,QAAM,SAAN,M;aACI,W;UADJ,OAC2B,E;aACvB,I;UAFJ,OAEoB,K;aAchB,K;UAHJ,OAGqB,M;gBAHrB,mC;;K;IC3CkC,oE;MACIC,0B;MACA,wC;MACA,kC;MACA,oC;K;sEAHA,Y;MAAA,0B;K;6EACA,Y;MAAA,iC;K;0EACA,Y;MAAA,8B;K;2EACA,Y;MAAA,+B;K;4CAEA,Y;MAAkC,gB;K;;8CANtC,Y;MACI,gB;K;8CADJ,Y;MAEI,uB;K;8CAFJ,Y;MAGI,oB;K;8CAHJ,Y;MAII,qB;K;gDAJJ,kD;MAAA,8BACI,kCADJ,EAEL,uDAFJ,EAAGI,8CAHJ,EAII,iDAJJ,C;K;4CAA,Y;MAAA,c;MACI,qD;MACA,4D;MACA,yD;MACA,0D;MAJJ,a;K;0CAA,iB;MAAA,4IACI,oCADJ,IAEL,kDAFJ,IAGI,4CAHJ,IAII,8CAJJ,I;K;ICAA,4B;MAAA,gC;MAEI,gBACe,wBAAoB,MAApB,EAA6D,KAA7D,EAAoE,gCAApE,C;MAEf,mBACKB,wBAAoB,MAApB,EAAGe,QAAhE,EAA0E,mCAA1E,C;MAEIB,oBACmB,+B;MAEnB,oBACmB,wBAAoB,OAAPB,EAaKE,SAaIE,EAA6E,oCAA7E,C;MAEnB,iBACgB,wBAAoB,MAApB,EAA8D,MAA9D,EAAsE,iCAAtE,C;MAEhB,kBACiB,wBAAoB,MAApB,EAAD,OAA/D,EAawE,kCAAxE,C;MAEjB,gBACe,wBAAoB,MAApB,EAA6D,KAA7D,EAAoE,gCAApE,C;MAEf,kBACiB,wBAAoB,MAApB,EAA+D,OAA/D,EAawE,kCAAxE,C;MAEjB,mBACKB,wBAAoB,MAApB,EAAGe,QAAhE,EAA0E,mCAA1E,C;MAEIB,kBACiB,wBAAoB,KAAPB,EAaIE,OAajE,EAA0E,kCAA1E,C;MAEjB,mBACKB,wBAAoB,MAApB,EAAGe,QAAhE,EAA0E,mCAA1E,C;MAEIB,sBACqB,wBAAoB,KAAPB,EAaKE,WAAIE,EAA+E,sCAA/E,C;MAErB,yBACwB,wBAAoB,KAAPB,EAaqF,cAArE,EAaqF,yCAArF,C;MAExB,sBACqB,wBAAoB,WAApB,EAAwE,WAAxE,EAaqF,sCAArF,C;MAErB,sBACqB,wBAAoB,SAAPB,EAAsE,WAAIE,EAAMF,sCAANF,C;MAErB,uBACsB,wBAAoB,UAApB,EAAwE,YAAxE,EAAsF,uCAAtF,C;MAEtB,qBACoB,wBAAoB,UAApB,EAAsE,UAAIE,EAakF,qCAAlF,C;MAEpB,sBACqB,wBAAoB,KAAPB,EAaKE,WAAIE,EAA+E,sCAA/E,C;MAErB,uBACsB,wBAAoB,YAApB,EAA0E,YAA1E,EAawF,uCAAxF,C;MAEtB,wBACuB,wBAAoB,YAApB,EAA2E,aAA3E,EAA0F,wCAA1F,C;K;IAMkB,qE;MAAA,qB;QAAE,OtE/DD,OsE+DU,EAAT,KAAiB,UAAjB,IAAkC,EAAY,OAaf,KAA0B,a;O;K;+CAJpG,iB;MAE2B,Q;MAAhB,U;MAAA,KAAGB,OAahB,eAAgB,CAAI,KAAJ,CAAhB,U;QAAA,a;;QACH,aAAa,wBAAoB,QAApB,EAA+D,kBAA/D,EACoB,mDADpB,C;QAEg,eAAhB,UAAqC,M;QAHIC,SAIH,M;;MAJJ,a;K;IA7D+E,8C;MAAE,6B;K;IAGO,iD;MAAE,0B;K;IAME,kD;MAAE,8B;K;IAGZ,+C;MAAE,6B;K;IAGC,gD;MAAE,6B;K;IAGR,8C;MAAE,6B;K;IAGI,gD;MAAE,6B;K;IAGC,iD;MAAE,6B;K;IAGH,gD;MAAE,yB;K;IAGD,iD;MAAE,6B;K;IAGM,oD;MAAE,mC;K;IAGO,uD;MAAE,gC;K;IAGL,oD;MAAE,6B;K;IAGJ,oD;MAAE,6B;K;IAGE,qD;MAAE,8B;K;IAGR,mD;MAAE,4B;K;IAGJ,oD;MAAE,6B;K;IAGQ,qD;MAAE,8B;K;IAGC,sD;MAAE,+B;K;;IA5DvH,wC;MAAA,uC;QAAA,sB;OAAA,gC;K;;ICCA,2B;MAEW,Q;MAAA,IAAI,KAAY,SAAQ,MAAR,CAAhB,C;QACH,kBAAW,MAAX,C;;QAEA,kBAAW,MAAX,C;;MAHJ,W;K;IAOJ,8B;MAC4E,QAAM,QAAS,OAaf,C;aACxE,C;UADwE,OACnE,WAAW,SAAS,CAAT,CAAX,C;aACL,C;UAFwE,OAEnE,+B;gBAFmE,OAGhE,iB;;K;IAGZ,oC;MAEU,IAAN,I;MAAA,QvEhB0C,OuEgB3B,CAAf,C;aACI,Q;UAA6B,OAajB,8BAaiB,Y;UAA7B,K;aACA,Q;UAAy,OAAI,CAAY,C9DbhC,G8DamC,CAAf,MAAkC,CAAtC,GAAyC,8BAaiB,SAA1D,GAAwE,8BAaiB,Y;UAArG,K;aACA,S;UAA8B,OAajB,8BAaiB,

a;UAA9B,K;aACA,U;UAA+B,OAAjB,8BAAiB,eAAgB,CAAY,OAA5B,C;UAA/B,K;gBAGQ,6B;YAAAsC,OAAjB,8BAAiB,kB;eACtC,0B;YAAmC,OAAjB,8BAAiB,e;eACnC,0B;YAAmC,OAAjB,8BAAiB,e;eACnC,2B;YAAoC,OAAjB,8BAAiB,gB;eACpC,yB;YAAkC,OAAjB,8BAAiB,c;eAClC,0B;YAAmC,OAAjB,8BAAiB,e;eACnC,2B;YAAoC,OAAjB,8BAAiB,gB;eACpC,4B;YAAqC,OAAjB,8BAAiB,iB;eACrC,6B;;eACA,sB;YAAkC,OAAjB,8BAAiB,W;;YAE9B,kBAAkB,MAAA,gBA Ae,CAAf,CAAKB,Y;YAE7C,oBAAgB,MAAhB,C;cAAiD,OAAjB,8BAAiB,S;iBACjD,oBAAgB,KAAhB,C;cAAgD,OAAjB,8BAAiB,e;;cAE5C,cAA0B,W;cAC1B,kBAAW,OAAAX,C;;;UAxBxB,K;;MAAA,W;K;IAgCJ,4B;MAMW,Q;MAJP,IAAI,WAAW,MAAf,C;QAA6B,OAAO,8BAAiB,Y;OAErD,eAsB,MAAY,W;MAE3B,IAAI,gBAAJ,C;QACH,IAAI,QAAS,SAAT,QAAJ,C;UACI,aAAa,qBAAiB,MAAJB,C;UACb,oBAAAsB,M;UACtB,a;;UAES,OAAT,QAAS,S;;;QAGb,4BAAiB,MAAJB,C;;MATJ,W;K;ICrCJ,0B;MAIL,sBAA Y,C;K;qEAcB,4B;MAIkE,iBAA Y,KAAZ,C;K;2EAEIE,qB;MAI8D,gB;K;ICIDb,2C;MAC7C,qBAAwC,Q;K;iDA ExC,Y;MACmB,Q;MAAA,yB;MAAA,iB;QAAe,MAAM,6BAAAsB,0CAAtB,C;OAApC,eAAe,I;MACf,qBAAc,I;M ACd,OAAO,QAAS,W;K;;;ICLa,kD;MADrC,e;MACsC,0B;MAAyB,gB;MAD/D,iB;MAAA,uB;K;IAAA,mC;MA AA,sC;O;MAEI,qEAGW,CAHX,EAGc,IAHd,C;MAKA,iFAGiB,CAHjB,EAGoB,IAHpB,C;MAKA,iFAGiB,CAHj B,EAGoB,IAHpB,C;MAKA,iFAGiB,CAHjB,EAGoB,IAHpB,C;MAKA,+EAGgB,CAHhB,EAGmB,IAHnB,C;MA KA,yEAGa,CAHb,EAGgB,IAHhB,C;MAKA,iFAGiB,CAHjB,EAGoB,IAHpB,C;MAKA,6EAGe,CAHf,EAGkB,I AHIB,C;MAKA,6FAGuB,CAHvB,EAG0B,IAH1B,C;MAKA,yFAGqB,CAHrB,EAGwB,IAHxB,C;MAKA,4EAGc ,EAHd,EAGkB,IAHIB,C;MAKA,0EAGa,EAHb,EAGiB,IAHjB,C;MAKA,gFAGgB,EAHhB,EAGoB,IAHpB,C;M AKA,8EAGe,EAHf,EAGmB,IAHnB,C;MAKA,wFAGoB,EAHpB,EAGwB,IAHxB,C;MAKA,gEAGQ,EAHR,EA GY,IAHZ,C;MAKA,8DAGO,EAHP,EAGW,IAHX,C;MAKA,wEAGY,EAHZ,EAGgB,IAHhB,C;MAKA,oEAGU, EAHV,EAGc,IAHd,C;MAKA,kFAGiB,EAHjB,EAGqB,IAHrB,C;MAKA,oFAGkB,EAHIB,EAGsB,IAHtB,C;MA KA,gFAGgB,EAHhB,EAGoB,IAHpB,C;MAKA,4FAGsB,EAHtB,EAG0B,IAH1B,C;MAKA,oFAGkB,EAHIB,EA GsB,IAHtB,C;MAKA,wEAGY,EAHZ,EAGgB,IAHhB,C;MAKA,gFAGgB,EAHhB,EAGoB,IAHpB,C;MAKA,gF AGgB,EAHhB,EAGoB,IAHpB,C;MAKA,0EAGa,EAHb,EAGiB,IAHjB,C;MAKA,oGAG0B,EAH1B,EAG8B,IAH 9B,C;MAKA,gGAGwB,EAHxB,EAG4B,IAH5B,C;MAUA,oC;K;;IA3JA,+C;MAAA,yB;MAAA,uC;K;;IAKA,qD; MAAA,yB;MAAA,6C;K;;IAKA,qD;MAAA,yB;MAAA,6C;K;;IAKA,qD;MAAA,yB;MAAA,6C;K;;IAKA,oD;MA AA,yB;MAAA,4C;K;;IAKA,iD;MAAA,yB;MAAA,yC;K;;IAKA,qD;MAAA,yB;MAAA,6C;K;;IAKA,mD;MAAA ,yB;MAAA,2C;K;;IAKA,2D;MAAA,yB;MAAA,mD;K;;IAKA,yD;MAAA,yB;MAAA,iD;K;;IAKA,kD;MAAA,yB ;MAAA,0C;K;;IAKA,iD;MAAA,yB;MAAA,yC;K;;IAKA,oD;MAAA,yB;MAAA,4C;K;;IAKA,mD;MAAA,yB;M AAA,2C;K;;IAKA,wD;MAAA,yB;MAAA,gD;K;;IAKA,4C;MAAA,yB;MAAA,oC;K;;IAKA,2C;MAAA,yB;MAA A,mC;K;;IAKA,gD;MAAA,yB;MAAA,wC;K;;IAKA,8C;MAAA,yB;MAAA,sC;K;;IAKA,qD;MAAA,yB;MAAA, 6C;K;;IAKA,sD;MAAA,yB;MAAA,8C;K;;IAKA,oD;MAAA,yB;MAAA,4C;K;;IAKA,0D;MAAA,yB;MAAA,kD; K;;IAKA,sD;MAAA,yB;MAAA,8C;K;;IAKA,gD;MAAA,yB;MAAA,wC;K;;IAKA,oD;MAAA,yB;MAAA,4C;K;; IAKA,oD;MAAA,yB;MAAA,4C;K;;IAKA,iD;MAAA,yB;MAAA,yC;K;;IAKA,8D;MAAA,yB;MAAA,sD;K;;IAK A,4D;MAAA,yB;MAAA,oD;K;8CAKA,gB;MAG2D,OAAK,iBAAL,IAAK,CAAL,KAA2B,IAAK,c;K;IAE3F,kC; MAAA,sC;K;uDACL,oB;MAEQ,IADE,QACF,IAAG,CAAH,IADE,QACF,IAAM,EAAN,C;QADJ,OACgB,sBAAS ,QAAT,C;WACZ,IAFE,QAEF,IAAG,EAH,IAFE,QAEF,IAAO,EAAP,C;QAFJ,OAEiB,sBAAS,WAAW,CAAX,I AAT,C;;QACL,MAAM,gCAAYB,eAAY,QA AZ,qBAAzB,C;K;;IAL1B,8C;MAAA,yB;MAAA,6C;QAAA,4B;OAA AA,sC;K;;IA7JJ,+B;MAAA,+yC;K;;IAAA,oC;MAAA,a;AAAA,Y;UAAA,4C;aAAA,kB;UAAA,kD;aAAA,kB;UA AA,kD;aAAA,kB;UAAA,kD;aAAA,iB;UAAA,iD;aAAA,c;UAAA,8C;aAAA,kB;UAAA,kD;aAAA,gB;UAAA,gD; aAAA,wB;UAAA,wD;aAAA,sB;UAAA,sD;aAAA,e;UAAA,+C;aAAA,c;UAAA,8C;aAAA,iB;UAAA,iD;aAAA,g B;UAAA,gD;aAAA,qB;UAAA,qD;aAAA,S;UAAA,yC;aAAA,Q;UAAA,wC;aAAA,a;UAAA,6C;aAAA,W;UAAA ,2C;aAAA,kB;UAAA,kD;aAAA,mB;UAAA,mD;aAAA,iB;UAAA,iD;aAAA,uB;UAAA,uD;aAAA,mB;UAAA,m D;aAAA,a;UAAA,6C;aAAA,iB;UAAA,iD;aAAA,iB;UAAA,iD;aAAA,c;UAAA,8C;aAAA,2B;UAAA,2D;aAAA,y B;UAAA,yD;gBAAA,6D;;K;;ICKiD,2C;uBAA+B,O;;K;;IAC5E,8C;MAAA,KE;MAAuB,qCAAK,IAAL,C;MAAv B,Y;K;ICD8B,gC;MAe9B,gBAAiC,YAAY,SAAhB,GAA2B,OAA3B,GAAwC,E;K;uFAGjE,Y;MAAQ,OAAO,aA AY,O;K;yCAE/B,iB;MACW,gBAAP,a;MpGoGG,Q;MAAA,IoGpGc,KpGoGV,IAAS,CAAT,IoGpGU,KpGoGI,IA AS,2BAA3B,C;QAAA,OAAAsC,qBoGpGxB,KpGoGwB,C;;QoGpGf,MAAM,8BAA0B,mCAAYB,WAAZB,MAA1 B,C;;MAAhC,W;K;kDAEJ,gC;MAAgF,OAAA,azGiMY,WyGjMK,UzGiML,EyGjMiB,QzGiMjB,C;K;6CyG/L5Fi

B;MACI,qCAAU,KAAV,C;MACA,OAAO,I;K;6CAGX,iB;MACI,iBAAGB,SAAN,KAAM,C;MACHB,OAAO,I;K;6CAGX,uC;MACI,OAAA,IAAK,qBAAY,wBAAS,MAARb,EAA6B,UAA7B,EAAyC,QAAzC,C;K;sCAET,Y;MAayB,UAEK,M;MAL1B,eAAe,E;MACf,YAAY,aAAO,OAAP,GAAgB,CAAhB,I;MACZ,OAAO,SAAS,CAAhB,C;QACI,UAAU,0BAAO,YAAP,EAAO,oBAAP,Q;QACV,IAAQ,eAAJ,GAAL,CAAJ,IAAwB,SAAS,CAArC,C;UACI,WAAW,0BAAO,cAAP,EAAO,sBAAP,U;UACX,IAAS,gBAAL,IAAK,CAAT,C;YACI,WAAW,+BAAW,iBAAX,wBAakB,gBAaIB,C;;YAEX,WAAW,+BAAW,gBAAX,wBAaIB,iBAaJB,C;;UAGf,gCAAY,GAAZ,C;;MAGR,gBAAS,Q;MACT,OAAO,I;K;6CAGX,iB;MAOI,iBAAGB,SAAN,KAAM,C;MACHB,OAAO,I;K;6CAGX,iB;MAQI,iBAAU,K;MACV,OAAO,I;K;6CAGX,iB;MAQI,iBAAGB,eAAN,KAAM,C;MACHB,OAAO,I;K;6CAGX,iB;MAC2C,2BAAO,KAAP,C;K;6CAE3C,iB;MAOI,gBAAA,IAAK,SAAL,IAAe,wBAAS,MAAxB,C;MACA,OAAO,I;K;uCAGX,Y;MAU6B,kB;K;qDAE7B,2B;K;8CAcA,kB;MAO0C,OAAA,IAAY,SAAY,SAAQ,MAAR,C;K;8CAEIE,8B;MAQ2D,OAAA,IAAY,SAAY,SAAQ,MAAR,EAAgB,UAAhB,C;K;kDAEnF,kB;MAQ8C,OAAA,IAAY,SAAy,aAAY,MAAZ,C;K;kDAEIE,8B;MASI,IAAI,MnGuGwC,YAAU,CmGvGID,IAAoB,aAAa,CAArC,C;QAAwC,OAAO,E;MAC/C,OAAO,IAAY,SAAY,aAAY,MAAZ,EAAoB,UAApB,C;K;4CAGnC,wB;MAWI,oCAAA,4BAAmB,KAAAnB,EAA0B,WAA1B,C;MAEb,gBAAS,azGmB+E,WyGnB9D,CzGmB8D,EyGnB3D,KzGmB2D,CyGnB/E,YAA6B,KAA7B,IAAqC,azGgB2B,WyGhBV,KzGgBU,C;MyGfzE,OAAO,I;K;6CAGX,wB;MAQI,oCAAA,4BAAmB,KAAAnB,EAA0B,WAA1B,C;MAEb,gBAAS,azGK+E,WyGL9D,CzGK8D,EyGL3D,KzGK2D,CyGL/E,uBAA6B,kBAA7B,IAAqC,azGE2B,WyGFV,KzGEU,C;MyGDzE,OAAO,I;K;6CAGX,wB;MAUI,oCAAA,4BAAmB,KAAAnB,EAA0B,WAA1B,C;MAEb,gBAAS,azGX+E,WyGW9D,CzGX8D,EyGW3D,KzGX2D,CyGW/E,GAAMC,eAAN,KAAM,CAAnC,GAAsD,azGdU,WyGcO,KzGdP,C;MyGezE,OAAO,I;K;6CAGX,wB;MAAI,oCAAA,4BAAmB,KAAAnB,EAA0B,WAA1B,C;MAEb,gBAAS,azG9B+E,WyG8B9D,CzG9B8D,EyG8B3D,KzG9B2D,CyG8B/E,GAAMC,SAAN,KAAM,CAAnC,GAAGD,azGjCgB,WyGiCC,KzGjCD,C;MyGkCzE,OAAO,I;K;6CAGX,wB;MAWI,oCAAA,4BAAmB,KAAAnB,EAA0B,WAA1B,C;MAEb,gBAAS,azG/C+E,WyG+C9D,CzG/C8D,EyG+C3D,KzG/C2D,CyG+C/E,GAAMC,SAAN,KAAM,CAAnC,GAAGD,azGIDgB,WyGkDC,KzGIDD,C;MyGmDzE,OAAO,I;K;6CAGX,wB;MACuD,2BAAO,KAAP,EAAC,KAAD,C;K;6CAEvD,wB;MAUI,oCAAA,4BAAmB,KAAAnB,EAA0B,WAA1B,C;MAEb,eAAe,wBAAS,M;MACxB,gBAAC,IAAK,SzGnEqE,WyGmEpD,CzGnEoD,EyGmEjD,KzGnEiD,CyGmEIE,GAAC,QAAIC,GAAGC,IAAK,SzGtES,WyGsEQ,KzGtER,C;MyGuEzE,OAAO,I;K;gDAGX,qB;MACII,IAAI,YAAY,CAAhB,C;QACI,MAAM,gCAAYB,0BAAuB,SAAvB,MAAZB,C;OAGV,IAAI,aAAa,WAAJB,C;QACI,gBAAS,azG1F2E,WyG0F1D,CzG1F0D,EyG0FvD,SzG1FuD,C;;QyG4FpF,aAAU,WAAV,MAAuB,SAAvB,M;UACI,qCAAU,CAAV,C;;K;gDAKZ,sB;MAQI,oCAAA,4BAAmB,UAAAnB,EAA+B,WAA/B,C;MAEb,OAAO,azG/GkE,WyG+GjD,UzG/GiD,C;K;gDyGkH7E,gC;MAQI,oCAAA,4BAAmB,UAAAnB,EAA+B,QAA/B,EAAyC,WAAzC,C;MAEb,OAAO,azGzHiF,WyGyHhE,UzGzHgE,EyGyHpD,QzGzHoD,C;K;yCyG4H5F,Y;K;uCAcA,Y;MAAkC,oB;K;oCAEIC,Y;MAOI,gBAAS,E;MACT,OAAO,I;K;0CAGX,wB;MAQI,oCAAA,2BAakB,KAAIB,EAAyB,WAAzB,C;MAEb,gBAAS,azGjK+E,WyGiK9D,CzGjK8D,EyGiK3D,KzGjK2D,CyGiK/E,uBAA6B,kBAA7B,IAAqC,azGpK2B,WyGoKV,QAAQ,CAAR,IzGpKU,C;K;+CyGuK7E,uC;MAYI,yBAakB,UAAIB,EAA8B,QAA9B,EAAwC,WAAxC,C;MAEA,gBAAC,IAAK,SzGILqE,WyGkLpD,CzGILoD,EyGkLjD,UzGILiD,CyGkL1E,GAAC,KAAvC,GAAC,IAAK,SzGrLO,WyGqLU,QzGrLV,C;MyGsLzE,OAAO,I;K;kDAGX,wC;MACI,IAAI,aAAa,CAAb,IAAkB,aAAa,MAAnC,C;QACI,MAAM,8BAA0B,iBAAC,UAAAd,kBAAMC,MAA7D,C;OAEV,IAAI,aAAa,QAaJB,C;QACI,MAAM,gCAAYB,gBAAa,UAAAb,qBAAqC,QAARc,MAAZB,C;Q;+CAId,iB;MAYI,oCAAA,2BAakB,KAAIB,EAAyB,WAAzB,C;MAEb,gBAAS,azG7M+E,WyG6M9D,CzG7M8D,EyG6M3D,KzG7M2D,CyG6M/E,GAAG6B,azGhNmC,WyGgNIB,QAAQ,CAAR,IzGhNkB,C;MyGiNzE,OAAO,I;K;kDAGX,gC;MAWI,yBAakB,UAAIB,EAA8B,QAA9B,EAAwC,WAAxC,C;MAEA,gBAAS,azG9N+E,WyG8N9D,CzG9N8D,EyG8N3D,UzG9N2D,CyG8N/E,GAAC,azGjO8B,WyGiOb,QzGjOa,C;MyGkOzE,OAAO,I;K;kDAGX,gE;MAC+C,iC;QAAA,oBAAYB,C;MAAG,0B;QAAA,aAAkB,C;MAAG,wB;QAAA,WAAgB,IAAK,O;MAKIF,IACf,I;MALhB,oCAAA,4BAAmB,UAAAnB,EAA+B,QAA/B,EAAyC,WAAzC,C;MACb,oCAAA,4BAAmB,iBAAnB,EAAc,oBAAoB,QAAPB,GA A+B,UAA/B,IAAtC,EAAiF,WAAy,OAA7F,C;MAEb,eAAe,iB;MACf,iBAAC,UAAAd,UAA+B,QAA/B,U;QACI,YAAY,eAAZ,EAAy,uBAAZ,UAA0B,yBAAO,KAAP,C;;K;kDAIIC,uC;MAcI,iBAAGB,iBAAN,KAAM,EAAe,UAAf,EAA2B,QAA3B,C;MACHB,OAAO,I;K;kDAGX,uC;MAYI,gBAAGB,KAAM,W;MACTb,oCAAA,4BAAmB,UAAAnB,EAA+B,QAA/B,EAAyC,SAAU,OAAnD,C;MAEb,iBAAU,SzG3R8E,WyG2R1D,UzG3R0D,EyG2R9C,Qz

G3R8C,C;MyG4RxF,OAAO,I;K;kDAGX,8C;MAgBI,oCAAa,4BAAmB,KAAAnB,EAA0B,IAAK,OAA/B,C;MAEb, gBAAS,azGjT+E,WyGiT9D,CzGjT8D,EyGiT3D,KzGjT2D,CyGiT/E,GAAMc,iBAAN,KAAM,EAAe,UAAf,EAA 2B,QAA3B,CAAnC,GAA0E,azGpTV,WyGoT2B,KzGpT3B,C;MyGqTzE,OAAO,I;K;kDAGX,8C;MAgBI,oCAAa ,4BAAmB,KAAAnB,EAA0B,WAA1B,C;MAEb,gBAAGb,KAAM,W;MACTb,oCAAa,4BAAmB,UAAAnB,EAA+B, QAA/B,EAAyC,SAAU,OAAAnD,C;MAEb,gBAAS,azG1U+E,WyG0U9D,CzG1U8D,EyG0U3D,KzG1U2D,CyG0U /E,GAA6B,SzG1UkD,WyG0U9B,UzG1U8B,EyG0UIB,QzG1UkB,CyG0U/E,GAAyE,azG7UT,WyG6U0B,KzG7U 1B,C;MyG8UzE,OAAO,I;K;;IAliBX,6C;MAAA,uD;MAKoC,2B;MALpC,Y;K;IAQA,8C;MAAA,uD;MAC4C,0B AAK,OAAQ,WAAb,C;MAD5C,Y;K;IAGA,qC;MAAA,uD;MACuB,0BAAK,EAAL,C;MADvB,Y;K;2EA4hBJ,qB ;MAOgE,OAAA,SAAK,Q;K;uEAeRE,mC;MAQ+E,SAAK,aAAI,KAAJ,EAAW,KAAX,C;K;+EAepF,kD;MAaI,O AAA,SAAK,kBAAS,UAAAT,EAAqB,QAArB,EAA+B,KAA/B,C;K;+EAET,4B;MAY6E,OAAA,SAAK,kBAAS,K AAT,C;K;qFAEIF,2C;MAWoG,OAAA,SAAK,qBAAY,UAAZ,EAAwB,QAAxB,C;K;uFAEZg,2E;MAe2E,iC;QA AA,oBAAYB,C;MAAG,0B;QAAA,aAAkB,C;MAAG,wB;QAAA,WAAgB,SAAK,O;MAC7I,SAAK,qBAAY,WA AZ,EAAyB,iBAAZB,EAA4C,UAA5C,EAAwD,QAAxD,C;K;qFAET,kD;MAeI,OAAA,SAAK,qBAAY,KAAZ,EA AmB,UAAAnB,EAA+B,QAA/B,C;K;uFAET,kD;MAaI,OAAA,SAAK,qBAAY,KAAZ,EAAMb,UAAAnB,EAA+B,Q AA/B,C;K;qFAET,yD;MAiBI,OAAA,SAAK,qBAAY,KAAZ,EAAMb,KAAAnB,EAA0B,UAA1B,EAAsC,QAAtC, C;K;uFAET,yD;MAiBI,OAAA,SAAK,qBAAY,KAAZ,EAAMb,KAAAnB,EAA0B,UAA1B,EAAsC,QAAtC,C;K;qF 1GhsBT,qB;MAMoD,OA6BW,8BAAY,cAfrB,YAAY,CAAZ,C;K;yFAZtD,qB;MAYsD,OAeS,8BAAY,cAfrB,YA AY,CAAZ,C;K;iFAEtD,qB;MAaoD,OAAW,8BAAY,c;K;qFAE3E,yB;MAAA,uD;MAAA,4B;QAMoD,+B;O;KA NpD,C;IAQA,kC;MAYI,gBAiB2D,8BAAY,c;MAhBvE,OAAW,SAAU,OAAV,GAAMb,CAAvB,GAA0B,SAI1B ,GAAoC,qBAAU,CAAV,C;K;iFAG/C,qB;MAaoD,OAAW,8BAAY,c;K;IAE3E,kC;MAU+C,mC;K;IAE/C,oC;MA GoD,QAAQ,cAAA,sCAAK,mBAAL,EAAyB,sCAAK,mBAA9B,CAAR,6B;K;IAEpD,mC;MAGmD,QAAQ,cAA A,sCAAK,kBAAL,EAAwB,sCAAK,kBAA7B,CAAR,6B;K;IAO/C,iC;MAAQ,OAAA,oCAAa,iBAAQ,2BAAR,C; K;IAEZb,8B;MAOI,IAAI,YAAO,GAAX,C;QACI,OAAO,I;OAEX,OAAO,gCAA8C,mD;K;IAGzD,6B;MAUI,IAA I,CAAQ,kBAAK,GAAL,CAAR,iCAAoB,CAAQ,kBAAK,EAAL,CAAR,6BAAxB,C;QACI,OAAO,I;OAEX,IAAI, YAAO,GAAX,C;QACI,OAAO,K;OAEX,OAAO,uB;K;IAGX,oC;MAUI,IAAI,CAAQ,kBAAK,GAAL,CAAR,iCA AoB,CAAQ,kBAAK,EAAL,CAAR,6BAApB,IAAwC,CAAQ,kBAAK,EAAL,CAAR,6BAA5C,C;QACI,OAAO,I; OAEX,IAAI,YAAO,GAAX,C;QACI,OAAO,K;OAGX,OAAO,0BAAiB,uB;K;IAG5B,4B;MASI,IAAI,CAAQ,kBA AK,EAAL,CAAR,6BAAJ,C;QACI,OAAO,I;OAEX,IAAI,YAAO,GAAX,C;QACI,OAAO,K;OAEX,OAAO,sB;K;I AGX,gC;MAUI,IAAI,CAAQ,kBAAK,EAAL,CAAR,6BAAJ,C;QACI,OAAO,I;OAEX,IAAI,YAAO,GAAX,C;QA CI,OAAO,K;OAEX,OAAO,0B;K;IAGX,gC;MAUI,IAAI,CAAQ,kBAAK,GAAL,CAAR,6BAAJ,C;QACI,OAAO,I ;OAEX,IAAI,YAAO,GAAX,C;QACI,OAAO,K;OAEX,OAAO,0B;K;IAGX,gC;MASI,IAAI,YAAO,GAAX,C;QA CI,OAAO,K;OAEX,OAAO,gCAAoD,yD;K;IAG/D,iC;MAUI,OAAO,aAAQ,EAAR,IAAoB,CAAQ,mBAAU,GAA V,CAAR,6B;K;IAG/B,iC;MAMiD,kC;K;iF2GtPjD,yB;MAAA,+C;MAAA,4B;QAMuD,OAAK,UAAAL,SAAK,C;O ;KAN5D,C;IAQA,gC;MAMiD,4B;MAAA,S;QAAGb,cAAA,S1G4LC,c0G5LD,EAAoB,MAApB,C;OAAhB,W;K;I AEjD,6B;MAI0C,Q;MAAA,yDAakB,kBAakB,SAIb,C;K;IAE5D,oC;MAKoD,Q;MAAA,yCAAa,KAAb,oBAA uB,kBAakB,SAIb,C;K;IAG3E,8B;MAI4C,Q;MAAA,0DAAMb,kBAakB,SAIb,C;K;IAE/D,qC;MAKsD,Q;M AAA,0CAAc,KAAAd,oBAAwB,kBAakB,SAIb,C;K;IAE9E,0B;MAIwC,Q;MAAA,wDAAiB,kBAakB,SAIb,C; K;IAEzD,mC;MAKkD,Q;MAAA,wCAAY,KAAZ,oBAAsB,kBAakB,SAIb,C;K;IAExE,2B;MAI0C,Q;MAAA,y DAakB,kBAakB,SAIb,C;K;IAE5D,oC;MAKoD,Q;MAAA,yCAAa,KAAb,oBAAuB,kBAakB,SAIb,C;K;IAE 3E,6B;MAIyF,kBAA1C,CAAO,S;MACID,IAAO,QpHeD,WoHfC,CAAH,IAAc,CAAM,kBAApB,KpHeE,WoHf6 B,KAAM,GAAN,IAAkB,kBAAjD,CAAJ,C;QACI,4B;MAFsC,OpHiBnC,W;K;6EoHZX,yB;MAAA,6C;MAAA,4 B;QAKmD,0B;O;KALnD,C;IAOA,mC;MAIgg,kBAA1C,CAAO,S;MAAR,OACjD,EAAK,QpH2BgB,WoH3BhB, CAAH,IAAc,CAAM,kBAApB,KpH2BmB,WoH3BY,KAAM,GAAN,IAAkB,kBAAjD,CAAF,CpH2BO,GAAqB, WAARb,GAA+B,I;K;yFoHxB1C,yB;MAAA,yD;MAAA,4B;QAK0D,gC;O;KAL1D,C;IFAoA,yB;MAAA,6C;MA AA,mC;QAO6D,OAAa,SAAR,SAAQ,EAAS,KAAT,C;O;KAP1E,C;IFASA,yB;MAAA,6C;MAAA,mC;QAO8D,O AAa,SAAR,SAAQ,EAAS,KAAT,C;O;KAP3E,C;IASA,sC;MAMqD,OAAA,SAAY,UAAAS,WAAW,KAAX,CAAT ,C;K;IAEjE,4B;MAAsC,QAAM,S1G4EsB,c0G5E5B,C;aACIC,K;aAAA,M;aAAA,M;UADkC,OACT,I;gBADS,O AE1B,K;;K;IAGZ,2B;MAKI,IAAI,EAAU,CAAV,sBAAa,EAAb,CAAJ,C;QACI,MAAM,gCAAyB,WAAQ,KAAR



,kCAAzB,C;OAEV,OAAO,K;K;IAGX,8B;MAA2D,Q;MACvD,YAAQ,EAAR,IAAe,QAAQ,EAAvB,C;QAA8B,cAAO,E;WACrC,YAAQ,EAAR,IAAe,QAAQ,EAAvB,C;QAA8B,cAAO,EAAP,GAAa,EAAb,I;WAC9B,YAAQ,EAAR,IAAe,QAAQ,GAAvB,C;QAA8B,cAAO,EAAP,GAAa,EAAb,I;WAC9B,WAAO,GAAP,C;QAAMb,S;WACnB,YAAQ,KAAR,IAAoB,QAAQ,KAA5B,C;QAAwC,cAAO,KAAP,GAAB,EAAlB,I;WACx,C,YAAQ,KAAR,IAAoB,QAAQ,KAA5B,C;QAAwC,cAAO,KAAP,GAAB,EAAlB,I;QAC3B,sBAAL,IAAK,C;Mph9CN,a;MoHuCGD,OAQ/C,WAAJ,GAAiB,EAajB,GAAyB,E;K;ICIJG,2C;MAHPc,e;MAGqC,kB;MAHrC,iB;MAAA,uB;K;IAAA,kC;MAAA,qC;O;MAII,qEACY,GADZ,C;MAEA,iEAIU,GAJV,C;K;;IAFA,+C;MAAA,wB;MAAA,uC;K;;IAEA,6C;MAAA,wB;MAAA,qC;K;;IANJ,8B;MAAA,mF;K;;IAAA,mC;MAAA,a;aAAA,a;UAAA,4C;aAAA,W;UAAA,0C;gBAAA,4D;;K;;IAawG,4B;MAAE,OAAA,EAAG,M;K;IAA7G,qC;MAAqE,iCAAA,EAAb,EAA0B,OAA1B,0BAAmC,cAAnc,C;K;IAQIC,2B;MAAC,kB;K;;sCALpC,Y;MAKoC,iB;K;wCALpC,iB;MAAA,sBAKoC,qCALpC,C;K;oCAAA,Y;MAAA,OAKoC,iDALpC,M;K;oCAAA,Y;MAAA,c;MAKoC,sD;MALpC,a;K;kCAAA,iB;MAAA,2IAKoC,sCALpC,G;K;IAqB0B,iC;MA8PtB,6B;MArPA,eACoC,O;MACpC,eACsD,QAAR,OAAQ,C;MACtD,uBAAoC,WAAO,OAAP,EAAwB,QAAR,OAAQ,EAAQ,IAAR,CAAxB,C;MACpC,6BAA2C,I;MAI3C,oCAAKD,I;K;0CAHID,Y;MACI,Q;MAAA,U;MAAA,gD;QAAA,a;;QAA8D,gBAAvC,WAAO,YAAP,EAAwB,QAAR,YAAQ,EAAQ,IAAR,CAAxB,C;QAA8C,6BrHmCnE,S;QqHnCF,SrHoCG,S;;MqHpCH,a;K;iDAGJ,Y;MACI,Q;MAAA,U;MAAA,uD;QAAA,a;;QrHVG,gB;QqHWC,IAAY,aAAR,YAAQ,EAAW,EAAX,CAAR,IAAmC,WAAR,YAAQ,EAAS,EAAT,CAAvC,C;UAAA,eACI,oB;;UAEA,OAAO,WAAO,MAA2B,UAAf,YAAR,YAAQ,qBAAU,EAAV,EAAe,qBAAQ,EAAR,EAA3B,MAAP,EAA2D,QAAR,YAAQ,EAAQ,IAAR,CAA3D,C;QACb,4B;QAAO,oCrH0BP,S;QqH/BF,SrHgCG,S;;MqHhCH,a;K;sCAQJ,iB;MAEkB,MAAd,oBAAC,C;MACd,YAAY,oBAAC,MAAK,KAAM,WAAX,C;MAC1B,OAAO,iBAAiB,KAAM,MAAN,KAAe,CAAhC,IAAqC,oBAAC,UAAAd,KAA2B,KAAM,O;K;8CAGjF,iB;MAEkB,MAAd,oBAAC,C;MACd,OAAO,oBAAC,MAAK,KAAM,WAAX,C;K;wCAGzB,wB;MAGI,IAAI,QAAQ,CAAR,IAAa,QAAQ,KAAM,OAA/B,C;QACI,MAAM,8BAA0B,0BAAuB,KAAvB,wBAA8C,KAAM,OA9E,C;OAEV,cAAc,0B;MACd,oBAAoB,K;MACpB,OAAO,OAAQ,MAAK,KAAM,WAAX,C;K;mCAGnB,6B;MAS4C,0B;QAAA,aAAkB,C;MAC1D,IAAI,aAAa,CAAb,IAAkB,aAAa,KAAM,OAAzC,C;QACI,MAAM,8BAA0B,gCAA6B,UAA7B,wBAAyD,KAAM,OAAzF,C;OAEV,OAAqB,SAAd,oBAAC,EAAS,KAAM,WAAf,EAA2B,UAA3B,EAAuC,oBAAvC,C;K;IAeG,6E;MAAA,mB;QAAE,+BAAK,aAAL,EAAY,kBAAZ,C;O;K;IAA2B,uC;MAAW,OAAA,KAAM,O;K;sCAZ1E,6B;MAQ+C,0B;QAAA,aAAkB,C;MAC7D,IAAI,aAAa,CAAb,IAAkB,aAAa,KAAM,OAAzC,C;QACI,MAAM,8BAA0B,gCAA6B,UAA7B,wBAAyD,KAAM,OAAzF,C;OAEV,OAAO,mBAAiB,6CAAjB,EAA8C,sBAA9C,C;K;0CAGX,iB;MAMI,OAA2B,SAA3B,iCAA2B,EAAS,KAAM,WAAf,EAA2B,CAA3B,EAA8B,oBAA9B,C;K;sCAE/B,wB;MAGI,IAAI,QAAQ,CAAR,IAAa,QAAQ,KAAM,OAA/B,C;QACI,MAAM,8BAA0B,0BAAuB,KAAvB,wBAA8C,KAAM,OA9E,C;OAEV,OAA2B,SAAPB,0BAAoB,EAAS,KAAM,WAAf,EAA2B,KAA3B,EAAC,oBAAIC,C;K;IA4BL,mD;MAAA,qB;QAAE,2BAAoB,EAAPB,EAAwB,mBAAxB,C;O;K;sCAxB5B,8B;MAqBI,IAAI,CAAA,YAAZ,WAAZ,EAAS,EAAT,CAAb,IAA+B,CAAA,YAAZ,WAAZ,EAAS,EAAT,CAAhD,C;QACI,OAAO,KAAM,W3G2E4E,S2G3EnD,oB3G2EmD,E2G3EpC,W3G2EoC,C;O2GzE7F,OAAO,qBAAQ,KAAR,EAAe,iCAAf,C;K;sCAGX,4B;MAMI,YAAY,kBAAK,KAAL,C;MACZ,IAAI,aAAJ,C;QAAMb,OAAO,KAAM,W;MAEHc,gBAAgB,C;MACHb,aAAa,KAAM,O;MACnB,SAAS,mBAAc,MAAd,C;;QAEI,iBAAiB,oB;QACjB,EAAG,gBAAO,KAAP,EAAC,SAAd,EAAYB,UAAW,MAAM,MAA1C,C;QACH,EAAG,gBAAO,UAAU,UAAV,CAAP,C;QACH,YAAY,UAAW,MAAM,aAAjB,GAAGC,CAAhC,I;QACZ,QAAQ,UAAW,O;;MACd,oBAAZ,MAAZ,IAAsB,aAAtB,C;MAET,IAAI,YAAY,MAAhB,C;QACI,EAAG,gBAAO,KAAP,EAAC,SAAd,EAAYB,MAAZB,C;OAGP,OAAO,EAAG,W;K;2CAGd,8B;MA0BgB,Q;MALZ,IAAI,CAAA,YAAZ,WAAZ,EAAS,EAAT,CAAb,IAA+B,CAAA,YAAZ,WAAZ,EAAS,EAAT,CAAhD,C;QACI,uBAA+B,QAAR,YAAQ,EAAQ,GAAAR,C;QAC/B,OAAO,KAAM,W3GoB4E,S2GpBnD,WAAO,YAAP,EAAgB,gBAAhB,C3GoBmD,E2GpBhB,W3GoBgB,C;O2GjBjF,yBAAK,KAAL,C;MAAA,iB;QAae,OAAO,KAAM,W;OAAxC,YAAY,I;MCoLO,gBAAhB,sB;MDjLC,yBrG2LgF,0BqG3LzD,CrG2LyD,EqG3LhD,WAAM,MrG2L0C,CAAKC,WqG3LIH,C;MACA,yBAAO,uCAAP,C;MACA,yBrGyLgF,0BqGzLnD,WAAM,KAAZ,GAAmB,CAAnB,IrGyLyD,EqGzL7B,YrGyL6B,CAAKC,WqGzLIH,C;MAHJ,OrHlJG,SsHoUqC,W;K;oCD3K5C,wB;MAO6C,qB;QAAA,QAAa,C;MAMxC,Q;MALd,wBAAwB,KAAxB,C;MrHrIG,SqHsIW,qBAAQ,KAAR,C;MAAd,cAAuC,UAAAS,CAAb,GAAGB,EAAhB,GAA2B,OA AH,EAAG,EAAC,QAAQ,CAAR,IAAL,C;MAC9D,ahI3JgD,gB;MgI4JhD,gBAAgB,C;MAEF,yB;MAAd,OAAC

AAd,C;QAAC,uB;QACV,MAAO,WAAU,mBAAN,KAAM,EAAY,SAAZ,EAaUB,KAAM,MAAM,MAAnC,CAA  
0C,WAApD,C;QACP,YAAY,KAAM,MAAM,aAAZ,GAA2B,CAA3B,I;;MAEhB,MAAO,WAAU,mBAAN,KAA  
M,EAAY,SAAZ,EAaUB,KAAM,OAA7B,CAAqC,WAA/C,C;MACP,OAAO,M;K;IAGBS,yI;MAAA,wC;MAAA,6  
B;MAAA,yB;MAAA,0C;MAAA,oC;MAAA,0C;MAAA,yB;MAAA,6B;MAAA,8B;MAAA,8B;MAAA,kC;K;;;gE  
AAA,Y;;;;iCACA,mCAAK,wBAAL,C;cACZ,IAAI,4BAAiB,6BAAS,CAA9B,C;gBACI,gB;gCAAA,iCAAM,wB  
AAM,WAAZ,O;oBAAA,2C;yBAAA,yB;gBAAA,Q;;gBADJ,gB;;;;cAEI,M;;qCAGY,C;sCACC,C;cAEjB,gB;;;sC  
ACqB,+B;cACjB,gB;8BAAA,iCrGuI4E,mBqGvItE,wBrGuIsE,EqGvItD,oBrGuIsD,EqGvI3C,qBAAW,MAAM,Mr  
GuI0B,CAAKC,WqGvI9G,O;kBAAA,2C;uBAAA,yB;cAAA,Q;;cACA,uBAAY,qBAAW,MAAM,aAAjB,GAAgC,  
CAAhC,I;cACZ,mBAAQ,qBAAW,O;cAJvB,KAKS,qDALT,EAKS,qBALT,OAKyB,2BAAQ,CAAR,IALzB,KAK  
sC,gBALtC,S;gBAAA,gB;;;cAAA,gB;;;cAOA,gB;8BAAA,iCrGkIgF,mBqGII1E,wBrGkI0E,EqGII1D,oBrGkI0D,E  
qGII/C,wBAAM,OrGkIyC,CAAKC,WqGIIH,O;kBAAA,2C;uBAAA,yB;cAAA,Q;;cAhBA,OAgBA,a;,,,,;K;I  
AjBY,sF;MAAA,yD;uBAAA,6H;YAAA,S;iBAAA,Q;;iBAAA,uB;O;K;8CAbpB,wB;MAUuD,qB;QAAA,QAAa,C  
;MACHe,wBAAwB,KAAxB,C;MAEA,OAAO,SAAS,gDAAT,C;K;+BASBX,Y;MAMyC,OAAA,oBAAc,W;K;IAE  
vD,2B;MAAA,+B;MAmBI,uBAA4B,WAAO,uBAAP,EAAiC,GAAjC,C;MAC5B,2BAAGC,WAAO,OAAP,EAAM  
B,GAAAnB,C;MAGhC,iCAAsC,WAAO,KAAP,EAAiB,GAAjB,C;K;oDatBtC,mB;MAIwD,oBAAM,oBAAO,OAA  
P,CAAN,C;K;+CAExD,mB;MAIoD,OAAA,O3GnEyC,S2GmEnB,oB3GnEmB,E2GmEJ,M3GnEI,C;K;0D2GqE7F  
,mB;MAI+D,OAAA,O3GzE8B,S2GyER,wB3GzEQ,E2GyEW,M3GzEX,C;K;gE2G8E7F,mB;MAAgE,OAAA,O3  
G9E6B,S2G8EP,8B3G9EO,E2G8EkB,M3G9EIb,C;K;;;I2GwDjG,uC;MAAA,sC;QAAA,qB;OAAA,+B;K;;IA5PA,  
4C;MAAA,+C;MACKe,kBAAK,OAAL,EAAC,MAAM,MAAN,CAAd,C;MADIE,Y;K;IAGA,sC;MAAA,+C;MAC  
6C,kBAAK,OAAL,EAAC,UAd,C;MAD7C,Y;K;IA4RO,kG;MAAA,kC;MAAA,8C;MAAA,kC;MAAA,kC;MAC  
H,uBAA+B,a;MAI/B,sF;MAOA,sBAA0C,I;K;+FAX1C,Y;MAAA,2B;K;+FAEI,Y;MAAQ,qBAAA,kBN/R8C,CM  
+RxC,CN/RwC,CM+R9C,C;K;gGAEZ,Y;MAAA,4B;K;IAY2B,oG;MAAA,kC;MAAS,uB;K;mJACG,Y;MAAQ,O  
AAA,kBAAM,O;K;wGACrC,iB;MAAuC,Q;MAAA,eAAA,kBN/SG,CM+SG,KN/SH,CM+SH,mBAAGB,E;K;;qG  
AJnE,Y;MACI,IAAI,2BAAJ,C;QACI,yH;OAKJ,OAAO,kC;K;4CAGf,Y;MACI,OAAy,SAAZ,wBAAY,EAAS,kB  
AAT,EAAoB,kBAAM,UAAV,GAAqB,kBAAM,MAAN,GAAc,CAAd,IAArB,GAA0C,kBAAM,aAAN,GAAqB,C  
AArB,IAA1D,EAakF,wBAAIF,C;K;IArB4B,oE;MAAA,kC;MAA+B,6B;K;mHACHd,Y;MAAQ,OAAA,kBAAM,  
O;K;IACqC,4E;MAAA,qB;QAAE,yBAAK,EAAL,C;O;K;qEAA5E,Y;MAAiD,OAAqB,OAAb,aAAR,oBAAQ,CA  
Aa,EAAl,iEAAJ,CAAiB,W;K;wEACvF,iB;MAA4C,Q;MAAA,eAAA,kBNpSU,CMoSJ,KNpSI,CMoSv,YAAoB,o  
BAApB,O;K;;;IAdxD,uD;MACI,sBAAiB,I;MACjB,YAAY,eAAK,KAAL,C;MACZ,IAAI,aAAJ,C;QAAMB,OAA  
O,I;MAC1B,YAAY,aAAA,KAAM,MAAN,EAAa,sBAAy,CAAZ,IAAb,C;MAEZ,mE;K;IA8BJ,iD;MAM+B,UAK  
O,M;MATIC,YAAY,C;MACZ,aAAa,mBAAc,WAAy,OAA1B,C;MAEb,OAAO,QAAQ,WAAy,OAA3B,C;QACI,  
WAAW,wBAAY,YAAZ,EAAY,oBAAZ,Q;QACX,IAAI,SAAQ,EAZ,C;UACI,IAAI,UAAS,WAAy,OAAzB,C;Y  
ACI,MAAM,gCAAYB,mCAAzB,C;UAEV,MAAO,gBAAO,wBAAY,cAAZ,EAAY,sBAAZ,UAAP,C;eACJ,IAAI,  
SAAQ,EAZ,C;UACH,IAAI,UAAS,WAAy,OAAzB,C;YACI,MAAM,gCAAYB,kCAAzB,C;UAEV,IAAI,uBAA  
Y,KAZ,MAASB,GAA1B,C;YACI,MAAM,gCAAYB,4DAAzB,C;UAEV,IAAI,EAaUB,kBAAK,EAAL,CAAvB,0  
CAAY,KAZ,EAJ,C;YACI,MAAM,gCAAYB,mCAAzB,C;UAEV,eAA2B,eAAZ,WAAy,EAae,KAaf,EAASB,  
KAAM,YAAY,KAAxC,C;UAC3B,iBAAwD,MAAvC,W3GhKmE,W2GgK7C,K3GhK6C,E2GgKtC,Q3GhKsC,C2  
GgK5B,C;UAExD,IAAI,cAAc,KAAM,YAAY,KAApC,C;YACI,MAAM,8BAA0B,sBAAmB,UAAAnB,oBAA1B,C;  
UAEV,MAAO,gBAAO,KAAM,YAAN,aAAkB,UAAIB,CAAP,C;UACP,QAAQ,Q;;UAER,MAAO,gBAAO,IAAP,  
C;;MAGf,OAAO,MAAO,W;K;IAGIB,2D;MAEI,YAAY,aAAa,CAAb,I;MACZ,iBAAiB,qBAAK,UAAI,IAAmB,  
E;MAGpC,OAAO,QAAQ,gBAAR,IAAkB,CAAE,kBAAK,EAAL,CAAF,wCAAK,KAAL,EAZB,C;QACI,oBAAo  
B,CAAC,aAAa,EAAb,IAAD,KAAqB,qBAAK,KAAL,IAAc,EAAnC,K;QACpB,IAAqB,CAAjB,qCAAYB,UAA7B  
,C;UACI,aAAa,a;UACb,qB;;UAEA,K;;;MAGR,OAAO,K;K;I3GxZX,yB;MAQiB,Q;MADb,aAAa,E;MACb,wBAA  
a,KAAb,gB;QAAa,WAAb,UAAa,KAAb,O;QACI,8BAAU,IAAV,C;;MAEJ,OAAO,M;K;IAGX,yC;MAa+B,Q;MA  
H3B,IAAI,SAAS,CAAT,IAAc,SAAS,CAAvB,IAA4B,CAAA,KAAM,OAAN,GAAa,MAAb,QAASB,MAAtD,C;Q  
ACI,MAAM,8BAA0B,WAAAS,KAAM,OAaf,kBAA+B,MAA/B,kBAAGD,MAA1E,C;MACV,aAAa,E;MACc,gBA  
AS,MAAT,I;MAA3B,iBAAc,MAAd,wB;QACI,8BAAU,MAAM,KAAN,CAAV,C;;MAEJ,OAAO,M;K;IAGX,mC;  
MAOiB,Q;MADb,aAAa,E;MACb,wBAAa,SAAb,gB;QAAa,WAAb,UAAa,SAAb,O;QACI,8BAAU,IAAV,C;;MA

EJ,OAAO,M;K;IAGX,2D;MAY2C,0B;QAAA,aAAkB,C;MAAG,wB;QAAA,WAAgB,SAAK,O;MACjF,oCAAa,4  
BAAmB,UAAAnB,EAA+B,QAA/B,EAAyC,SAAK,OAA9C,C;MACb,aAAa,E;MACb,iBAAc,UAAAd,UAA+B,QAA  
/B,U;QACI,8BAAU,UAAK,KAAL,CAAV,C;:MAEJ,OAAO,M;K;IASKB,gD;MAAA,qB;QAAE,+CAAI,EAAJ,E;  
O;K;IAN/B,kC;MAMI,OAAO,kBAAU,gBAAV,EAAkB,+BAAIB,C;K;IAiBiC,oE;MAAA,qB;QAAE,+CAAI,qBA  
Aa,EAAb,IAAJ,E;O;K;IAd9C,wD;MAYqC,0B;QAAA,aAAkB,C;MAAG,wB;QAAA,WAAgB,SAAK,O;MAC3E,  
oCAAa,4BAAmB,UAAAnB,EAA+B,QAA/B,EAAyC,gBAAzC,C;MACb,OAAO,kBAAU,WAAW,UAAAX,IAAV,E  
AAiC,2CAAjC,C;K;IAGX,mC;MAQI,OAAO,WAAW,SAAX,EAAiB,CAAjB,EAAoB,gBAApB,EAA0B,KAA1B,  
C;K;IAGX,mF;MAeI,0B;QAAA,aAAkB,C;MACIB,wB;QAAA,WAAgB,SAAK,O;MACrB,sC;QAAA,yBAaKc,K  
;MAEIC,oCAAa,4BAAmB,UAAAnB,EAA+B,QAA/B,EAAyC,SAAK,OAA9C,C;MACb,OAAO,WAAW,SAAX,E  
AAiB,UAAjB,EAA6B,QAA7B,EAAuC,sBAAvC,C;K;IAGX,sC;MAQI,OAAO,WAAW,SAAX,EAAiB,CAAjB,E  
AAoB,gBAApB,EAA4B,KAA5B,C;K;IAGX,sF;MAeI,0B;QAAA,aAAkB,C;MACIB,wB;QAAA,WAAgB,SAAK,  
O;MACrB,sC;QAAA,yBAaKc,K;MAEIC,oCAAa,4BAAmB,UAAAnB,EAA+B,QAA/B,EAAyC,gBAAzC,C;MACb  
,OAAO,WAAW,SAAX,EAAiB,UAAjB,EAA6B,QAA7B,EAAuC,sBAAvC,C;K;uFAGX,qB;MAMwD,OAAA,SA  
AY,c;K;mFAEpE,qB;MAWsD,OAAA,SAAY,c;K;uFAEIE,qB;MAMwD,OAAA,SAAY,c;K;mFAEpE,qB;MAWsD  
,OAAA,SAAY,c;K;yFAEIE,qC;MACoF,OAAA,SAAY,SAAQ,GAAR,EAAa,SAAb,C;K;iGAEHg,qC;MACwF,OA  
AA,SAAY,aAAY,GAAZ,EAAiB,SAAjB,C;K;+FAEpG,kC;MACiF,OAAA,SAAY,YAAW,CAAX,EAAc,QAAd,C  
;K;2FAE7F,wB;MACgE,OAAA,SAAY,UAAS,CAAT,C;K;iFAE5E,iC;MACqE,OAAA,SAAY,WAAU,UAAV,C;  
K;mFAEjF,2C;MACoF,OAAA,SAAY,WAAU,UAAV,EAAAsB,QAAtB,C;K;4EAehG,0B;MAGuD,OAAA,SAAY,  
QAAO,GAAP,C;K;wEAEnE,4B;MAGgE,OAAA,SAAY,OAAM,KAAN,C;K;yFAK5E,2C;MACyF,OAAA,SAAY,  
SAAQ,OAAR,EAAiB,WAAjB,C;K;IAErG,iD;MAOkD,0B;QAAA,aAAsB,K;MACpE,IAAI,UAAJ,C;QACI,SAAS  
,SAAK,O;QACd,SAAS,KAAM,O;QACf,UTGG,MAAO,KSHM,ETGN,ESHU,ETGV,C;QSFV,IAAI,QAAO,CAA  
X,C;UAAc,OAAO,KAAC,EAAL,I;QACrB,iBAAc,CAAd,UAAAsB,GAAtB,U;UACI,eAAe,qBAAK,KAAL,C;UAC  
f,gBAAgB,iBAAM,KAAN,C;UAEhB,IAAI,aAAY,SAAhB,C;YACI,WAAoB,cAAT,QAAS,C;YACpB,YAAsB,cA  
AV,SAAU,C;YAEtB,IAAI,aAAY,SAAhB,C;cACwB,kBAAT,Q;cAAX,WDIO2C,gCAAY,cAfrB,YAAY,CAAZ,C;  
cCkPZ,kBAAV,S;cAAZ,YDnO2C,gCAAY,cAfrB,YAAY,CAAZ,C;cCoPIC,IAAI,aAAY,SAAhB,C;gBACI,OAAg  
B,iBAAT,QAAS,EAAU,SAAV,C;:QAKhC,OAAO,KAAC,EAAL,I;:QAEP,OAAO,4BAAU,KAAV,C;:K;IAIf,4C;  
MAOqF,oCAaKb,KAAIB,C;K;IAErF,wD;MASI,OAAW,UAAJ,GACE,4BAAL,SAAK,EAA4B,KAA5B,CADF,G  
AGE,kBAAL,SAAK,EAAkB,KAAIB,C;K;IAIkD,oD;MAAU,OAAE,UAAF,CAAE,EAAU,CAAV,EAA0B,IAA1B  
,C;K;:IAIvE,+C;MAAQ,oC;K;2F6G/SZ,oC;MACiF,O7G2Me,kB6G3ME,oBAAH,EAAG,C7G2MF,E6G3Mc,S7G  
2Md,C;K;mG6GzMhG,oC;MACqF,O7G2Me,sB6G3MM,oBAAH,EAAG,C7G2MN,E6G3MkB,S7G2MIB,C;K;I6  
GzMpG,mD;MAIoD,0B;QAAA,aAAsB,K;MACTe,IAAI,CAAC,UAAAL,C;QACI,O7GsMqF,qB6GtM7D,M7GsM6  
D,E6GtMrD,C7GsMqD,C;:Q6GpMrF,OAAO,yBAAc,CAAd,EAAiB,MAAjB,EAAyB,CAAzB,EAA4B,MAAO,O  
AAAnC,EAA2C,UAA3C,C;K;IAGf,iE;MAIqE,0B;QAAA,aAAsB,K;MACvF,IAAI,CAAC,UAAAL,C;QACI,O7G2Lq  
F,qB6G3L7D,M7G2L6D,E6G3LrD,U7G2LqD,C;:Q6GzLrF,OAAO,yBAAc,UAAAd,EAA0B,MAA1B,EAAkC,CAA  
IC,EAAqC,MAAO,OAA5C,EAAoD,UAApD,C;K;IAGf,iD;MAIkD,0B;QAAA,aAAsB,K;MACpE,IAAI,CAAC,U  
AAL,C;QACI,O7GmLoE,mB6GnL9C,M7GmL8C,C;:Q6GjLpE,OAAO,yBAAc,mBAAS,MAAO,OAAhB,IAAd,E  
AAsC,MAAtC,EAA8C,CAA9C,EAAiD,MAAO,OAAxD,EAAgE,UAAhE,C;K;IAGf,mC;MAGI,aACa,S7G0L2D,  
O6G1LhD,K7G0LgD,C;M6GzLxE,OAAO,kBAaKb,MAAO,OAAP,KAAe,C;K;IAG5C,4B;MAKoD,gCAAU,C;M  
AAV,U;QAAuB,kBAAR,yB;QAAQ,c;:UpH2nDvD,U;UADhB,IAAI,OCAAsB,qBAA1B,C;YAAqC,aAAO,I;YAA  
P,e;WACrB,+B;UAAhB,OAAGB,gBAAhB,C;YAAgB,2B;YAAM,IAAI,CoH3nD4D,aAAT,qBpH2nDxC,OoH3nD  
wC,CAAS,CpH2nDhE,C;cAAyB,aAAO,K;cAAP,e;:UAC/C,aAAO,I;:;:QoH5nDgE,iB;OAAvB,W;K;IAEpD,gD;M  
ASiD,0B;QAAA,aAAsB,K;MAOxC,Q;MAN3B,IAAI,iBAAJ,C;QAaKb,OAAO,a;MACzB,IAAI,aAAJ,C;QAAMb  
,OAAO,K;MAC1B,IAAI,CAAC,UAAAL,C;QAAiB,OAAO,kBAAQ,KAAR,C;MAExB,IAAI,SAAK,OAAL,KAAe,  
KAAM,OAazB,C;QAAiC,OAAO,K;MAEb,OAAL,SAAK,O;MAA3B,iBAAc,CAAd,wB;QACI,eAAe,qBAAK,K  
AAL,C;QACf,gBAAgB,iBAAM,KAAN,C;QACHb,IAAI,CAAU,SAAT,QAAS,EAAO,SAAP,EAAkB,UAAIB,CA  
Ad,C;UACI,OAAO,K;:MAIf,OAAO,I;K;IAIX,sF;MACkH,0B;QAAA,aAAsB,K;MACpI,oCAaKb,UAAIB,EAA8  
B,KAA9B,EAAqC,WAArC,EAAkD,MAAID,EAA0D,UAA1D,C;K;IAGJ,+B;MAYI,OvGmMmD,mBAAS,CuGn  
M5D,G7GwH4F,oB6GxHzD,C7GwHyD,E6GxHtD,C7GwHsD,CAvC9B,c6GjFrC,G7GqHoD,oB6GrHZ,C7GqHY,

C6GrH7E,GAAyE,S;K;IAG7E,iC;MASI,OvGuLmD,mBAAS,CuGvL5D,G7G4G4F,oB6G5GzD,C7G4GyD,E6G5  
GtD,C7G4GsD,CAIB9B,c6G1FrC,G7GyGoD,oB6GzGZ,C7GyGY,C6GzG7E,GAAyE,S;K;IAG7E,8B;MAOiB,IA  
AN,I;M1H/FP,IAAI,E0H8FI,KAAK,C1H9FT,CAAJ,C;QACI,c0H6Fc,oD;Q1H5Fd,MAAM,gCAAyB,OAAQ,WA  
AjC,C;O0H6FH,QAAM,CAAN,C;aACH,C;UAAK,S;UAAL,K;aACA,C;UAAU,OAAL,SAAK,W;UAAV,K;gBAE  
I,aAAa,E;UACb,IAAI,EvGgKoC,qBAAU,CuGhK9C,CAAJ,C;YACI,QAAQ,SAAK,W;YACb,YAAy,C;YACZ,O  
AAO,IAAP,C;cACI,IAAI,CAAC,QAAU,CAAX,MAAiB,CAArB,C;gBACI,UAAU,C;eAEd,QAAQ,UAAW,C;cA  
CnB,IAAI,UAAS,CAAb,C;gBACI,K;eAEJ,KAAK,C;;;UAGb,OAAO,M;;MANBf,W;K;IAwBJ,4D;MAOqE,0B;QA  
AA,aAAsB,K;MACvF,O7GkFiG,kB6GIFnF,WAAO,6BAAM,gBAAO,QAAP,CAAb,EAAmC,UAAJ,GAAgB,KA  
AhB,GAA2B,IAA1D,C7GkFmF,E6GIFIB,6BAAM,iCAAwB,QAAXB,C7GkFY,C;K;I6GhFrG,4D;MAM+D,0B;Q  
AAA,aAAsB,K;MACjF,O7GyEiG,kB6GzEnF,WAAO,6BAAM,gBAAe,oBAAR,OAAQ,CAAf,CAAb,EAA6C,UA  
AJ,GAAgB,KAAhB,GAA2B,IAApE,C7GyEmF,E6GzEA,oBAAR,OAAQ,C7GyEA,C;K;I6GvErG,iE;MAC0E,0B;  
QAAA,aAAsB,K;MAC5F,O7GqEiG,kB6GrEnF,WAAO,6BAAM,gBAAO,QAAP,CAAb,EAAmC,UAAJ,GAAgB,  
IAAhB,GAA0B,GAAzD,C7GqEmF,E6GrEpB,6BAAM,iCAAwB,QAAXB,C7GqEc,C;K;I6GnErG,iE;MACoE,0B;  
QAAA,aAAsB,K;MACtF,O7GiEiG,kB6GjEnF,WAAO,6BAAM,gBAAe,oBAAR,OAAQ,CAAf,CAAb,EAA6C,U  
AAJ,GAAgB,IAAhB,GAA0B,GAAnE,C7GiEmF,E6GjEF,oBAAR,OAAQ,C7GiEE,C;K;I8G7OrG,kD;MAEI,IAAI  
,gBAAJ,C;QAAsB,MAAM,6BAAyB,qCAAKC,QAAQ,CAAR,IAAIC,CAAzB,C;MAC5B,OAAO,CAAC,IAAD,I;  
K;IAGX,iF;MAQI,IAAI,EAAS,KAAT,oBAAiB,KAAjB,KAA2B,SAAS,QAAXC,C;QACI,OAAO,UAAU,CAAV,E  
AAa,KAAb,EAAoB,gBAApB,C;OAEX,UAAU,kBAAO,KAAP,C5GwBgC,I;M4GvB1C,IAAI,EAAQ,KAAR,kBA  
AgB,KAAhB,CAAJ,C;QACI,OAAO,UAAU,CAAV,EAAa,KAAb,EAAoB,gBAApB,C;OAEX,OAAO,SAAW,CA  
AC,OAAS,IAAV,KAAqB,EAAhC,IAAwC,MAAQ,I;K;IAG3D,yE;MAQI,IAAI,SAAU,EAAV,MAAKB,CAIB,IA  
AuB,SAAS,QAAP,C;QACI,OAAO,UAAU,CAAV,EAAa,KAAb,EAAoB,gBAApB,C;OAEX,YAAy,KAAa,CAA  
P,KAAO,C;MACzB,IAAI,SAAU,GAAV,MAAKB,GAAtB,C;QACI,OAAO,UAAU,CAAV,EAAa,KAAb,EAAoB,g  
BAApB,C;OAEX,OAAQ,SAAU,CAAX,GAAkB,KAAIB,GAA4B,I;K;IAGvC,yE;MASI,IAAI,SAAS,QAAb,C;QA  
CI,OAAO,UAAU,CAAV,EAAa,KAAb,EAAoB,gBAApB,C;OAGX,YAAy,KAAa,CAAP,KAAO,C;MACzB,IAAI  
,SAAU,EAAV,MAAiB,CAArB,C;QACI,IAAI,SAAU,GAAV,MAAKB,GAAtB,C;UAEI,OAAO,UAAU,CAAV,EA  
Aa,KAAb,EAAoB,gBAApB,C;gBAER,IAAI,SAAU,EAAV,MAAiB,EAARb,C;QACH,IAAI,SAAU,GAAV,MAAK  
B,GAAtB,C;UAEI,OAAO,UAAU,CAAV,EAAa,KAAb,EAAoB,gBAApB,C;gBAER,IAAI,SAAU,GAAV,MAAKB  
,GAAtB,C;QACH,OAAO,UAAU,CAAV,EAAa,KAAb,EAAoB,gBAApB,C;OAGX,IAAI,SAAQ,CAAR,UAAa,Q  
AAjB,C;QACI,OAAO,UAAU,CAAV,EAAa,KAAb,EAAoB,gBAApB,C;OAEX,YAAy,KAAiB,CAAX,QAAQ,C  
AAR,IAAW,C;MAC7B,IAAI,SAAU,GAAV,MAAKB,GAAtB,C;QACI,OAAO,UAAU,CAAV,EAAa,KAAb,EAAo  
B,gBAApB,C;OAGX,OAAQ,SAAU,EAAX,GAAoB,SAAU,CAA9B,GAAqC,KAARc,GAA+C,O;K;IAG1D,yE;M  
ASI,IAAI,SAAS,QAAb,C;QACI,UAAU,CAAV,EAAa,KAAb,EAAoB,gBAApB,C;OAGJ,YAAy,KAAa,CAAP,K  
AAO,C;MACzB,IAAI,SAAU,EAAV,MAAiB,CAArB,C;QACI,IAAI,SAAU,GAAV,KAAB,GAAtB,C;UAEI,OA  
AO,UAAU,CAAV,EAAa,KAAb,EAAoB,gBAApB,C;gBAER,IAAI,SAAU,EAAV,MAAiB,CAArB,C;QACH,IAA  
I,SAAU,GAAV,MAAKB,GAAtB,C;UAEI,OAAO,UAAU,CAAV,EAAa,KAAb,EAAoB,gBAApB,C;gBAER,IAAI,  
SAAU,EAAV,IAAgB,CAAP,C;QACH,OAAO,UAAU,CAAV,EAAa,KAAb,EAAoB,gBAApB,C;aACJ,IAAI,SA  
AU,GAAV,MAAKB,GAAtB,C;QACH,OAAO,UAAU,CAAV,EAAa,KAAb,EAAoB,gBAApB,C;OAGX,IAAI,SA  
AQ,CAAR,UAAa,QAAjB,C;QACI,OAAO,UAAU,CAAV,EAAa,KAAb,EAAoB,gBAApB,C;OAEX,YAAy,KAAi  
B,CAAX,QAAQ,CAAR,IAAW,C;MAC7B,IAAI,SAAU,GAAV,MAAKB,GAAtB,C;QACI,OAAO,UAAU,CAAV,  
EAAa,KAAb,EAAoB,gBAApB,C;OAGX,IAAI,SAAQ,CAAR,UAAa,QAAjB,C;QACI,OAAO,UAAU,CAAV,EA  
Aa,KAAb,EAAoB,gBAApB,C;OAEX,YAAy,KAAiB,CAAX,QAAQ,CAAR,IAAW,C;MAC7B,IAAI,SAAU,GAA  
V,MAAKB,GAAtB,C;QACI,OAAO,UAAU,CAAV,EAAa,KAAb,EAAoB,gBAApB,C;OAEX,OAAQ,SAAU,EA  
AX,GAAoB,SAAU,EA9B,GAAuC,SAAU,CAAjD,GAAwD,KAAxD,GAAkE,O;K;;;IAmB7E,oE;MAkB0B,UAGJ,  
MAHI,EAKJ,MALI,EAMJ,MANI,EASJ,MATI,EAUJ,MAVI,EAWJ,MAXI,EAgBA,MAhBA,EAiBA,MAjBA,EA  
kBA,MAiBA,EAoBA,MApBA,EAqBA,OAARBA,EASBA,OAATBA,EAuBA,O;M3H9JtB,IAAI,E2HgII,cAAc,CAAd,I  
AAmB,YAAy,MAAO,OAAtC,IAAgD,cAAc,Q3HhIII,CAAJ,C;QACI,cAda,qB;QAeb,MAAM,gCAAyB,OAAQ,  
WAAjC,C;O2HgIV,YAAy,cAAU,CAAC,WAAW,UAAx,IAAD,IAA0B,CAA1B,IAAV,C;MACZ,gBAAgB,C;M  
AChB,gBAAgB,U;MAEhB,OAAO,YAAy,QAAnB,C;QACI,WAAW,mBAAO,gBAAP,EAAO,wBAAP,Q5G1H2

B,I;Q4G4HIC,WAAO,GAAP,C;UACI,MAAM,kBAAN,EAAM,0BAAN,YAA0B,OAAL,IAAK,C;eAC9B,WAAO,IAAP,C;UACI,MAAM,kBAAN,EAAM,0BAAN,YAA4C,OAArB,QAAS,CAAV,GAAgB,GAAM,C;UAC5C,MAAM,kBAAN,EAAM,0BAAN,YAA+C,OAAxB,OAAS,EAAV,GAAmB,GAAM,C;eAEnD,WAAO,KAAP,IAAiB,QAAQ,KAAzB,C;UACI,MAAM,kBAAN,EAAM,0BAAN,YAA6C,OAAtB,QAAS,EAAV,GAAiB,GAAM,C;UAC7C,MAAM,kBAAN,EAAM,0BAAN,YAAuD,OAA/B,QAAS,CAAV,GAAiB,EAAIB,GAA2B,GAAM,C;UACvD,MAAM,kBAAN,EAAM,0BAAN,YAA+C,OAAxB,OAAS,EAAV,GAAmB,GAAM,C;;UAG/C,gBAAgB,uBAAB,MAAvB,EAA+B,IAA/B,EAAqC,SAArC,EAAgD,QAAhD,EAA0D,gBAA1D,C;UAChB,IAAI,aAAa,CAAjB,C;YACI,MAAM,kBAAN,EAAM,0BAAN,YAAqB,0BAA0B,CAA1B,C;YACrB,MAAM,kBAAN,EAAM,0BAAN,YAAqB,0BAA0B,CAA1B,C;YACrB,MAAM,kBAAN,EAAM,0BAAN,YAAqB,0BAA0B,CAA1B,C;;YAErB,MAAM,kBAAN,EAAM,0BAAN,YAAkD,OAA3B,aAAc,EAAf,GAAaB,GAAM,C;YACID,MAAM,mBAAN,EAAM,2BAAN,aAA6D,OAArC,aAAc,EAAf,GAAuB,EAAxB,GAAiC,GAAM,C;YAC7D,MAAM,mBAAN,EAAM,2BAAN,aAA4D,OAApC,aAAc,CAAf,GAAaB,EAAvB,GAAgC,GAAM,C;YAC5D,MAAM,mBAAN,EAAM,2BAAN,aAAoD,OAA7B,YAAc,EAAf,GAAwB,GAAM,C;YACpD,6B;;;MAMhB,OAAW,KAAM,OAAN,KAAc,SAAIB,GAA6B,KAA7B,GAA8C,UAAN,KAAM,EAAO,SAAP,C;K;;IAQzD,mE;MAiByB,Q;M3H9LrB,IAAI,E2HwLI,cAAc,CAAd,IAAmB,YAAY,KAAM,OAArC,IAA6C,cAAc,Q3HxL/D,CAAJ,C;QACI,cAda,qB;QAEb,MAAM,gCAAYB,OAAQ,WAAjC,C;O2HwLV,gBAAgB,U;MACHb,oBAAoB,sB;MAEpB,OAAO,YAAY,QAAnB,C;QACI,WAAW,KAAmB,CAAb,gBAAa,EAAb,wBAAa,O;QAE1B,YAAQ,CAAR,C;UACI,aAAc,gBAAY,OAAL,IAAK,CAAZ,C;aACIB,YAAS,CAAT,KAAc,EAAd,C;UACI,WAAW,eAAe,KAAf,EAAaB,IAAtB,EAA4B,SAA5B,EAAuC,QAAvC,EAAiD,gBAAjD,C;UACX,IAAI,QAAQ,CAAZ,C;YACI,aAAc,gBAAO,gBAAP,C;YACd,yBAAa,CAAC,IAAD,IAAb,K;;YAEA,aAAc,gBAAY,OAAL,IAAK,CAAZ,C;YACd,wBAAa,CAAb,I;;eAGR,YAAS,CAAT,KAAc,EAAd,C;UACI,aAAW,eAAe,KAAf,EAAaB,IAAtB,EAA4B,SAA5B,EAAuC,QAAvC,EAAiD,gBAAjD,C;UACX,IAAI,UAAQ,CAAZ,C;YACI,aAAc,gBAAO,gBAAP,C;YACd,yBAAa,CAAC,MAAD,IAAb,K;;YAEA,aAAc,gBAAY,OAAL,MAAK,CAAZ,C;YACd,wBAAa,CAAb,I;;eAGR,YAAS,CAAT,KAAc,EAAd,C;UACI,aAAW,eAAe,KAAf,EAAaB,IAAtB,EAA4B,SAA5B,EAAuC,QAAvC,EAAiD,gBAAjD,C;UACX,IAAI,UAAQ,CAAZ,C;YACI,aAAc,gBAAO,gBAAP,C;YACd,yBAAa,CAAC,MAAD,IAAb,K;;YAEA,WAAY,MAAD,GAAQ,KAAR,IAAqB,EAArB,GAA2B,K;YACtC,UAAW,SAAS,IAAV,GAAoB,K;YAC9B,aAAc,gBAAY,OAAL,IAAK,CAAZ,C;YACd,aAAc,gBAAW,OAAJ,GAAI,CAAX,C;YACd,wBAAa,CAAb,I;;UAIJ,UAAU,CAAV,EAAa,SAAb,EAAwB,gBAAxB,C;UACA,aAAc,gBAAO,gBAAP,C;;MAK1B,OAAO,aAAc,W;K;ICtQzB,uC;MAU2D,OAAwB,CAAXB,2BAAwB,mBAAS,SAAT,C;K;IAEnF,oC;MAKI,OAAQ,OAAW,mBAAL,SAAK,CAAX,C;K;IAGZ,6C;MAMI,IAAI,cAAS,SAAb,C;QACI,iBAAsB,SAAY,Y;QACIC,IAAI,kBAAJ,C;UACS,SAAL,eAA+B,iBAAc,SAAAd,E;;UAE/B,UAAW,WAAI,SAAJ,C;;Q;IAUnB,6C;MAC4B,UAAjB,M;MAAP,OAAO,WAAiB,OAAZ,SAAY,YAAjB,4CAA+D,W;K;IAI9E,iC;MACI,gBAAqB,sB;MACrB,iBAAsB,E;MACtB,kBAA+B,E;MAC/B,uBAAiC,C;K;uDAEjC,qB;MACc,qBAAV,SAAU,EAAc,EAAd,EAAkB,EAAIB,C;MACV,OAAO,aAAO,W;K;gDAGIB,qB;MAA6D,gBAAR,c;MAAQ,c;;Q1I41Y7C,Q;QAAhB,wBAAgB,SAAhB,gB;UAAgB,CAAA,SAAhB,M;UAAaB,IAAc,00I51Y+B,c1I41Y7C,C;YAAwB,aAAO,I;YAAP,e;;QAC9C,aAAO,K;;M0I71Y8C,iB;K;sDAErD,wC;MACI,KAAK,qBAAL,SAAK,EAAc,MAAd,EAAaB,SAAtB,CAAL,C;QAAyC,M;MAEzC,YAAY,SAAK,M;MACjB,OAAO,aAAP,C;QACI,KAAM,qBAAN,KAAM,EAAc,MAAd,EAAaB,aAAtB,CAAN,C;UAA8C,M;QAC9C,QAAQ,KAAM,M;;K;sDAItB,wC;MASgB,IAAiB,IAAjB,EA2BE,M;MAnCd,aAAO,gBAAO,MAAP,CAAE,gBAAO,SAAP,C;MACtB,gBAAgB,SAAK,W;MACrB,IAAI,eAAQ,SAAR,CAAJ,C;QACI,aAAO,gBAAO,kCAAP,CAA2C,gBAAO,SAAP,CAAKB,gBAAO,KAAP,C;QACpE,OAAO,K;OAEH,cAAY,MAAK,SAAL,C;MAEpB,YAAY,CAAiB,OAAZ,SAAY,MAAjB,2D;MACZ,IAAI,aAAJ,C;QzHyBG,SyHxBwB,WAAN,KAAM,EAAQ,SAAR,C;QAAvB,iBAAoD,KAAK,CAAT,GAAY,C;AAZ,GAAmB,KAAe,gBAAf,I;QACnE,IAAI,eAAc,CAAIB,C;UAAqB,aAAO,gBAAO,SAAP,CAAKB,gBAAO,IAAP,C;QAC9C,IAAI,ezG8MoC,YAAU,CyG9MID,C;UACI,kBAAW,K;UACX,uBAAgB,U;;UAEhB,QAAQ,wBAAiB,KAAjB,EAAwB,UAAxB,C;;QAEZ,IAAI,MzGgNuC,UAAS,CyGhNpD,C;UAEuB,U;UAAA,IAAI,eAAc,CAAIB,C;YAAA,SAAqB,C;;Y1Gq+BpC,U;YADhB,YAAY,C;YACI,oB0Gr+B+C,S1Gq+B/C,C;YAAhB,OAAgB,gBAAhB,C;cAAgB,sC;cAAM,I0Gr+BgE,U1Gq+BiD,oB0Gr+BkD,MAAK,E1Gq+BrE,C;gBAAwB,qB;;Y0Gr+Bf,SAA4B,I1Gs+BpD,K0Gt+BoD,I;;UAA/C,yB;U5GorCC,kB;UADb,YAAY,C;UACC,S4GnrCK,aAAN,KAAM,C5GmrCL,W;UAAb,OAAa,gBAAb,C;YAAa,wB;Y4GlrCG,I5GkrCU,oBAAmB,cAAnB,EAAmB,sBAAnB,U4GlrCN,gBA

AJ,C;cAA2B,aAAO,uB;YACIC,aAAO,gB5GirCgC,I4GjrChC,CAAA,gBAAO,IAAP,C;;;UAGxB,aAAO,gBAAO,K  
AAP,CAAc,gBAAO,IAAP,C;;;QAGzB,aAAO,gBAAO,SAAP,CAAkB,gBAAO,IAAP,C;;;MAG7B,iBAAiB,mC;M  
ACjB,IpIuHoD,CoIvHhD,UpIuHiD,UoIvHrD,C;QACI,uBAAuB,SAAS,M;QACtB,8B;QAAV,OAAU,gBAAV,C;U  
AAU,qB;UACJ,qBAAF,CAAE,EAAC,gBAAd,EAAGC,cAAhC,C;;OAGV,OAAO,I;K;yDAGX,6B;MAIwB,Q;MA  
HpB,mBAAwB,C;MACxB,gBAAqB,C;MACrB,mBAAwB,C;MACJ,OxHyIjB,MAAO,KwHzIgB,eAAS,OAAT,G  
AAkB,oBAAlB,IxHyIhB,EwHzIiD,KAAM,OAAN,GAAe,UAAf,IxHyIjD,C;MwHzIV,eAAY,CAAZ,oB;QACI,QA  
AQ,iBAAY,iBAAN,KAAM,CAAN,GAAkB,GAAIB,IAAN,C;QACR,IAAI,MAAK,2BAAkB,iBAAT,eAAS,CAA  
T,GAAqB,GAArB,IAAT,CAAT,C;UAA6C,K;QAC7C,IAAI,MAAK,EAAT,C;UACI,8BAAGB,CAAhB,I;UACA,e  
AAe,S;UACf,YAAY,G;;MAGpB,IAAI,gBAAgB,CAApB,C;QAAuB,OAAO,K;MAC9B,OAAO,eAAe,CAAf,IAA  
oB,iBAAY,iBAAN,KAAM,CAAN,IAAmB,YAAnB,GAAkC,CAAIC,KAAN,MAA+C,EAA1E,C;QACI,8BAAGB,  
CAAhB,I;MAGJ,OAAa,YAAN,KAAM,EAAS,YAAT,CAAN,IAA+B,cAAW,eAAe,CAAf,IAAX,uCAA/B,C;K;;y  
HC/H+C,Y;MAAQ,W;K;IAEtE,gD;MACKB,UAMP,M;MANO,IAAI,aAAY,CAAhB,C;QACV,Y;;QAEA,UxBsY8  
C,MAAW,KwBtY/C,IxBsY+C,EwBtYtC,QxBsYsC,C;QwBrYzD,OAAA,IAAO,OxB2UmC,MAAW,KwB3UpC,K  
xB2UoC,CwB3UxC,GAAa,GAAAnB,CAAP,GAAiC,GAAjC,GxBwV2C,MAAW,MwBxVV,KxBwVU,C;;MwB5V  
1D,kB;MAMO,IxByUuC,MAAW,KwBzU1C,OxByU0C,CwBzU9C,GAAe,MAAnB,C;QAEmC,SAA9B,OAA Y,S  
AAQ,QAAR,C;;QAGpB,exBoU0C,MAAW,KwBpUIC,OxBoUkC,C;QwBnUrD,qBAA8B,QAA Y,axBgRC,MAA  
W,MAvCV,MAAW,OwBzOU,QxByOV,CAuCD,CwBhRA,GAAwB,QAAPC,C;QAC1C,SAAI,UAAU,CAAd,GA  
AiB,MAAG,cAApB,GAAyC,c;;MAP7C,a;K;IAWJ,6C;MACI,OAAa,KAAY,gBAAe,OAAf,EAawB,MAAK,4BA  
A2B,QAA3B,CAAL,EAAX,C;K;ICtBQ,4C;MAFrC,e;MAEsC,0B;MAFtC,iB;MAAA,uB;K;IAAA,mC;MAAA,sC  
;O;MAGI,uEAGY,GAHZ,C;MAIA,yEAGa,MAHb,C;MAIA,yEAGa,SAHb,C;MAIA,+DAGQ,KAHR,C;MAIA,+D  
AGQ,MAHR,C;MAIA,2DAGM,MAHN,C;MAIA,yDAGK,OAHL,C;K;;IAxBA,gD;MAAA,yB;MAAA,wC;K;;IAI  
A,iD;MAAA,yB;MAAA,yC;K;;IAIA,iD;MAAA,yB;MAAA,yC;K;;IAIA,4C;MAAA,yB;MAAA,oC;K;;IAIA,4C;M  
AAA,yB;MAAA,oC;K;;IAIA,0C;MAAA,yB;MAAA,kC;K;;IAIA,yC;MAAA,yB;MAAA,iC;K;;IA3BJ,+B;MAAA,  
4Q;K;;IAAA,oC;MAAA,a;aAAA,a;UAAA,6C;aAAA,c;UAAA,8C;aAAA,c;UAAA,8C;aAAA,S;UAAA,yC;aAAA,  
S;UAAA,yC;aAAA,O;UAAA,uC;aAAA,M;UAAA,sC;gBAAA,6D;;K;;IAiCA,4D;MAGW,Q;MADP,0BAA2C,iB  
AAjB,UAAW,cAAM,EAAU,UAAW,cAArB,C;MAEvC,0BAAsB,CAAtB,C;QAA2B,gBAAS,UAAW,cAAX,GAAmB,UAAW,cAAvC,C;;  
QACnB,Y;MAHZ,W;K;IAOJ,oE;MAGW,Q;MADP,0BAA2C,iBAAjB,UAAW,cAAM,EAAU,UAAW,cAArB,C;M  
AEvC,0BAAsB,CAAtB,C;QAA2B,sBAA8C,uBAArC,UAAW,cAAX,GAAmB,UAAW,cAAO,CAA9C,C;WAC3B  
,0BAAsB,CAAtB,C;QAA2B,iBAA8C,uBAArC,UAAW,cAAX,GAAmB,UAAW,cAAO,CAA9C,C;;QACnB,Y;M  
AHZ,W;K;IAOJ,8D;MAGW,Q;MADP,0BAA2C,iBAAjB,UAAW,cAAM,EAAU,UAAW,cAArB,C;MAEvC,0BA  
AsB,CAAtB,C;QACI,YAAkD,uBAArC,UAAW,cAAX,GAAmB,UAAW,cAAO,C;QACID,aAAa,eAAQ,KAAR,C;  
QAET,sBAAS,KAAT,GAAkB,KAAIB,E;UAA2B,a;aAC3B,uBAAQ,CAAR,C;;;aAIR,0BAAsB,CAAtB,C;QAA2  
B,iBAA8C,uBAArC,UAAW,cAAX,GAAmB,UAAW,cAAO,CAA9C,C;;QACnB,Y;MAXZ,W;K;ICrDJ,+B;MAA  
A,mC;MAUuB,wB;MALf,aAAR,OAAO,OAAQ,KAAI,WAA Y,IAAG,OAAO,SAAX,IAAwB,CAAC,CAAC,OAA  
O,SAAS,K;MADpE,sBAGQ,MAHR,GAIQ,iBAAa,OAAb,CAJR,GAMQ,qBAAW,OAA X,IAAA,4GACO,+B;K;4  
CAIf,Y;MAAmC,OAAA,mBAAa,U;K;;;IAfpD,2C;MAAA,0C;QAAA,yB;OAAA,mC;K;IAwB2B,+B;MAAC,sB;K  
;IAEW,+D;MAAA,0C;MAAS,mB;MACxC,iBAAgB,yBAAQ,S;K;8DACxB,Y;M5HyEG,Q4HxEC,8BAAQ,QAA  
O,cAAP,C;MAAyB,c7IZIC,EAAl,CAAJ,C;M6IY2C,Y7IuF3C,EAAl,CAAJ,C;M6IvFC,OAA4D,aAAR,OAAQ,qC  
AAR,aAAiD,aAN,KAAM,yCAAJD,C;K;;qCAH5D,Y;MAAmC,md;K;sCAMnC,Y;MAAkC,qC;K;;IAKF,4C;M  
AAiC,4E;MAAhC,8B;K;2CACjC,Y;MAA8B,OAAA,gBAA Y,M;K;+CAC1C,Y;MAAkC,2C;K;;IAGtC,6B;MAAA  
iC;MAEoC,4E;K;uCAChC,Y;MAA8B,OAAe,U;K;2CAC7C,Y;MAAkC,+B;K;;IAJtC,yC;MAAA,wC;QAAA,uB;  
OAAA,iC;K;IC1CA,gD;MAQ+B,kBAApB,wBAAC,IAAd,C;MAA0B,I7HgEjC,a;M6HhEA,O7HiEO,W;K;I6H9D  
X,gD;MAQqD,kBAA1B,gBAAhB,sCAAgB,EAAC,IAAd,EAAoB,IAApB,C;MAAiC,sB7HoEID,W6HpEkD,C;MA  
AxD,O7HqEO,W;K;I8HzFX,yC;MAEkD,8B;MAAA,OCGN,aDHwB,yBAAa,QAAb,mCCGxB,C/G+xBgC,sB;K;I  
8GhyB5E,2C;M/IggIW,kBAAY,gB;MAoGH,Q;MAAhB,wB+I7IqB,U/I6IIRB,gB;QAAgB,c+I7IIK,U/I6IIRB,M;QA  
AsB,IAAI,C+I7IIkB,sB/I6IIP,O+I7IIO,C/I6IItB,C;UAAyB,WAA Y,WAAI,OAAJ,C;;M+I7II3D,qB/I8IIO,W;M+I7II  
P,IzIgNwD,CyIhNpD,czIgNqD,UyIhNzD,C;Q9GgKuC,U;Q8G/JnC,qB9G+JyD,OAAtB,+B8G/Jd,mB9G+Jc,uBAA

sB,CAAOW;QsGkO7C,kBAAhB,sB;QQ/XC,0C;QACA,IAAI,E9G8QoC,0BAAU,C8G9Q9C,CAAJ,C;UACI,2BA  
AO,GAAP,C;SAEW,sCAAa,GAAb,C;QALnB,sB9H4DG,WsHoUqC,W;QQzXxC,OAAO,I;OAGX,OAAO,K;K;IA  
GX,8C;MAOmB,c;;Q/Ii3YC,Q;QAaHb,wB+Ij3YI,U/Ii3YJ,gB;UAAgB,c+Ij3YZ,U/Ii3YJ,M;UAAsB,I+Ij3YD,sB/I  
i3Ye,O+Ij3Yf,C/Ii3YC,C;YAAwB,aAAO,I;YAAP,e;;QAC9C,aAAO,K;;;M+II3YP,e;QACI,kBAA6B,MAAX,UAA  
W,C;Q9GyIM,U;Q8GxIb,a9GwImC,OAAtB,+B8GxIvB,mB9GwIuB,uBAAAsB,CAAOW;Q8GxIX,kBC/BjB,aD+B  
D,MC/BC,C/Gg1C6C,uBAAzB,CAAyB,C;QbnmB9E,kBAAS,gB;QA2FA,U;QAAA,+B;QAaHb,OAAgB,gBAAh  
B,C;UAAgB,6B;UAAm,I2HzyB4C,4B3HyyB9B,S2HzyB8B,C3HyyB5C,C;YAAwB,WAAy,WAAI,SAAJ,C;;Q2  
HzyBtD,sBAAmF,e3H0yBhF,W2H1yBgF,EAAa,GAAb,C;QACnF,OAAO,I;OAGX,OAAO,K;K;IEnCP,iC;MAAQ  
,8BAAY,IAAK,UAAjB,IAA8B,uBAAY,IAAK,mB;K;IAOvD,oC;MAAQ,8BAAY,IAAK,a;K;ICZ7B,4B;MAGI,O  
AAO,yBAAP,C;QACI,sBAAY,mCAAZ,C;;K;IAIR,uC;MAOI,sBAAY,sCAAgB,gBAAe,IAAf,CAA5B,C;MACA,  
OAAO,S;K;ICbP,4B;MAAQ,mB;K;IACR,mC;MACI,eAAO,K;K;IAKX,4B;MAAQ,mB;K;IACR,mC;MACI,eAA  
O,K;K;iHCoBf,sJ;MAEyC,qB;QAAA,QAaKB,I;MAAM,qB;QAAA,QAaKB,I;MAAM,uB;QAAA,UAAoB,K;MA  
AO,yB;QAAA,YAAsB,I;MAAM,kC;QAAA,qBAA+B,I;MAAM,qC;QAAA,wBAaK,C,K;MAAO,+C;QAAA,kCA  
A4C,K;MAAO,4C;QAAA,+BAAYC,K;MACtT,QAAQ,E;MACR,EAAE,OAAF,IAAa,K;MACb,EAAE,OAAF,IA  
Aa,K;MACb,EAAE,SAAF,IAAe,O;MACf,EAAE,WAAF,IAAiB,S;MACjB,EAAE,oBAAF,IAA0B,kB;MAC1B,E  
AAE,uBAAF,IAA6B,qB;MAC7B,EAAE,iCAAF,IAAuC,+B;MACvC,EAAE,8BAAF,IAAoC,4B;MACpC,OAAO,  
C;K;+GAw0BX,wD;MAEwC,6B;QAAA,gBAAYB,E;MAAI,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;  
MAAO,wB;QAAA,WAAqB,K;MAC/I,QAAQ,E;MACR,EAAE,eAAF,IAAqB,a;MACrB,EAAE,SAAF,IAAe,O;M  
ACf,EAAE,YAAF,IAaKB,U;MACIB,EAAE,UAAF,IAAgB,Q;MACHB,OAAO,C;K;6EA6CX,4B;MAE6D,iBAAY  
,KAAZ,C;K;6EAE7D,mC;MAEoE,UAAy,KAAZ,IAAqB,K;K;6EAuBzF,4B;MAE8D,iBAAY,KAAZ,C;K;6EAE9  
D,mC;MAEqE,UAAy,KAAZ,IAAqB,K;K;6EAuB1F,4B;MAEqE,iBAAY,KAAZ,C;K;6EAeRE,mC;MAE4E,UAA  
y,KAAZ,IAAqB,K;K;6EAuBjG,4B;MAE+D,iBAAY,KAAZ,C;K;6EAE/D,mC;MAEsE,UAAy,KAAZ,IAAqB,K;  
K;6EAuB3F,4B;MAEgE,iBAAY,KAAZ,C;K;6EAehE,mC;MAEuE,UAAy,KAAZ,IAAqB,K;K;6EAuB5F,4B;MA  
E6D,iBAAY,KAAZ,C;K;6EAE7D,mC;MAEoE,UAAy,KAAZ,IAAqB,K;K;6EAuBzF,4B;MAE8D,iBAAY,KAAZ,  
C;K;6EAE9D,mC;MAEqE,UAAy,KAAZ,IAAqB,K;K;6EAuB1F,4B;MAEiE,iBAAY,KAAZ,C;K;6EAEjE,mC;M  
AEwE,UAAy,KAAZ,IAAqB,K;K;6EAuB7F,4B;MAEKE,iBAAY,KAAZ,C;K;6EAEIE,mC;MAEyE,UAAy,KAAZ  
,IAAqB,K;K;6GC3oC9F,wD;MAEqC,6B;QAAA,gBAA+B,I;MAAM,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aA  
AuB,K;MAAO,wB;QAAA,WAAqB,K;MACpJ,QAAQ,E;MACR,EAAE,eAAF,IAAqB,a;MACrB,EAAE,SAAF,IA  
Ae,O;MACf,EAAE,YAAF,IAaKB,U;MACIB,EAAE,UAAF,IAAgB,Q;MACHB,OAAO,C;K;mIAiCX,+B;MAEgD,  
mC;QAAA,sBAAgC,K;MAC5E,QAAQ,E;MACR,EAAE,qBAAF,IAA2B,mB;MAC3B,OAAO,C;K;4EC9CX,4B;  
MAEgE,iBAAY,KAAZ,C;K;4EAgChE,4B;MAEyE,iBAAY,KAAZ,C;K;4EAiBzE,4B;MAEmE,iBAAY,KAAZ,C;  
K;4EAyYnE,4B;MAE0E,iBAAY,KAAZ,C;K;oIC7a1E,4H;MAE8C,qB;QAAA,QAaIB,E;MAAI,6B;QAAA,gBAA  
gC,E;MAAW,iC;QAAA,oBAA2D,E;MAAW,iC;QAAA,oBAA2D,E;MAAW,qC;QAAA,wBAmJvJ,U;OAnJqO,+B  
;QAAA,kBAmJrO,U;OAnJ6S,4B;QAAA,eAA+B,S;MAC3a,QAAQ,E;MACR,EAAE,OAAF,IAAa,K;MACb,EAA  
E,eAAF,IAAqB,a;MACrB,EAAE,mBAAF,IAAyB,iB;MACzB,EAAE,mBAAF,IAAyB,iB;MACzB,EAAE,uBAAF,  
IAA6B,qB;MAC7B,EAAE,iBAAF,IAAuB,e;MACvB,EAAE,cAAF,IAAoB,Y;MACpB,OAAO,C;K;wIAYX,mC;M  
AEgD,2B;QAAA,cAAuB,E;MAAI,0B;QAAA,aAAsB,E;MAC7F,QAAQ,E;MACR,EAAE,aAAF,IAAmB,W;MAC  
nB,EAAE,YAAF,IAaKB,U;MACIB,OAAO,C;K;8HAKEX,+D;MAEqG,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,  
aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MAC/K,QAAQ,E;MACR,EAAE,aAAF,IAAmB,W;MACnB,EAAE,SA  
AF,IAAe,O;MACf,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAaKB,U;MACIB,EAAE,UAAF,IAAgB,Q;MACH  
B,OAAO,C;K;4HAwBX,iE;MAE0C,4B;QAAA,eAAwB,E;MAAI,wB;QAAA,WAAyB,I;MAAM,uB;QAAA,UAA  
oB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MAC/K,QAAQ,E;MACR,EAAE,cAAF,IAAo  
B,Y;MACpB,EAAE,UAAF,IAAgB,Q;MACHB,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAaKB,U;MACIB,EA  
AE,UAAF,IAAgB,Q;MACHB,OAAO,C;K;sGAUqe,qB;MAAQ,OAAW,U;K;sGAEnB,qB;MAAQ,OAAW,U;K;4G  
AEhB,qB;MAAQ,OAAc,a;K;wGAS1B,qB;MAAQ,OAAy,W;K;0HAEX,qB;MAAQ,OAAqB,oB;K;kGASnD,qB;  
MAAQ,OAAS,Q;K;oGAEhB,qB;MAAQ,OAAU,S;K;sGAEjB,qB;MAAQ,OAAW,U;K;wHAEV,qB;MAAQ,OAA  
oB,mB;K;wHAE5B,qB;MAAQ,OAAoB,mB;K;kHAE/B,qB;MAAQ,OAAiB,gB;K;kHAEzB,qB;MAAQ,OAAiB,g  
B;K;oHASd,qB;MAAQ,OAAKB,iB;K;oHAE1B,qB;MAAQ,OAAKB,iB;K;oHAE1B,qB;MAAQ,OAAKB,iB;K;wIA

EhB,qB;MAAQ,OAA4B,2B;K;4FC1MnI,uD;MAE8B,oB;QAAA,OAAgB,I;MAAM,sB;QAAA,SA Ae,C;MAAG,u B;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MAChJ,QAAQ,E;MACR,EAA E,MAAF,IAAY,I;MACZ,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MA CIB,EAAE,UAAF,IAAgB,Q;MAChB,OAAO,C;K;kGAuBX,sE;MAEiC,6B;QAAA,gBAA8B,I;MAAM,oB;QAAA, OAAgB,I;MAAM,sB;QAAA,SA Ae,C;MAAG,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;Q AAA,WAAqB,K;MACvL,QAAQ,E;MACR,EAAE,eAAF,IAAqB,a;MACrB,EAAE,MAAF,IAAY,I;MACZ,EAAE, QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MACIB,EAAE,UAAF,IAAgB,Q;M AChB,OAAO,C;K;kGA8DX,8U;MAEiC,uB;QAAA,UAAgB,C;MAAG,uB;QAAA,UAAgB,C;MAAG,uB;QAAA, UAAgB,C;MAAG,uB;QAAA,UAAgB,C;MAAG,sB;QAAA,SAAiB,C;MAAG,uB;QAAA,UAAkB,C;MAAG,6B;Q AAA,gBAA8B,I;MAAM,sB;QAAA,SAAkB,I;MAAM,uB;QAAA,UAAoB,K;MAAO,wB;QAAA,WAAqB,K;MA AO,sB;QAAA,SAAmB,K;MAAO,uB;QAAA,UAAoB,K;MAAO,gC;QAAA,mBAA6B,K;MAAO,gC;QAAA,mBA A6B,K;MAAO,0B;QAAA,aAAuB,K;MAAO,8B;QAAA,iBAA2B,K;MAAO,6B;QAAA,gBAA0B,K;MAAO,+B;Q AAA,kBAA4B,K;MAAO,kC;QAAA,qBAA+B,K;MAAO,6B;QAAA,gBAA0B,K;MAAO,8B;QAAA,iBAA2B,K; MAAO,kC;QAAA,qBAA+B,K;MAAO,oB;QAAA,OAAgB,I;MAAM,sB;QAAA,SA Ae,C;MAAG,uB;QAAA,UAA oB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MAC3wB,QAAQ,E;MACR,EAAE,SAAF,IAA e,O;MACf,EAAE,SAAF,IAAe,O;MACf,EAAE,SAAF,IAAe,O;MACf,EAAE,SAAF,IAAe,O;MACf,EAAE,QAAF, IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf,EAAE,eAAF,IAAqB,a;MACrB,EAAE,QAAF,IAAc,M;MACd,EAA E,SAAF,IAAe,O;MACf,EAAE,UAAF,IAAgB,Q;MAChB,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;M ACf,EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,YAAF,IAAkB,U;MACIB,EA AE,gBAAF,IAAsB,c;MACtB,EAAE,eAAF,IAAqB,a;MACrB,EAAE,iBAAF,IAAuB,e;MACvB,EAAE,oBAAF,IA A0B,kB;MAC1B,EAAE,eAAF,IAAqB,a;MACrB,EAAE,gBAAF,IAAsB,c;MACtB,EAAE,oBAAF,IAA0B,kB;MA C1B,EAAE,MAAF,IAAY,I;MACZ,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IA AkB,U;MACIB,EAAE,UAAF,IAAgB,Q;MAChB,OAAO,C;K;wGAgDX,kQ;MAEoC,uB;QAAA,UAAoB,K;MAA O,wB;QAAA,WAAqB,K;MAAO,sB;QAAA,SAAmB,K;MAAO,uB;QAAA,UAAoB,K;MAAO,gC;QAAA,mBAA 6B,K;MAAO,gC;QAAA,mBAA6B,K;MAAO,0B;QAAA,aAAuB,K;MAAO,8B;QAAA,iBAA2B,K;MAAO,6B;QA AA,gBAA0B,K;MAAO,+B;QAAA,kBAA4B,K;MAAO,kC;QAAA,qBAA+B,K;MAAO,6B;QAAA,gBAA0B,K;M AAO,8B;QAAA,iBAA2B,K;MAAO,kC;QAAA,qBAA+B,K;MAAO,oB;QAAA,OAAgB,I;MAAM,sB;QAAA,SA Ae,C;MAAG,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MAC7IB,QAA Q,E;MACR,EAAE,SAAF,IAAe,O;MACf,EAAE,UAAF,IAAgB,Q;MAChB,EAAE,QAAF,IAAc,M;MACd,EAAE, SAAF,IAAe,O;MACf,EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,YAAF,IAA kB,U;MACIB,EAAE,gBAAF,IAAsB,c;MACtB,EAAE,eAAF,IAAqB,a;MACrB,EAAE,iBAAF,IAAuB,e;MACvB, EAAE,oBAAF,IAA0B,kB;MAC1B,EAAE,eAAF,IAAqB,a;MACrB,EAAE,gBAAF,IAAsB,c;MACtB,EAAE,oBA AAF,IAA0B,kB;MAC1B,EAAE,MAAF,IAAY,I;MACZ,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf ,EAAE,YAAF,IAAkB,U;MACIB,EAAE,UAAF,IAAgB,Q;MAChB,OAAO,C;K;kGAsCX,iX;MAEiC,sB;QAAA,S AAkB,G;MAAK,sB;QAAA,SAAkB,G;MAAK,sB;QAAA,SAAkB,G;MAAK,yB;QAAA,YAAkB,C;MAAG,uB;Q AAA,UAAgB,C;MAAG,uB;QAAA,UAAgB,C;MAAG,uB;QAAA,UAAgB,C;MAAG,uB;QAAA,UAAgB,C;MAA G,sB;QAAA,SAAiB,C;MAAG,uB;QAAA,UAAkB,C;MAAG,6B;QAAA,gBAA8B,I;MAAM,sB;QAAA,SAAkB,I; MAAM,uB;QAAA,UAAoB,K;MAAO,wB;QAAA,WAAqB,K;MAAO,sB;QAAA,SAAmB,K;MAAO,uB;QAAA,U AAoB,K;MAAO,gC;QAAA,mBAA6B,K;MAAO,gC;QAAA,mBAA6B,K;MAAO,0B;QAAA,aAAuB,K;MAAO,8 B;QAAA,iBAA2B,K;MAAO,6B;QAAA,gBAA0B,K;MAAO,+B;QAAA,kBAA4B,K;MAAO,kC;QAAA,qBAA+B, K;MAAO,6B;QAAA,gBAA0B,K;MAAO,8B;QAAA,iBAA2B,K;MAAO,kC;QAAA,qBAA+B,K;MAAO,oB;QAA A,OAAgB,I;MAAM,sB;QAAA,SA Ae,C;MAAG,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB; QAAA,WAAqB,K;MACr2B,QAAQ,E;MACR,EAAE,QAAF,IAAc,M;MACd,EAAE,QAAF,IAAc,M;MACd,EAA E,QAAF,IAAc,M;MACd,EAAE,WAAF,IAAiB,S;MACjB,EAAE,SAAF,IAAe,O;MACf,EAAE,SAAF,IAAe,O;MA Cf,EAAE,SAAF,IAAe,O;MACf,EAAE,SAAF,IAAe,O;MACf,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe, O;MACf,EAAE,eAAF,IAAqB,a;MACrB,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf,EAAE,UAA F,IAAgB,Q;MAChB,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf,EAAE,kBAAF,IAAwB,gB;MAC xB,EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,YAAF,IAAkB,U;MACIB,EAAE,gBAAF,IAAsB,c;MACtB,EAAE,



eAAF,IAAqB,a;MACrB,EAAE,iBAAF,IAAuB,e;MACvB,EAAE,oBAAF,IAA0B,kB;MAC1B,EAAE,eAAF,IAAqB,a;MACrB,EAAE,gBAAF,IAAsB,c;MACtB,EAAE,oBAAF,IAA0B,kB;MAC1B,EAAE,MAAF,IAAY,I;MACZ,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MACiB,EAAE,UAAF,IAAgB,Q;MACHb,OAAO,C;K;kGA2BX,0E;MAEiC,oB;QAAA,OAAgB,E;MAAI,2B;QAAA,cAAwB,K;MAAO,oB;QAAA,OAAgB,I;MAAM,sB;QAAA,SA Ae,C;MAAG,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MACtM,QAAQ,E;MACR,EAAE,MAAF,IAAY,I;MACZ,EAAE,aAAF,IAAmB,W;MACnB,EAAE,MAAF,IAAY,I;MACZ,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MACiB,EAAE,UAAF,IAAgB,Q;MACHb,OAAO,C;K;wGAmDX,4S;MAEoC,mB;QAAA,MAAe,E;MAAI,oB;QAAA,OAAgB,E;MAAI,wB;QAAA,WAAiB,C;MAAG,sB;QAAA,SAAmB,K;MAAO,2B;QAAA,cAAwB,K;MAAO,uB;QAAA,UAAoB,K;MAAO,wB;QAAA,WAAqB,K;MAAO,sB;QAAA,SAAmB,K;MAAO,uB;QAAA,UAAoB,K;MAAO,gC;QAAA,mBAA6B,K;MAAO,gC;QAAA,mBAA6B,K;MAAO,0B;QAAA,aAAuB,K;MAAO,8B;QAAA,iBAA2B,K;MAAO,6B;QAAA,gBAA0B,K;MAAO,+B;QAAA,kBAA4B,K;MAAO,kC;QAAA,qBAA+B,K;MAAO,6B;QAAA,gBAA0B,K;MAAO,8B;QAAA,iBAA2B,K;MAAO,kC;QAAA,qBAA+B,K;MAAO,oB;QAAA,OAAgB,I;MAAM,sB;QAAA,SA Ae,C;MAAG,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MACjtB,QAAQ,E;MACR,EAAE,KAAF,IAAW,G;MACX,EAAE,MAAF,IAAY,I;MACZ,EAAE,UAAF,IAAgB,Q;MACHb,EAAE,QAAF,IAAc,M;MACd,EAAE,aAAF,IAAmB,W;MACnB,EAAE,SAAF,IAAe,O;MACf,EAAE,UAAF,IAAgB,Q;MACHb,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf,EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,YAAF,IAAkB,U;MACiB,EAAE,gBAAF,IAAsB,c;MACtB,EAAE,eAAF,IAAqB,a;MACrB,EAAE,iBAAF,IAAuB,e;MACvB,EAAE,oBAAF,IAA0B,kB;MAC1B,EAAE,eAAF,IAAqB,a;MACrB,EAAE,gBAAF,IAAsB,c;MACtB,EAAE,oBAAF,IAA0B,kB;MAC1B,EAAE,MAAF,IAAY,I;MACZ,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MACiB,EAAE,UAAF,IAAgB,Q;MACHb,OAAO,C;K;8GAuBX,6D;MAEuC,oB;QAAA,OAAgB,E;MAAI,oB;QAAA,OAAgB,I;MAAM,sB;QAAA,SA Ae,C;MAAG,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MAC7K,QAAQ,E;MACR,EAAE,MAAF,IAAY,I;MACZ,EAAE,MAAF,IAAY,I;MACZ,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MACiB,EAAE,UAAF,IAAgB,Q;MACHb,OAAO,C;K;wECnbX,4B;MAEyE,iBAA Y,KAAZ,C;K;wEAEzE,2B;MAEgG,iBAA Y,IAAZ,C;K;wEAwBhG,oC;MAE+F,UAA Y,KAAZ,IAAqB,M;K;wEAmFpH,2B;MAEqE,iBAA Y,IAAZ,C;K;wEAErE,kC;MAE2E,UAA Y,IAAZ,IAAoB,K;K;wEAssC/F,4B;MAEyE,iBAA Y,KAAZ,C;K;wEA0BzE,4B;MAEyE,iBAA Y,KAAZ,C;K;wEAsBzE,4B;MAEuE,iBAA Y,KAAZ,C;K;wEAyBvE,4B;MAE6E,iBAA Y,KAAZ,C;K;2FA4C7E,gD;MAEiC,qB;QAAA,QAAiD,I;MAAM,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MACiK,QAAQ,E;MACR,EAAE,OAAF,IAAa,K;MACb,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MACiB,EAAE,UAAF,IAAgB,Q;MACHb,OAAO,C;K;uEA+UX,4B;MAEuE,iBAA Y,KAAZ,C;K;wEAEvE,2B;MAE6F,iBAA Y,IAAZ,C;K;wEAqN7F,4B;MAEyE,iBAA Y,KAAZ,C;K;wEAEzE,oC;MAE2F,UAA Y,KAAZ,IAAqB,M;K;+FAuehH,wD;MAEmC,6B;QAAA,gBAA8B,I;MAAM,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MACjJ,QAAQ,E;MACR,EAAE,eAAF,IAAqB,a;MACrB,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MACiB,EAAE,UAAF,IAAgB,Q;MACHb,OAAO,C;K;uGAuIX,mB;MAEuC,uB;QAAA,UAAoB,K;MACvD,QAAQ,E;MACR,EAAE,SAAF,IAAe,O;MACf,OAAO,C;K;+HAyCX,iB;MAEmD,qB;QAAA,QAAkB,I;MACjE,QAAQ,E;MACR,EAAE,OAAF,IAAa,K;MACb,OAAO,C;K;+FA0MX,sE;MAEmC,oB;QAAA,OAAgB,I;MAAM,wB;QAAA,WA0+G4B,S;OA1+GwB,kB;QAAA,KAAc,E;MAAI,wB;QAAA,WAAoB,I;MAAM,sB;QAAA,SAAkB,S;MAAW,uB;QAAA,UAAoB,I;MAAM,qB;QAAA,QAAiB,I;MAAM,oB;QAAA,OAAgB,I;MACnP,QAAQ,E;MACR,EAAE,MAAF,IAAY,I;MACZ,EAAE,UAAF,IAAgB,Q;MACHb,EAAE,IAAF,IAAU,E;MACV,EAAE,UAAF,IAAgB,Q;MACHb,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf,EAAE,OAAF,IAAa,K;MACb,EAAE,MAAF,IAAY,I;MACZ,OAAO,C;K;qIagDX,iB;MAEsD,qB;QAAA,QAAkB,I;MACpE,QAAQ,E;MACR,EAAE,OAAF,IAAa,K;MACb,OAAO,C;K;+GakBX,qB;MAE2C,yB;QAAA,YAAmB,S;MAC1D,QAAQ,E;MACR,EAAE,SAAF,IAAe,S;MACf,OAAO,C;K;wEAkCX,4B;MAEqF,iBAA Y,KAAZ,C;K;yFAGCrF,4V;MAEgC,4B;QAAA,eAA8B,I;MAAM,uB;QAAA,UAAgB,C;MAAG,uB;QAAA,UAAgB,C;MAAG,uB;QAAA,UAAgB,C;MAAG,uB;QAAA,UAAgB,C;MAAG,sB;QAAA,SAAiB,C;MAAG,uB;QAAA,UAAkB,C;MAAG,6B;QAAA,gBAA8B,I;MAAM,sB;QAAA,SAAkB,I;MAAM,uB;QAAA,UAAoB,K;MAAO,wB;QAAA,WAAqB,K;MAAO,sB;QAAA,SAAmB,K;MAAO,

uB;QAAA,UAAoB,K;MAAO,gC;QAAA,mBAA6B,K;MAAO,gC;QAAA,mBAA6B,K;MAAO,0B;QAAA,aAAuB,  
K;MAAO,8B;QAAA,iBAA2B,K;MAAO,6B;QAAA,gBAA0B,K;MAAO,+B;QAAA,kBAA4B,K;MAAO,kC;QAA  
A,qBAA+B,K;MAAO,6B;QAAA,gBAA0B,K;MAAO,8B;QAAA,iBAA2B,K;MAAO,kC;QAAA,qBAA+B,K;MA  
AO,oB;QAAA,OAAgB,I;MAAM,sB;QAAA,SAAe,C;MAAG,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;  
MAAO,wB;QAAA,WAAqB,K;MAC9yB,QAAQ,E;MACR,EAAE,cAAF,IAAoB,Y;MACpB,EAAE,SAAF,IAAe,O  
;MACf,EAAE,SAAF,IAAe,O;MACf,EAAE,SAAF,IAAe,O;MACf,EAAE,SAAF,IAAe,O;MACf,EAAE,QAAF,IA  
Ac,M;MACd,EAAE,SAAF,IAAe,O;MACf,EAAE,eAAF,IAAqB,a;MACrB,EAAE,QAAF,IAAc,M;MACd,EAAE,S  
AAF,IAAe,O;MACf,EAAE,UAAF,IAAgB,Q;MACHb,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf  
,EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,YAAF,IAAkB,U;MACIB,EAAE,  
gBAAF,IAAsB,c;MACtB,EAAE,eAAF,IAAqB,a;MACrB,EAAE,iBAAF,IAAuB,e;MACvB,EAAE,oBAAF,IAA0B  
,kB;MACIB,EAAE,eAAF,IAAqB,a;MACrB,EAAE,gBAAF,IAAsB,c;MACtB,EAAE,oBAAF,IAA0B,kB;MACIB,  
EAAE,MAAF,IAAY,I;MACZ,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,  
U;MACIB,EAAE,UAAF,IAAgB,Q;MACHb,OAAO,C;K;wEAwEX,2B;MAE+D,iBAA Y,IAAZ,C;K;iGA2D/D,gD;  
MAEoC,qB;QAAA,QAAC,I;MAAM,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WA  
AqB,K;MACII,QAAQ,E;MACR,EAAE,OAAF,IAAa,K;MACb,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB  
,U;MACIB,EAAE,UAAF,IAAgB,Q;MACHb,OAAO,C;K;qGA2BX,yD;MAEsC,sB;QAAA,SAAkB,E;MAAI,sB;Q  
AAA,SAAkB,E;MAAI,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MAC5  
J,QAAQ,E;MACR,EAAE,QAAF,IAAc,M;MACd,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf,EA  
AE,YAAF,IAAkB,U;MACIB,EAAE,UAAF,IAAgB,Q;MACHb,OAAO,C;K;6GAuBX,oD;MAE0C,yB;QAAA,YA  
AsB,K;MAAO,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MACjJ,QAAQ  
,E;MACR,EAAE,WAAF,IAAiB,S;MACjB,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MACIB,EAAE,  
UAAF,IAAgB,Q;MACHb,OAAO,C;K;2FAoFX,kF;MAEiC,uB;QAAA,UAAmB,E;MAAI,wB;QAAA,WAAoB,E;  
MAAI,sB;QAAA,SAAe,C;MAAG,qB;QAAA,QAAC,C;MAAG,qB;QAAA,QAAC,I;MAAM,uB;QAAA,UAAoB,K;  
MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MACjN,QAAQ,E;MACR,EAAE,SAAF,IAAe,O;MA  
Cf,EAAE,UAAF,IAAgB,Q;MACHb,EAAE,QAAF,IAAc,M;MACd,EAAE,OAAF,IAAa,K;MACb,EAAE,OAAF,IA  
AAa,K;MACb,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MACIB,EAAE,UAAF,IAAgB,Q;MACHb,O  
AAO,C;K;iHAyBX,0D;MAEqE,sB;QAAA,SAAe,S;MAAW,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;  
MAAO,wB;QAAA,WAAqB,K;MACzK,QAAQ,E;MACR,EAAE,SAAF,IAAe,O;MACf,EAAE,QAAF,IAAc,M;M  
ACd,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MACIB,EAAE,UAAF,IAAgB,Q;MACHb,OAAO,C;K;  
wEAmXX,4B;MAEkE,iBAA Y,KAAZ,C;K;wEAIE,2B;MAEoE,iBAA Y,IAAZ,C;K;wEAUPE,4B;MAEsE,iBAA  
Y,KAAZ,C;K;wEAET,2B;MAEW,E,iBAA Y,IAAZ,C;K;wEAxE,4B;MAE+D,iBAA Y,KAAZ,C;K;wEAE/D,2B;M  
AEiE,iBAA Y,IAAZ,C;K;mGA0CjE,8G;MAEqC,gC;QAAA,mBAooF8C,M;OApoFe,gC;QAAA,mBAmpFT,S;OA  
npFyE,oC;QAAA,uBA8pFjE,S;OA9pF6I,2B;QAAA,cAAoB,S;MAAW,4B;QAAA,eAAqB,S;MAAW,6B;QAAA,g  
BAyqFIO,K;OAxqFvE,QAAQ,E;MACR,EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,kBAAF,IAAwB,gB;MACxB,  
EAAE,sBAAF,IAA4B,oB;MAC5B,EAAE,aAAF,IAAmB,W;MACnB,EAAE,cAAF,IAAoB,Y;MACpB,EAAE,eA  
AF,IAAqB,a;MACrB,OAAO,C;K;+FAwCX,mF;MAEmC,oB;QAAA,OAAa,I;MAAM,sB;QAAA,SAAkB,E;MAAI  
,2B;QAAA,cAAuB,E;MAAI,sB;QAAA,SAAYC,I;MAAM,qB;QAAA,QAA6B,E;MAAW,uB;QAAA,UAAoB,K;M  
AAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MACxQ,QAAQ,E;MACR,EAAE,MAAF,IAAY,I;MA  
CZ,EAAE,QAAF,IAAc,M;MACd,EAAE,aAAF,IAAmB,W;MACnB,EAAE,QAAF,IAAc,M;MACd,EAAE,OAAF,  
IAAa,K;MACb,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MACIB,EAAE,UAAF,IAAgB,Q;MACHb,O  
AAO,C;K;6FA4BX,2B;MAEkC,+B;QAAA,kBAA4B,K;MACID,QAAQ,E;MACR,EAAE,iBAAF,IAAuB,e;MAC  
vB,OAAO,C;K;2FA2DX,iE;MAEiC,wB;QAAA,WAAqB,K;MAAO,oB;QAAA,OAAe,C;MAAG,sB;QAAA,SAAk  
B,E;MAAI,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MAC/K,QAAQ,E;  
MACR,EAAE,UAAF,IAAgB,Q;MACHb,EAAE,MAAF,IAAY,I;MACZ,EAAE,QAAF,IAAc,M;MACd,EAAE,SA  
AF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MACIB,EAAE,UAAF,IAAgB,Q;MACHb,OAAO,C;K;yFA8FX,6B;M  
AEgC,oB;QAAA,OA+7E6C,S;OA/7EL,2B;QAAA,cCl2He,M;ODm2HnF,QAAQ,E;MACR,EAAE,MAAF,IAAY,I  
;MACZ,EAAE,aAAF,IAAmB,W;MACnB,OAAO,C;K;wEAoDX,0B;MAE+D,iBAA Y,GAAZ,C;K;wEAE/D,iC;M  
AEqE,UAA Y,GAAZ,IAAmB,K;K;+FAoDxF,oF;MAEmC,mB;QAAA,MAAe,I;MAAM,wB;QAAA,WAAoB,I;MA

AM,wB;QAAA,WAAoB,I;MAAM,mB;QAAA,MAAe,E;MAAI,2B;QAAA,cAAwB,I;MAAM,uB;QAAA,UAAoB,  
K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MACvO,QAAQ,E;MACR,EAAE,KA AF,IAAW,G  
;MACX,EAAE,UAAF,IAAgB,Q;MACHB,EAAE,UAAF,IAAgB,Q;MACHB,EAAE,KA AF,IAAW,G;MACX,EAA  
E,aAAF,IAAmB,W;MACnB,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MACIB,EAAE,UAAF,IAAgB,  
Q;MACHB,OAAO,C;K;iFAwNX,yC;MAE4B,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QA  
AA,WAAqB,K;MACtG,QAAQ,E;MACR,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MACIB,EAAE,U  
AAF,IAAgB,Q;MACHB,OAAO,C;K;6FAwBX,iD;MAEkC,sB;QAAA,SAAe,I;MAAM,uB;QAAA,UAAoB,K;MA  
AO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MACjI,QAAQ,E;MACR,EAAE,QAAF,IAAc,M;MACd,  
EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MACIB,EAAE,UAAF,IAAgB,Q;MACHB,OAAO,C;K;uGA  
SX,mB;MAEuC,uB;QAAA,UAAoB,K;MACvD,QAAQ,E;MACR,EAAE,SAAF,IAAe,O;MACf,OAAO,C;K;6GA  
YX,kC;MAE0C,uB;QAAA,UAAoB,K;MAAO,oB;QAAA,OAAiB,K;MAAO,uB;QAAA,UAAoB,K;MAC7G,QAA  
Q,E;MACR,EAAE,SAAF,IAAe,O;MACf,EAAE,MAAF,IAAY,I;MACZ,EAAE,SAAF,IAAe,O;MACf,OAAO,C;K  
;wEAkEX,4B;MAE6D,iBAAY,KAAZ,C;K;wEAU7D,4B;MAEsE,iBAAY,KAAZ,C;K;wEAeT,2B;MAEwE,iBA  
AY,IAAZ,C;K;uGAsCxE,oH;MAEuC,yB;QAAA,YAAsB,K;MAAO,0B;QAAA,aAAuB,S;MAAW,6B;QAAA,gB  
AA0B,S;MAAW,uB;QAAA,UAAoB,K;MAAO,iC;QAAA,oBAA8B,S;MAAW,qC;QAAA,wBAAkC,S;MAAW,+  
B;QAAA,kBAAkC,S;MAC1R,QAAQ,E;MACR,EAAE,WAAF,IAAiB,S;MACjB,EAAE,YAAF,IAAkB,U;MACIB  
,EAAE,eAAF,IAAqB,a;MACrB,EAAE,SAAF,IAAe,O;MACf,EAAE,mBAAF,IAAyB,iB;MACzB,EAAE,uBAAF,I  
AA6B,qB;MAC7B,EAAE,iBAAF,IAAuB,e;MACvB,OAAO,C;K;mGAgFX,oB;MAEqC,wB;QAAA,WAAqB,K;M  
ACtD,QAAQ,E;MACR,EAAE,UAAF,IAAgB,Q;MACHB,OAAO,C;K;wEA+MX,2B;MAEiE,iBAAY,IAAZ,C;K;2  
GakCjE,c;MAEyC,kB;QAAA,KAAgB,S;MACrD,QAAQ,E;MACR,EAAE,IAAF,IAAU,E;MACV,OAAO,C;K;2F  
AuMX,gB;MAGI,QAAQ,E;MACR,EAAE,MAAF,IAAY,I;MACZ,OAAO,C;K;wEAgBX,4B;MAEiE,iBAAY,KA  
AZ,C;K;wEAeJ,E,oC;MAE4E,iBAAY,aAAZ,C;K;wEAuT5E,4B;MAEmE,iBAAY,KAAZ,C;K;uFA2CnE,sB;MAE  
+B,iB;QAAA,IAAa,G;MAAK,iB;QAAA,IAAa,G;MAAK,iB;QAAA,IAAa,G;MAAK,iB;QAAA,IAAa,G;MAC9F,  
QAAQ,E;MACR,EAAE,GAAF,IAAS,C;MACT,EAAE,GAAF,IAAS,C;MACT,EAAE,GAAF,IAAS,C;MACT,EA  
AE,GAAF,IAAS,C;MACT,OAAO,C;K;qFA0CX,+B;MAE8B,iB;QAAA,IAAa,G;MAAK,iB;QAAA,IAAa,G;MAA  
K,qB;QAAA,QAAiB,G;MAAK,sB;QAAA,SAAkB,G;MACtG,QAAQ,E;MACR,EAAE,GAAF,IAAS,C;MACT,EA  
AE,GAAF,IAAS,C;MACT,EAAE,OAAF,IAAa,K;MACb,EAAE,QAAF,IAAc,M;MACd,OAAO,C;K;wEAOX,4B;  
MAEmE,iBAAY,KAAZ,C;K;yFAiHnE,oB;MAEgC,wB;QAAA,WAY2B+C,M;OAx2B3E,QAAQ,E;MACR,EAAE  
,UAAF,IAAgB,Q;MACHB,OAAO,C;K;6FAeX,+B;MAEkC,oB;QAAA,OAAGB,S;MAAW,mB;QAAA,MAAe,S;M  
AAW,wB;QAAA,Waq1BR,M;OAp1B3E,QAAQ,E;MACR,EAAE,MAAF,IAAY,I;MACZ,EAAE,KA AF,IAAW,G  
;MACX,EAAE,UAAF,IAAgB,Q;MACHB,OAAO,C;K;6GAwCX,yD;MAE0C,qB;QAAA,QAAiB,E;MAAI,uB;QA  
AA,UAAoB,K;MAAO,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MACp  
K,QAAQ,E;MACR,EAAE,OAAF,IAAa,K;MACb,EAAE,SAAF,IAAe,O;MACf,EAAE,SAAF,IAAe,O;MACf,EAA  
E,YAAF,IAAkB,U;MACIB,EAAE,UAAF,IAAgB,Q;MACHB,OAAO,C;K;yGAiCX,mC;MAEwC,qB;QAAA,QA2  
wByD,Q;OA3wBK,sB;QAAA,SA2wBL,Q;OA3wBoE,wB;QAAA,WA4vBtF,M;OA3vB3E,QAAQ,E;MACR,EAA  
E,OAAF,IAAa,K;MACb,EAAE,QAAF,IAAc,M;MACd,EAAE,UAAF,IAAgB,Q;MACHB,OAAO,C;K;2FAYX,2B;  
MAEiC,mB;QAAA,MAuwB0C,Q;OAvwBJ,0B;QAAA,aAAsB,S;MACzF,QAAQ,E;MACR,EAAE,KA AF,IAAW,  
G;MACX,EAAE,YAAF,IAAkB,U;MACIB,OAAO,C;K;+GAYX,0B;MAE2C,uB;QAAA,UaqvBgC,Q;OArvBU,q  
B;QAAA,QAqvBV,Q;OApvBvE,QAAQ,E;MACR,EAAE,SAAF,IAAe,O;MACf,EAAE,OAAF,IAAa,K;MACb,OA  
AO,C;K;wEAgCX,4B;MAE+D,iBAAY,KAAZ,C;K;qFAyaY,qB;MAAQ,OAAU,S;K;6FAEd,qB;MAAQ,OAAc,a;  
K;uFAEzB,qB;MAAQ,OAAW,U;K;iFASxB,qB;MAAQ,OAAG,E;K;iFAEX,qB;MAAQ,OAAQ,O;K;uFAEb,qB;M  
AAQ,OAAW,U;K;uFAS3B,qB;MAAQ,OAAW,U;K;mFAErB,qB;MAAQ,OAAS,Q;K;qFAEhB,qB;MAAQ,OAAU  
,S;K;yFAShB,qB;MAAQ,OAAY,W;K;uFAErB,qB;MAAQ,OAAW,U;K;+FAEf,qB;MAAQ,OAe,c;K;uFAE3B,q  
B;MAAQ,OAAW,U;K;uFAEnB,qB;MAAQ,OAAW,U;K;mFASrB,qB;MAAQ,OAAS,Q;K;iFAEiB,qB;MAAQ,OA  
AQ,O;K;6EAEiB,qB;MAAQ,OAAM,K;K;uFAET,qB;MAAQ,OAAW,U;K;qFASiB,qB;MAAQ,OAAU,S;K;qFAEi  
B,qB;MAAQ,OAAU,S;K;6EASR,qB;MAAQ,OAAM,K;K;mFAEX,qB;MAAQ,OAAS,Q;K;+EAEnB,qB;MAAQ,O  
AAO,M;K;+EAS/B,qB;MAAQ,OAAO,M;K;iFAEd,qB;MAAQ,OAAQ,O;K;mFAEf,qB;MAAQ,OAAS,Q;K;mFAS  
hB,qB;MAAQ,OAAQ,O;K;iFAEhB,qB;MAAQ,OAAQ,O;K;iFAEhB,qB;MAAQ,OAAQ,O;K;mFASd,qB;MAAQ,

OAAQ,O;K;+EAEIB,qB;MAAQ,OAAM,K;K;+EAEb,qB;MAAQ,OAAO,M;K;iFAEd,qB;MAAQ,OAAQ,O;K;mFAEf,qB;MAAQ,OAAS,Q;K;6EASd,qB;MAAQ,OAAM,K;K;qFAEV,qB;MAAQ,OAAU,S;K;mFAEnB,qB;MAAQ,OAAS,Q;K;2FAEb,qB;MAAQ,OAAa,Y;K;6FAEpB,qB;MAAQ,OAAC,a;K;mFAE3B,qB;MAAQ,OAAS,Q;K;6EAS1B,qB;MAAQ,OAAM,K;K;6EAEd,qB;MAAQ,OAAM,K;K;qFAEV,qB;MAAQ,OAAU,S;K;+EASjB,qB;MAAQ,OAAO,M;K;mFAEb,qB;MAAQ,OAAS,Q;K;+EASrB,qB;MAAQ,OAAO,M;K;iFAEd,qB;MAAQ,OAAQ,O;K;iFASjB,qB;MAAQ,OAAO,M;K;6FAER,qB;MAAQ,OAAC,a;K;qFAE1B,qB;MAAQ,OAAU,S;K;iFASb,qB;MAAQ,OAAO,M;K;uFAEZ,qB;MAAQ,OAAU,S;K;yFAS9B,qB;MAAQ,OAAy,W;K;+EAE1B,qB;MAAQ,OAAM,K;K;qFAEX,qB;MAAQ,OAAS,Q;K;iFAEnB,qB;MAAQ,OAAO,M;K;+EASrB,qB;MAAQ,OAAO,M;K;6FAER,qB;MAAQ,OAAC,a;K;qFAS1B,qB;MAAQ,OAAU,S;K;mFAEnB,qB;MAAQ,OAAS,Q;K;+EASX,qB;MAAQ,OAAO,M;K;mFAEb,qB;MAAQ,OAAS,Q;K;iFASnB,qB;MAAQ,OAAO,M;K;qFAEZ,qB;MAAQ,OAAU,S;K;mFAEnB,qB;MAAQ,OAAS,Q;K;kFASJ,qB;MAAQ,OAAQ,O;K;oFAEf,qB;MAAQ,OAAS,Q;K;8EAEpB,qB;MAAQ,OAAM,K;K;oFAEV,qB;MAAQ,OAAU,S;K;mFASzC,qB;MAAQ,OAAS,Q;K;mFAEjB,qB;MAAQ,OAAS,Q;K;qFAEhB,qB;MAAQ,OAAU,S;K;qFAEIB,qB;MAAQ,OAAU,S;K;wIEx+M7E,wM;MAEiD,qB;QAAA,QAAkB,I;MAAM,sB;QAAA,SAAMb,I;MAAM,2B;QAAA,cAAwB,I;MAAM,yB;QAAA,YAAsB,I;MAAM,0B;QAAA,aAAuB,I;MAAM,0B;QAAA,aAAuB,I;MAAM,sB;QAAA,SAAMb,I;MAAM,0B;QAAA,aAAuB,I;MAAM,0B;QAAA,aAAuB,I;MAAM,gC;QAAA,mBAA6B,I;MAAM,+B;QAAA,kBAA4B,I;MAAM,gC;QAAA,mBAA6B,I;MAAM,uB;QAAA,UAAoB,I;MAAM,4B;QAAA,eAAyB,I;MAAM,wB;QAAA,WAAqB,I;MAAM,uB;QAAA,UAAoB,I;MACrF,QAAQ,E;MACR,EAAE,OAAF,IAAa,K;MACb,EAAE,QAAF,IAAc,M;MACd,EAAE,aAAF,IAAmB,W;MACnB,EAAE,WAAF,IAAiB,S;MACjB,EAAE,YAAF,IAAkB,U;MACiB,EAAE,YAAF,IAAkB,U;MACiB,EAAE,QAAF,IAAc,M;MACd,EAAE,YAAF,IAAkB,U;MACiB,EAAE,YAAF,IAAkB,U;MACiB,EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,iBAAF,IAAuB,e;MACvB,EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,SAAF,IAAe,O;MACf,EAAE,cAAF,IAAoB,Y;MACpB,EAAE,UAAF,IAAgB,Q;MAChB,EAAE,SAAF,IAAe,O;MACf,OAAO,C;K;wHAsDX,wM;MAEyC,qB;QAAA,QAAqB,S;MAAW,sB;QAAA,SAAsB,S;MAAW,2B;QAAA,cAA4B,S;MAAW,yB;QAAA,YAA0B,S;MAAW,0B;QAAA,aAA6B,S;MAAW,0B;QAAA,aAA6B,S;MAAW,sB;QAAA,SAAuB,S;MAAW,0B;QAAA,aAA0B,S;MAAW,0B;QAAA,aAA0B,S;MAAW,gC;QAAA,mBAAoC,S;MAAW,+B;QAAA,kBAAmC,S;MAAW,gC;QAAA,mBAAoC,S;MAAW,uB;QAAA,UAAwB,S;MAAW,4B;QAAA,eAA4B,S;MAAW,wB;QAAA,WAAoB,S;MAAW,uB;QAAA,UAAmB,S;MACtnB,QAAQ,E;MACR,EAAE,OAAF,IAAa,K;MACb,EAAE,QAAF,IAAc,M;MACd,EAAE,aAAF,IAAmB,W;MACnB,EAAE,WAAF,IAAiB,S;MACjB,EAAE,YAAF,IAAkB,U;MACiB,EAAE,YAAF,IAAkB,U;MACiB,EAAE,QAAF,IAAc,M;MACd,EAAE,YAAF,IAAkB,U;MACiB,EAAE,YAAF,IAAkB,U;MACiB,EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,iBAAF,IAAuB,e;MACvB,EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,SAAF,IAAe,O;MACf,EAAE,cAAF,IAAoB,Y;MACpB,EAAE,UAAF,IAAgB,Q;MAChB,EAAE,SAAF,IAAe,O;MACf,OAAO,C;K;sHAYX,kN;MAEwC,wB;QAAA,WAA4C,S;MAAW,qB;QAAA,QAAiB,S;MAAW,sB;QAAA,SAAkB,S;MAAW,2B;QAAA,cAAuB,S;MAAW,yB;QAAA,YAAqB,S;MAAW,0B;QAAA,aAsB,S;MAAW,0B;QAAA,aAsB,S;MAAW,sB;QAAA,SAAkB,S;MAAW,0B;QAAA,aAsB,S;MAAW,0B;QAAA,aAsB,S;MAAW,gC;QAAA,mBAA4B,S;MAAW,+B;QAAA,kBAA2B,S;MAAW,gC;QAAA,mBAA4B,S;MAAW,uB;QAAA,UAAmB,S;MAAW,4B;QAAA,eAAwB,S;MAAW,wB;QAAA,WAAoB,S;MAAW,uB;QAAA,UAAmB,S;MAC9IB,QAAQ,E;MACR,EAAE,UAAF,IAAgB,Q;MAChB,EAAE,OAAF,IAAa,K;MACb,EAAE,QAAF,IAAc,M;MACd,EAAE,aAAF,IAAmB,W;MACnB,EAAE,WAAF,IAAiB,S;MACjB,EAAE,YAAF,IAAkB,U;MACiB,EAAE,YAAF,IAAkB,U;MACiB,EAAE,QAAF,IAAc,M;MACd,EAAE,YAAF,IAAkB,U;MACiB,EAAE,YAAF,IAAkB,U;MACiB,EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,iBAAF,IAAuB,e;MACvB,EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,SAAF,IAAe,O;MACf,EAAE,cAAF,IAAoB,Y;MACpB,EAAE,UAAF,IAAgB,Q;MAChB,EAAE,SAAF,IAAe,O;MACf,OAAO,C;K;0HAsDX,wM;MAE0C,qB;QAAA,QAAiB,S;MAAW,sB;QAAA,SAAkB,S;MAAW,2B;QAAA,cAAuB,S;MAAW,yB;QAAA,YAAqB,S;MAAW,0B;QAAA,aAsB,S;MAAW,0B;QAAA,aAsB,S;MAAW,sB;QAAA,SAAkB,S;MAAW,0B;QAAA,aAsB,S;MAAW,0B;QAAA,aAsB,S;MAAW,gC;QAAA,mBAA4B,S;MAAW,+B;QAAA,kBAA2B,S;MAAW,gC;QAAA,mBAA4B,S;MAAW,uB;QAAA,UAAmB,S;MAAW,4B;QAAA,eAAwB,S;MAAW,wB;QAAA,WAAoB,S;MAAW,uB;QAAA,UAAmB,S;MACziB,QAAQ,E;MACR,EAAE,OAAF,IAAa,K;MACb,EAAE,QAAF,IAAc,M;MACd,EAAE,aAAF,IAAmB,W;MACnB,EAAE,WAAF,IAAiB,S;MACjB,EAAE,YAAF,IAAkB,U;MACiB,EAAE,YAAF,IAAkB,U;MACiB,EAAE,QAAF,IAAc,M;MACd,EAAE,YAAF,IAAkB,U;

U;MACIB,EAAE,YAAF,IAAkB,U;MACIB,EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,iBAAF,IAAuB,e;MACvB,  
EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,SAAF,IAAe,O;MACf,EAAE,cAAF,IAAoB,Y;MACpB,EAAE,UAAF,I  
AAgB,Q;MACHB,EAAE,SAAF,IAAe,O;MACf,OAAO,C;K;gHAYDX,wM;MAEqC,qB;QAAA,QAAc,S;MAAW,s  
B;QAAA,SA Ae,S;MAAW,2B;QAAA,cAAuB,S;MAAW,yB;QAAA,YAAqB,S;MAAW,0B;QAAA,aAAsB,S;MA  
AW,0B;QAAA,aAAsB,S;MAAW,sB;QAAA,SAAkB,S;MAAW,0B;QAAA,aAAmB,S;MAAW,0B;QAAA,aAAmB  
,S;MAAW,gC;QAAA,mBAA6B,S;MAAW,+B;QAAA,kBAA4B,S;MAAW,gC;QAAA,mBAA6B,S;MAAW,uB;Q  
AAA,UAAmB,S;MAAW,4B;QAAA,eAAqB,S;MAAW,wB;QAAA,WAAoB,S;MAAW,uB;QAAA,UAAmB,S;MA  
CxB,EAAE,iBAAF,IAAuB,e;MACvB,EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,SAAF,IAAe,O;MACf,EA  
AE,cAAF,IAAoB,Y;MACpB,EAAE,UAAF,IAAgB,Q;MACHB,EAAE,SAAF,IAAe,O;MACf,OAAO,C;K;8HAqB  
X,gD;MAEsE,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MACHJ,QAAQ,  
E;MACR,EAAE,OAAF,IAAa,K;MACb,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MACIB,EAAE,UA  
AF,IAAgB,Q;MACHB,OAAO,C;K;slAoBX,gD;MAEgD,qB;QAAA,QAAiB,I;MAAM,uB;QAAA,UAAoB,K;MA  
AO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MACjJ,QAAQ,E;MACR,EAAE,OAAF,IAAa,K;MACb,  
EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MACIB,EAAE,UAAF,IAAgB,Q;MACHB,OAAO,C;K;wHA  
wCX,wB;MAEyC,qB;QAAA,QAAiB,K;MAAO,qB;QAAA,QAAiB,K;MAC9E,QAAQ,E;MACR,EAAE,OAAF,IA  
Aa,K;MACb,EAAE,OAAF,IAAa,K;MACb,OAAO,C;K;kGAYBX,oB;MAE8B,mB;QAAA,MAAe,S;MAAW,mB;Q  
AAA,MAAe,S;MACnE,QAAQ,E;MACR,EAAE,KAAF,IAAW,G;MACX,EAAE,KAAF,IAAW,G;MACX,OAAO,  
C;K;oHAYX,kC;MAEuC,qB;QAAA,QAAiB,S;MAAW,qB;QAAA,QAAiB,S;MAAW,mB;QAAA,MAAe,S;MAA  
W,mB;QAAA,MAAe,S;MACpI,QAAQ,E;MACR,EAAE,OAAF,IAAa,K;MACb,EAAE,OAAF,IAAa,K;MACb,EA  
AE,KAAF,IAAW,G;MACX,EAAE,KAAF,IAAW,G;MACX,OAAO,C;K;gGAYX,oB;MAE6B,mB;QAAA,MAAY  
,S;MAAW,mB;QAAA,MAAY,S;MAC5D,QAAQ,E;MACR,EAAE,KAAF,IAAW,G;MACX,EAAE,KAAF,IAAW,  
G;MACX,OAAO,C;K;kHAYX,kC;MAEsC,qB;QAAA,QAAc,S;MAAW,qB;QAAA,QAAc,S;MAAW,mB;QAAA,  
MAAY,S;MAAW,mB;QAAA,MAAY,S;MACvH,QAAQ,E;MACR,EAAE,OAAF,IAAa,K;MACb,EAAE,OAAF,IA  
Aa,K;MACb,EAAE,KAAF,IAAW,G;MACX,EAAE,KAAF,IAAW,G;MACX,OAAO,C;K;gIAeX,wB;MAE6C,q  
B;QAAA,QAAkB,S;MAAW,qB;QAAA,QAAkB,S;MACxF,QAAQ,E;MACR,EAAE,OAAF,IAAa,K;MACb,EAA  
E,OAAF,IAAa,K;MACb,OAAO,C;K;oIAeX,wB;MAE+C,qB;QAAA,QAAiB,S;MAAW,qB;QAAA,QAAiB,S;MA  
CxF,QAAQ,E;MACR,EAAE,OAAF,IAAa,K;MACb,EAAE,OAAF,IAAa,K;MACb,OAAO,C;K;4FAKX,Y;MAGI,  
QAAQ,E;MACR,OAAO,C;K;oFAKX,Y;MAGI,QAAQ,E;MACR,OAAO,C;K;8FAKX,Y;MAGI,QAAQ,E;MACR,  
OAAO,C;K;kGASX,oB;MAE8B,wB;QAAA,WAAkC,S;MAC5D,QAAQ,E;MACR,EAAE,UAAF,IAAgB,Q;MAC  
hB,OAAO,C;K;4FAUmE,qB;MAAQ,OAAO,M;K;8FAEd,qB;MAAQ,OAAQ,O;K;4FASrB,qB;MAAQ,OAAO,M;  
K;0GAER,qB;MAAQ,OAAc,a;K;8FAE7B,qB;MAAQ,OAAO,M;K;gGAEd,qB;MAAQ,OAAQ,O;K;8FASjB,qB;M  
AAQ,OAAO,M;K;gHAEL,qB;MAAQ,OAAiB,gB;K;wGASrC,qB;MAAQ,OAAa,Y;K;0GAEPB,qB;MAAQ,OAAc  
,a;K;wGAEvB,qB;MAAQ,OAAa,Y;K;oFCroB7F,4B;MAE6E,iBAAY,KAAZ,C;K;iGASnB,qB;MAAQ,OAAS,Q;  
K;6FAEnB,qB;MAAQ,OAAO,M;K;+FAEd,qB;MAAQ,OAAQ,O;K;iGASF,qB;MAAQ,OAAU,S;K;+FAEnB,qB;  
MAAQ,OAAS,Q;K;mGAS3B,qB;MAAQ,OAAW,U;K;mGAEnB,qB;MAAQ,OAAW,U;K;6GC1D/E,mb;MAEmC,  
yB;QAAA,YAAkB,C;MAAG,qB;QAAA,QAAiB,G;MAAK,sB;QAAA,SAAkB,G;MAAK,wB;QAAA,WAAmB,G;  
MAAI,kC;QAAA,qBAA6B,G;MAAI,qB;QAAA,QAAc,C;MAAG,qB;QAAA,QAAc,C;MAAG,qB;QAAA,QAAc,  
C;MAAG,2B;QAAA,cAAuB,E;MAAI,yB;QAAA,YAAsB,K;MAAO,uB;QAAA,UAAgB,C;MAAG,uB;QAAA,UA  
AgB,C;MAAG,uB;QAAA,UAAgB,C;MAAG,uB;QAAA,UAAgB,C;MAAG,sB;QAAA,SAAiB,C;MAAG,uB;QAA  
A,UAAkB,C;MAAG,6B;QAAA,gBAA8B,I;MAAM,sB;QAAA,SAAkB,I;MAAM,uB;QAAA,UAAoB,K;MAAO,w  
B;QAAA,WAAqB,K;MAAO,sB;QAAA,SAAmB,K;MAAO,uB;QAAA,UAAoB,K;MAAO,gC;QAAA,mBAA6B,K  
;MAAO,gC;QAAA,mBAA6B,K;MAAO,0B;QAAA,aAAuB,K;MAAO,8B;QAAA,iBAA2B,K;MAAO,6B;QAAA,g  
BAA0B,K;MAAO,+B;QAAA,kBAA4B,K;MAAO,kC;QAAA,qBAA+B,K;MAAO,6B;QAAA,gBAA0B,K;MAAO,  
8B;QAAA,iBAA2B,K;MAAO,kC;QAAA,qBAA+B,K;MAAO,oB;QAAA,OAAgB,I;MAAM,sB;QAAA,SAAc,C;  
MAAG,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MACI/B,QAAQ,E;M

ACR,EAAE,WAAF,IAAiB,S;MACjB,EAAE,OAAF,IAAa,K;MACb,EAAE,QAAF,IAAc,M;MACd,EAAE,UAAF,IAAgB,Q;MAChB,EAAE,oBAAF,IAA0B,kB;MAC1B,EAAE,OAAF,IAAa,K;MACb,EAAE,OAAF,IAAa,K;MAC b,EAAE,OAAF,IAAa,K;MACb,EAAE,aAAF,IAAmB,W;MACnB,EAAE,WAAF,IAAiB,S;MACjB,EAAE,SAAF,IA Ae,O;MACf,EAAE,SAAF,IAAe,O;MACf,EAAE,SAAF,IAAe,O;MACf,EAAE,SAAF,IAAe,O;MACf,EAAE,QA AF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf,EAAE,eAAF,IAAqB,a;MACrB,EAAE,QAAF,IAAc,M;MACd,E AA E,SAAF,IAAe,O;MACf,EAAE,UAAF,IAAgB,Q;MAChB,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O ;MACf,EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,YAAF,IAAkB,U;MACiB, EAAE,gBAAF,IAAsB,c;MACtB,EAAE,eAAF,IAAqB,a;MACrB,EAAE,iBAAF,IAAuB,e;MACvB,EAAE,oBAAF, IAA0B,kB;MAC1B,EAAE,eAAF,IAAqB,a;MACrB,EAAE,gBAAF,IAAsB,c;MACtB,EAAE,oBAAF,IAA0B,kB; MAC1B,EAAE,MAAF,IAAY,I;MACZ,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF, IAAkB,U;MACiB,EAAE,UAAF,IAAgB,Q;MAChB,OAAO,C;K;6GC1BX,0C;MAEwC,oB;QAAA,OAAiB,I;MAA M,sB;QAAA,SAAmB,K;MAAO,uB;QAAA,UAAoB,K;MAAO,uB;QAAA,UAAoB,K;MACpI,QAAQ,E;MACR,E AA E,MAAF,IAAY,I;MACZ,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf,EAAE,SAAF,IAAe,O;M ACf,OAAO,C;K;4EAmIX,4B;MAEkE,iBAAY,KAAZ,C;K;4EAEIE,qC;MAE2E,UAA Y,KAAZ,IAAqB,O;K;4EAI BhG,4B;MAEuE,iBAAY,KAAZ,C;K;4EAEvE,qC;MAE+E,UAA Y,KAAZ,IAAqB,O;K;4EAI BpG,4B;MAEuE,iBA AY,KAAZ,C;K;4EAEvE,qC;MAE+E,UAA Y,KAAZ,IAAqB,O;K;4EAI GpG,4B;MAEoE,iBAAY,KAAZ,C;K;2EA EpE,qC;MAE4E,UAA Y,KAAZ,IAAqB,O;K;4EAKcJG,4B;MAE6E,iBAAY,KAAZ,C;K;4EAE7E,qC;MAEQF,UAA Y,KAAZ,IAAqB,O;K;4EAgP1G,4B;MAEQE,iBAAY,KAAZ,C;K;4EAErE,qC;MAE6E,UAA Y,KAAZ,IAAqB,O;K ;uFJ57BIG,+H;MAE8B,sB;QAAA,SAAkB,S;MAAW,uB;QAAA,UAAmB,S;MAAW,oB;QAAA,OAAgB,S;MAA W,wB;QAAA,WAAoB,S;MAAW,8B;QAAA,iBAA0B,S;MAAW,oB;QAAA,OAAqB,S;MAAW,2B;QAAA,cAAm C,S;MAAW,qB;QAAA,QAAuB,S;MAAW,wB;QAAA,WAA6B,S;MAAW,yB;QAAA,YAAqB,S;MAAW,yB;QA AA,YAAsB,S;MAAW,wB;QAAA,WAAe,S;MAC5Z,QAAQ,E;MACR,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf,EAAE,MAAF,IAAY,I;MACZ,EAAE,UAAF,IAAgB,Q;MAChB,EAAE,gBAAF,IAAsB,c;MACt B,EAAE,MAAF,IAAY,I;MACZ,EAAE,aAAF,IAAmB,W;MACnB,EAAE,OAAF,IAAa,K;MACb,EAAE,UAAF,IA AgB,Q;MAChB,EAAE,WAAF,IAAiB,S;MACjB,EAAE,WAAF,IAAiB,S;MACjB,EAAE,QAAF,IAAc,Q;MACd,O AAO,C;K;yFA0CX,uC;MAE+B,sB;QAAA,SAAiB,G;MAAK,0B;QAAA,aAAsB,I;MAAM,uB;QAAA,UAAmB,S; MAChG,QAAQ,E;MACR,EAAE,QAAF,IAAc,M;MACd,EAAE,YAAF,IAAkB,U;MACiB,EAAE,SAAF,IAAe,O; MACf,OAAO,C;K;qFAUgD,qB;MAAQ,OAAG,E;K;mFAEX,qB;MAAQ,OAAQ,O;K;iFAEjB,qB;MAAQ,OAAO, M;K;mFAEd,qB;MAAQ,OAAQ,O;K;qFAEf,qB;MAAQ,OAAS,Q;K;mFAEiB,qB;MAAQ,OAAQ,O;K;mFAEhB,q B;MAAQ,OAAQ,O;K;mFAEhB,qB;MAAQ,OAAQ,O;K;qFASF,qB;MAAQ,OAAG,E;K;yFAER,qB;MAAQ,OAA W,U;K;mFAEtB,qB;MAAQ,OAAQ,O;K;mFAEjB,qB;MAAQ,OAAO,M;K;qFAEd,qB;MAAQ,OAAQ,O;K;yFAEb ,qB;MAAQ,OAAW,U;K;mFAEtB,qB;MAAQ,OAAQ,O;K;qFAEf,qB;MAAQ,OAAS,Q;K;qFAEjB,qB;MAAQ,OA AS,Q;K;uFAEjB,qB;MAAQ,OAAS,Q;K;mGAEV,qB;MAAQ,OAAgB,e;K;iGAEzB,qB;MAAQ,OAAe,c;K;qFAE9 B,qB;MAAQ,OAAQ,O;K;qFAEf,qB;MAAQ,OAAS,Q;K;iFAEnB,qB;MAAQ,OAAO,M;K;yFASzB,qB;MAAQ,O AAW,U;K;+FAEhB,qB;MAAQ,OAAc,a;K;uFAE1B,qB;MAAQ,OAAU,S;K;iFAErB,qB;MAAQ,OAAO,M;K;iFA SD,qB;MAAQ,OAAO,M;K;iGAER,qB;MAAQ,OAAc,a;K;uFAE1B,qB;MAAQ,OAAU,S;K;yFAS9B,qB;MAAQ, OAAU,S;K;yFAEjB,qB;MAAQ,OAAW,U;K;qFAErB,qB;MAAQ,OAAS,Q;K;yFAEf,qB;MAAQ,OAAW,U;K;+F AEhB,qB;MAAQ,OAAc,a;K;qGAEnB,qB;MAAQ,OAAiB,gB;K;qFAS3B,qB;MAAQ,OAAS,Q;K;mFAEiB,qB;M AAQ,OAAQ,O;K;uFAEf,qB;MAAQ,OAAS,Q;K;mFASxB,qB;MAAQ,OAAQ,O;K;mFAEjB,qB;MAAQ,OAAO, M;K;yFAEZ,qB;MAAQ,OAAU,S;K;qFAEpB,qB;MAAQ,OAAQ,O;K;qFAEf,qB;MAAQ,OAAS,Q;K;qGAET,qB; MAAQ,OAAiB,gB;K;+FKnR/F,gB;MAEkC,oB;QAAA,OAAgB,E;MAC9C,QAAQ,E;MACR,EAAE,MAAF,IAA Y,I;MACZ,OAAO,C;K;+FAiBX,8B;MAEkC,4B;QAAA,eAAqB,S;MAAW,oB;QAAA,OAAgB,E;MAC9E,QAAQ, E;MACR,EAAE,cAAF,IAAoB,Y;MACpB,EAAE,MAAF,IAAY,I;MACZ,OAAO,C;K;0EAUX,4B;MAE6D,iBAA Y,KAAZ,C;K;+GC6B7D,sJ;MAEsC,mB;QAAA,MA4GuD,M;OA5GG,oB;QAAA,OAAgB,E;MAAI,oB;QAAA,O AAgB,E;MAAI,mB;QAAA,MAAe,E;MAAI,qB;QAAA,QAAiB,S;MAAW,oB;QAAA,OAAgB,S;MAAW,qB;QA AA,QAAiB,S;MAAW,qB;QAAA,QAAiB,S;MAAW,uB;QAAA,UAAmB,S;MAAW,yB;QAAA,YAAqB,S;MAA W,wB;QAAA,WAAqB,K;MAAO,sB;QAAA,SAAmB,K;MAAO,wB;QAAA,WAAqB,K;MAAO,kC;QAAA,qBAA +B,K;MAAO,sB;QAAA,SAAmB,K;MAAO,oB;QAAA,OAAa,I;MAAM,uB;QAAA,UAAc,E;MAC/gB,QAAQ,E;

MACR,EAAE,KAAF,IAAW,G;MACX,EAAE,MAAF,IAAY,I;MACZ,EAAE,MAAF,IAAY,I;MACZ,EAAE,KAA  
F,IAAW,G;MACX,EAAE,OAAF,IAAa,K;MACb,EAAE,MAAF,IAAY,I;MACZ,EAAE,OAAF,IAAa,K;MACb,EA  
AE,OAAF,IAAa,K;MACb,EAAE,SAAF,IAAe,O;MACf,EAAE,WAAF,IAAiB,S;MACjB,EAAE,UAAF,IAAgB,Q;  
MACHb,EAAE,QAAF,IAAc,M;MACd,EAAE,UAAF,IAAgB,Q;MACHb,EAAE,oBAAF,IAA0B,kB;MAC1B,EA  
E,QAAF,IAAc,M;MACd,EAAE,MAAF,IAAY,I;MACZ,EAAE,SAAF,IAAe,O;MACf,OAAO,C;K;6GAWX,+B;M  
AEsE,oB;QAAA,OAAgB,S;MACf,QAAQ,E;MACR,EAAE,QAAF,IAAc,M;MACd,EAAE,OAAF,IAAa,K;MAC  
b,EAAE,MAAF,IAAY,I;MACZ,OAAO,C;K;qHASX,e;MAEyC,mB;QAAA,MAAe,E;MACpD,QAAQ,E;MACR,E  
AAE,KAAF,IAAW,G;MACX,OAAO,C;K;mHAyBX,+D;MAEqE,sB;QAAA,SAAkB,E;MAAI,uB;QAAA,UAAoB  
,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MACrK,QAAQ,E;MACR,EAAE,cAAF,IAAoB,Y  
;MACpB,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MACIB,EAAE,UA  
AF,IAAgB,Q;MACHb,OAAO,C;K;iGAUwE,qB;MAAQ,OAAU,S;K;6FAEnB,qB;MAAQ,OAAS,Q;K;+FAEhB,q  
B;MAAQ,OAAU,S;K;2FASvB,qB;MAAQ,OAAO,M;K;yFAEhB,qB;MAAQ,OAAM,K;K;yFAEd,qB;MAAQ,OA  
AM,K;K;yGCrJ3F,uB;MAEsC,qB;QAAA,QAAiB,S;MAAW,oB;QAAA,ORy9MW,S;OQx9MzE,QAAQ,E;MACR  
,EAAE,OAAF,IAAa,K;MACb,EAAE,MAAF,IAAY,I;MACZ,OAAO,C;K;6HAuCX,mF;MAEqD,oB;QAAA,OAA  
a,S;MAAW,sB;QAAA,SAAkB,S;MAAW,2B;QAAA,cAAuB,S;MAAW,sB;QAAA,SAA2C,S;MAAW,qB;QAAA,  
QAA6B,S;MAAW,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MAC/S,Q  
AAQ,E;MACR,EAAE,MAAF,IAAY,I;MACZ,EAAE,QAAF,IAAc,M;MACd,EAAE,aAAF,IAAmB,W;MACnB,E  
AAE,QAAF,IAAc,M;MACd,EAAE,OAAF,IAAa,K;MACb,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;  
MACIB,EAAE,UAAF,IAAgB,Q;MACHb,OAAO,C;K;uGA2DX,qC;MAEqC,mC;QAAA,sBAAgC,K;MAAO,oB;  
QAAA,OA4UD,Q;OA3UvE,QAAQ,E;MACR,EAAE,qBAAF,IAA2B,mB;MAC3B,EAAE,MAAF,IAAY,I;MACZ,  
OAAO,C;K;yGAmBX,yC;MAEsC,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAq  
B,K;MACHh,QAAQ,E;MACR,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MACIB,EAAE,UAAF,IAAg  
B,Q;MACHb,OAAO,C;K;yGAsBX,2B;MAGI,QAAQ,E;MACR,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe  
,O;MACf,OAAO,C;K;+FA8BX,sE;MAEoD,wB;QAAA,WAAoB,I;MAAM,wB;QAAA,WAAqB,K;MAAO,uB;QA  
AA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MACpL,QAAQ,E;MACR,EAAE,SA  
AF,IAAe,O;MACf,EAAE,UAAF,IAAgB,Q;MACHb,EAAE,UAAF,IAAgB,Q;MACHb,EAAE,SAAF,IAAe,O;MA  
Cf,EAAE,YAAF,IAAkB,U;MACIB,EAAE,UAAF,IAAgB,Q;MACHb,OAAO,C;K;6GAuBX,0D;MAE2D,sB;QAA  
A,SAAkB,M;MAAQ,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MAC/J,  
QAAQ,E;MACR,EAAE,SAAF,IAAe,O;MACf,EAAE,QAAF,IAAc,M;MACd,EAAE,SAAF,IAAe,O;MACf,EAAE,  
YAAF,IAAkB,U;MACIB,EAAE,UAAF,IAAgB,Q;MACHb,OAAO,C;K;2GAaX,qC;MAE4D,sB;QAAA,SAAkB,S;  
MAAW,uB;QAAA,UAA0B,S;MAC/G,QAAQ,E;MACR,EAAE,UAAF,IAAgB,Q;MACHb,EAAE,QAAF,IAAc,M;  
MACd,EAAE,SAAF,IAAe,O;MACf,OAAO,C;K;uHAuCX,mF;MAE6C,oB;QAAA,OAAa,S;MAAW,sB;QAAA,S  
AAkB,S;MAAW,2B;QAAA,cAAuB,S;MAAW,sB;QAAA,SAAmD,S;MAAW,qB;QAAA,QAA6B,S;MAAW,uB;Q  
AAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA,WAAqB,K;MACpT,QAAQ,E;MACR,EAAE,M  
AAF,IAAY,I;MACZ,EAAE,QAAF,IAAc,M;MACd,EAAE,aAAF,IAAmB,W;MACnB,EAAE,QAAF,IAAc,M;MA  
Cd,EAAE,OAAF,IAAa,K;MACb,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MACIB,EAAE,UAAF,IA  
AgB,Q;MACHb,OAAO,C;K;qGA+BX,6D;MAEoC,4B;QAAA,eAAyB,K;MAAO,4B;QAAA,eAAyB,K;MAAO,0B  
;QAAA,aAAuB,K;MAAO,yB;QAAA,YAAqB,S;MACnJ,QAAQ,E;MACR,EAAE,cAAF,IAAoB,Y;MACpB,EA  
E,cAAF,IAAoB,Y;MACpB,EAAE,YAAF,IAAkB,U;MACIB,EAAE,WAAF,IAAiB,S;MACjB,OAAO,C;K;yGAKB  
X,4C;MAEsC,oB;QAAA,OAAgB,S;MAAW,uB;QAAA,UAAoB,S;MAAW,wB;QAAA,WAAsB,S;MAAW,uB;QA  
AA,UAA8B,S;MAC3J,QAAQ,E;MACR,EAAE,MAAF,IAAY,I;MACZ,EAAE,SAAF,IAAe,O;MACf,EAAE,UA  
AF,IAAgB,Q;MACHb,EAAE,SAAF,IAAe,O;MACf,OAAO,C;K;+FAkCmE,qB;MAAQ,OAAa,Y;K;6FAEtB,qB;MA  
AQ,OAAY,W;K;+FAEnB,qB;MAAQ,OAAa,Y;K;6FAEtB,qB;MAAQ,OAAY,W;K;6FAEpB,qB;MAAQ,OAAY,  
W;K;6FAStC,qB;MAAQ,OAAY,W;K;6FAEpB,qB;MAAQ,OAAY,W;K;uFAEvB,qB;MAAQ,OAAS,Q;K;qFAEn  
B,qB;MAAQ,OAAO,M;K;uFASX,qB;MAAQ,OAAS,Q;K;yFAEjB,qB;MAAQ,OAAS,Q;K;qGAEX,qB;MAAQ,O  
AAe,c;K;iFAEhC,qB;MAAQ,OAAM,K;K;iGCharE,0E;MAEoC,gC;QAAA,mBAA6B,K;MAAO,sB;QAAA,SAAk  
B,C;MAAG,qB;QAAA,QAAiB,C;MAAG,uB;QAAA,UAAoB,K;MAAO,0B;QAAA,aAAuB,K;MAAO,wB;QAAA  
,WAAqB,K;MAC3L,QAAQ,E;MACR,EAAE,kBAAF,IAAwB,gB;MACxB,EAAE,QAAF,IAAc,M;MACd,EAAE,

OAAF,IAAa,K;MACb,EAAE,SAAF,IAAe,O;MACf,EAAE,YAAF,IAAkB,U;MACiB,EAAE,UAAF,IAAgB,Q;MAChB,OAAO,C;K;mFAU8E,qB;MAAQ,OAAG,E;K;+FAEL,qB;MAAQ,OAAC,a;K;iFAE7B,qB;MAAQ,OAAO,M;K;yFAEX,qB;MAAQ,OAAW,U;K;+EAEvB,qB;MAAQ,OAAO,M;K;+EAEf,qB;MAAQ,OAAO,M;K;oErJlvG,yB;MAAA,kF;MAAA,0B;MAAA,uB;QAaI,IAAI,OAAO,CAAP,IAA8B,OAAO,KAAzC,C;UACI,MAAM,8BAAYB,wBAAqB,IAA9C,C;SAEV,OAAY,OAAL,IAAK,C;O;KAhBhB,C;0EAwCiC,qB;MAAQ,OAAA,SAAK,I;K;IsIpBV,6B;MAAC,qB;QAAA,8C;MAAA,kB;K;IACjC,2C;MAAA,e;MAAA,iB;MAAA,uB;K;IAAA,yC;MAAA,4C;O;MAKI,0E;MAEA,sE;K;;IAFA,kD;MAAA,+B;MAAA,0C;K;;IAEA,gD;MAAA,+B;MAAA,wC;K;;IAPJ,qC;MAAA,yF;K;;IAAA,0C;MAAA,a;aAAA,S;UAAA,+C;aAAA,O;UAAA,6C;gBAAA,8D;;K;;IAyBmC,sC;MACnC,8B;K;;IAMqC,sC;MACrC,8B;K;;IC1DJ,iC;K;;ICMA,4B;K;;IA6BA,gD;K;;IC5BA,qC;K;;IA4BA,+B;K;;ICRqC,uC;MACjC,uB;QAAA,UAAaB,E;MACtB,qB;QAAA,+C;MADA,sB;MACA,kB;K;IAEA,4C;MAAA,e;MAAA,iB;MAAA,uB;K;IAAA,0C;MAAA,6C;O;MAKI,4E;MAGA,wE;K;;IAHA,mD;MAAA,gC;MAAA,2C;K;;IAGA,iD;MAAA,gC;MAAA,yC;K;;IARJ,sC;MAAA,2F;K;;IAAA,2C;MAAA,a;aAAA,S;UAAA,gD;aAAA,O;UAAA,8C;gBAAA,+D;;K;;IAyByB,4B;MACzB,8B;K;;IC/C4C,8B;K;kDAI5C,mB;MAA6D,c;;QpJ2rD7C,Q;QADhB,IAAI,mCAAsB,cAA1B,C;UAAqC,aAAO,K;UAAP,e;SACrB,sB;QAAhB,OAAGB,cAAhB,C;UAAgB,2B;UAAM,IoJ3rD6C,OpJ2rD/B,SoJ3rD+B,UpJ2rD7C,C;YAAwB,aAAO,I;YAAP,e;;QAC9C,aAAO,K;;MoJ5rDsD,iB;K;uDAE7D,oB;MACa,c;;QpJmqDG,Q;QADhB,IAAI,coJlqDA,QpJkqDA,iBoJlqDA,QpJkqDsB,UAA1B,C;UAAqC,aAAO,I;UAAP,e;SACrB,ooJnqDZ,QpJmqDY,W;QAAhB,OAAGB,cAAhB,C;UAAgB,yB;UAAM,IAAI,CoJnqDP,oBpJmqDkB,OoJnqDIB,CpJmqDG,C;YAAyB,aAAO,K;YAAP,e;;QAC/C,aAAO,I;;MoJpqDH,iB;K;2CAEJ,Y;MAAkC,qBAAQ,C;K;IAEqB,qE;MAAA,qB;QAC3D,OAAL,OAAO,uBAAX,GAAiB,mBAAjB,GAA6C,SAAH,EAAG,C;O;K;4CADjD,Y;MAAkC,4BAAa,IAAb,EAAMB,GAAmB,EAawB,GAAxB,kBAA6B,wCAA7B,C;K;2CAIIC,Y;MAI4C,uBAAgB,IAAhB,C;K;mDAE5C,iB;MAI4D,yBAAgB,IAAhB,EAAsB,KAAtB,C;K;;IC/BhE,8B;MAAA,e;MAAA,iB;MAAA,uB;K;IAAA,4B;MAAA,+B;O;MACI,4C;MACA,kD;MACA,0C;MACA,8C;K;;IAHA,mC;MAAA,kB;MAAA,2B;K;;IACA,sC;MAAA,kB;MAAA,8B;K;;IACA,kC;MAAA,kB;MAAA,0B;K;;IACA,oC;MAAA,kB;MAAA,4B;K;;IAJJ,wB;MAAA,sH;K;;IAAA,6B;MAAA,a;aAAA,O;UAAA,gC;aAAA,U;UAAA,mC;aAAA,M;UAAA,+B;aAAA,Q;UAAA,iC;gBAAA,6D;;K;;IAOA,4B;MAKI,mD;MACA,2BAA4B,I;K;yCAE5B,Y;MAEiB,IAAN,I;M3JUX,IAAI,E2JXQ,mD3JWR,CAAJ,C;QACI,cAda,qB;QAEb,MAAM,gCAAYB,OAAQ,WAAjC,C;O2JZC,QAAM,oBAAN,M;aACH,M;UAAc,Y;UAAAd,K;aACA,O;UAAe,W;UAAf,K;gBACQ,wC;UAHL,K;;MAAP,W;K;sCAOJ,Y;MAIW,Q;MAHP,IAAI,CAAC,cAAL,C;QAAgB,MAAM,6B;MACtB,mD;MAEA,OAAO,2F;K;4DAGX,Y;MACI,iD;MACA,kB;MACA,OAAO,kD;K;+CAeX,iB;MAII,2BAAY,K;MACZ,gD;K;sCAGJ,Y;MAII,+C;K;;ICjDkC,wB;MAoFtC,oC;MApFgE,6B;K;sCAIhE,Y;MAAuC,0C;K;2CAEvC,mB;MAAwD,uB;;QtJkU3C,Q;QADb,YAAAY,C;QACC,sB;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,IsJnUmE,OtJmUrD,IsJnUqD,UtJmUnE,C;YACI,sBAAO,K;YAAP,wB;WACJ,qB;;QAEJ,sBAAO,E;;MsJvUiD,0B;K;+CAExD,mB;MAA4D,sB;;QtJ2V5D,eAAoB,0BAAa,SAAb,C;QACpB,OAAO,QAAS,cAAhB,C;UACI,IsJ7VsE,OtJ6VxD,QAAS,WsJ7V+C,UtJ6VtE,C;YACI,qBAAO,QAAS,Y;YAAhB,uB;;QAGR,qBAAO,E;;MsJWqD,yB;K;0CAE5D,Y;MAA+C,+CAAiB,CAAjB,C;K;kDAE/C,iB;MAAyD,+CAAiB,KAAjB,C;K;6CAEzD,8B;MAA8D,gCAAQ,IAAR,EAAC,SAAd,EAAYB,OAAzB,C;K;IAEIC,wD;MAAgF,uB;MAA/E,kB;MAAMC,4B;MAC5D,eAAyB,C;MAGrB,+DAAkB,gBAAIB,EAA6B,OAA7B,EAAsC,WAAK,KAA3C,C;MACA,eAAa,UAAU,gBAAV,I;K;iDAGjB,iB;MACI,+DAAkB,KAAIB,EAAYB,YAAzB,C;MAEA,OAAO,wBAAK,mBAAY,KAAZ,IAAL,C;K;4FAGY,Y;MAAQ,mB;K;;oCAGnC,iB;MAMI,IAAI,UAAU,IAAd,C;QAAoB,OAAO,I;MAC3B,IAAI,2BAAJ,C;QAAuB,OAAO,K;MAE9B,OAAO,2DAAC,IAAd,EAAoB,KAApB,C;K;sCAGX,Y;MAG+B,oEAAgB,IAAhB,C;K;IAE/B,2C;MAAA,oB;MACI,eACsB,C;K;kDAEtB,Y;MAAkC,sBAAQ,gB;K;+CAE1C,Y;MAEe,gB;MADX,IAAI,CAAC,cAAL,C;QAAgB,MAAM,6B;MACX,iE;MAAX,OAAO,+B;K;;IAO0B,sD;MAHzC,oB;MAGwD,iD;MAGhD,gEAAmB,KAAmB,EAA0B,WAAkB,KAA5C,C;MACA,eAAa,K;K;0DAGjB,Y;MAAsC,sBAAQ,C;K;wDAE9C,Y;MAAgC,mB;K;uDAEhC,Y;MACI,IAAI,CAAC,kBAAL,C;QAAoB,MAAM,6B;MAC1B,OAAO,yBAAL,mCAAJ,EAAL,YAAJ,E;K;4DAGX,Y;MAAoC,sBAAQ,CAAR,I;K;;IAGxC,kC;MAAA,sC;K;;iEACI,uB;MACI,IAAI,QAAQ,CAAR,IAAa,SAAS,IAA1B,C;QACI,MAAM,8BAA0B,YAAS,KAAT,gBAAuB,IAAjD,C;Q;kEAIId,uB;MACI,IAAI,QAAQ,CAAR,IAAa,QAAQ,IAAzB,C;QACI,MAAM,8BAA0B,YAAS,KAAT,gBAAuB,IAAjD,C;Q;iEAIId,oC;MACI,IAAI,YAAAY,CAAZ,IAAiB,UAAU,IAA/B,C;QACI,MAAM,8BAA0B,gBAAa,SAAb,mBAAkC,OAAIC,gBAAkD,IAA5E,C;OAEV,IAAI,YAAAY,OAAhB,C;QACI,MAAM,gCAAYB,gBAAa,SA



b,oBAAmC,OAA5D,C;Q;kEAIId,sC;MACI,IAAI,aAAa,CAAb,IAAkB,WAAW,IAAjC,C;QACI,MAAM,8BAA0B,i  
BAAc,UAAAd,oBAAqC,QAARc,gBAAsD,IAAhF,C;OAEV,IAAI,aAAa,QAAjB,C;QACI,MAAM,gCAAYB,iBAAC,  
UAAAd,qBAAsC,QAA/D,C;Q;+DAId,a;MAEc,UACsB,M;MAFhC,iBA Ae,C;MACL,mB;MAAV,OAAU,cAAV,C;  
QAAU,mB;QACN,aAAW,MAAK,UAAAL,SAAiB,6DAAiB,CAAiC,K;;MAEf,OAAO,U;K;6DAGX,oB;MAliB,Q;  
MAHb,IAAI,CAAE,KAAF,KAAU,KAAM,KAApB,C;QAA0B,OAAO,K;MAEjC,oBAAoB,KAAM,W;MACb,mB  
;MAAb,OAAa,cAAb,C;QAAa,sB;QACT,gBAAgB,aAAc,O;QAC9B,IAAI,cAAQ,SAAR,CAAJ,C;UACI,OAAO,K;  
;MAGf,OAAO,I;K;;IAjDf,8C;MAAA,6C;QAAA,4B;OAAA,sC;K;;ICnFwC,uB;MAyHxC,mC;MAzCA,uBAC6B,I  
;MAmC7B,yBACsC,I;K;8CAnHtC,e;MACI,OAAO,6BAAc,GAAd,S;K;gDAGX,iB;MAAwE,gBAAR,Y;MAAQ,c;  
;QvJkrDxD,Q;QADhB,IAAI,wCAAsB,mBAA1B,C;UAAqC,aAAO,K;UAAP,e;SACrB,2B;QAAhB,OAAgB,cAAh  
B,C;UAAgB,yB;UAAM,IuJlrDwD,OvJkrD1C,OuJlrD6C,MAAH,QvJkrDxD,C;YAAwB,aAAO,I;YAAP,e;;QAC9  
C,aAAO,K;;MuJnrDyD,iB;K;kDAEhE,iB;MAEI,IAAI,gCAAJ,C;QAA+B,OAAO,K;MACtC,UAAU,KAAM,I;MA  
ChB,YAAAY,KAAM,M;MpKiNO,Q;MoKhNzB,epKgN4C,CAAnB,mDAAmB,YoKhNzB,GpKgNyB,C;MoK9M5C  
,IAAI,eAAS,QAAT,CAAJ,C;QACI,OAAO,K;OAIp,6B;MAAA,W;QpK0NqB,U;QoK1ND,UpK0NoB,CAAnB,uD  
AAmB,oBoK1NP,GpK0NO,C;OoK1N5C,W;QACI,OAAO,K;OAGX,OAAO,I;K;mCAIX,iB;MAMI,IAAI,UAAU,I  
AAAd,C;QAAoB,OAAO,I;MAC3B,IAAI,0BAAJ,C;QAAyB,OAAO,K;MACHC,IAAI,cAAQ,KAAM,KAAIB,C;QA  
AwB,OAAO,K;MAEV,gBAAd,KAAM,Q;MAAQ,c;;QvJ6nDT,Q;QADhB,IAAI,wCAAsB,mBAA1B,C;UAAqC,a  
AAO,I;UAAP,e;SACrB,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UAAM,IAAI,CuJ7nDK,2BvJ6nDM,OuJ7nDN  
,CvJ6nDT,C;YAAyB,aAAO,K;YAAP,e;;QAC/C,aAAO,I;;MuJ9nDH,iB;K;sCAGJ,e;MAAwC,Q;MAAA,4CAAc,  
GAAd,8B;K;qCAGxY,Y;MAK+B,OAAQ,SAAR,YAAQ,C;K;oCAEvC,Y;MAAkC,qBAAQ,C;K;mFACnB,Y;MA  
AQ,OAAA,YAAQ,K;K;IAWnB,0E;MAAA,wC;MAAS,sB;K;8EAcB,mB;MAASD,+CAAY,OAAZ,C;K;IAI3C,sG;  
MAAA,kD;K;8FACH,Y;MAAkC,OAAA,0BAAc,U;K;2FACHD,Y;MAAyB,OAAA,0BAAc,OAAO,I;K;;wEAJtD,  
Y;MACI,oBAAoB,6BAAQ,W;MAC5B,+F;K;sHAMmB,Y;MAAQ,OAAA,qBAAiB,K;K;;mFAB5D,Y;MACI,IAAI  
,4BAAJ,C;QACI,+E;OAcJ,OAAO,mC;K;IAOwD,uD;MAAA,qB;QAAE,2CAAS,EAAT,C;O;K;qCAAzE,Y;MAAk  
C,OAAQ,eAAR,YAAQ,EAAa,IAAb,EAAM,B,GAAnB,EAAB,W,GAAXB,kBAA6B,iCAA7B,C;K;+CAE1C,iB;MA  
AuD,+BAAS,KAAM,IAAf,IAAsB,GAAtB,GAA4B,wBAAS,KAAM,MAAf,C;K;+CAEnF,a;MAAwC,OAAI,MA  
AM,IAAV,GAAgB,YAAhB,GAAoC,SAAF,CAAE,C;K;IAWtD,4E;MAAA,wC;MAAS,6B;K;gFACf,mB;MAAsE,  
iDAAc,OAAAd,C;K;IAI3D,wG;MAAA,kD;K;gGACH,Y;MAAkC,OAAA,0BAAc,U;K;6FACHD,Y;MAAyB,OAAA  
,0BAAc,OAAO,M;K;;0EAJtD,Y;MACI,oBAAoB,6BAAQ,W;MAC5B,iG;K;wHAMmB,Y;MAAQ,OAAA,qBAAi  
B,K;K;;qFAB5D,Y;MACI,IAAI,8BAAJ,C;QACI,mF;OAcJ,OAAO,qC;K;oDAMf,e;MAA8D,gBAAR,Y;MAAQ,sB  
;;QvJjJ9C,Q;QAAA,2B;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UAAM,IuJjJsD,OvJjJxC,OuJjJ2C,IAAH,MvJjJtD,  
C;YAAwB,qBAAO,O;YAAP,uB;;QAC9C,qBAAO,I;;MuJjJ+C,yB;K;IAEtD,iC;MAAA,qC;K;4DAEI,a;MAAiE,g  
C;MAAX,OAAU,CAAC,kBAAN,CAAM,0DAAmB,CAApB,KAA4B,oBAAjC,CAAiC,8DAAqB,CAAjD,C;K;4D  
AChE,a;MAAyD,OAAU,SAAL,CAAO,IAAF,mBAAL,CAAY,MAAP,C;K;0DACnE,oB;MACI,IAAI,gCAAJ,C;Q  
AA+B,OAAO,K;MACtC,OAAO,OAAA,CAAE,IAAF,EAAS,KAAM,IAAf,KAAsB,OAAA,CAAE,MAAF,EAAW  
,KAAM,MAAjB,C;K;;IANrC,6C;MAAA,4C;QAAA,2B;OAAA,qC;K;;IChIqC,uB;MAkBrC,mC;MAIB+D,6B;K;  
mCAE/D,iB;MAMI,IAAI,UAAU,IAAd,C;QAAoB,OAAO,I;MAC3B,IAAI,0BAAJ,C;QAAsB,OAAO,K;MAC7B,  
OAAO,sDAAU,IAAV,EAAGB,KAAhB,C;K;qCAGX,Y;MAG+B,qEAakB,IAAiB,C;K;IAE/B,iC;MAAA,qC;K;gE  
ACI,a;MAEoB,Q;MADhB,iBA Ae,C;MACC,mB;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;QACC,U;QAAb,2BAAa  
,yEAAuB,CAApC,K;;MAEJ,OAAO,U;K;wDAGX,oB;MACI,IAAI,CAAE,KAAF,KAAU,KAAM,KAApB,C;QAA  
0B,OAAO,K;MACjC,OAAO,CtK40sG,qBsK5OxF,KtK40wF,C;K;;IsKvPrH,6C;MAAA,4C;QAAA,2B;OAAA,q  
C;K;;MCghBA,kC;MA9hBA,cAAwB,C;MACxB,yB;MAEA,sBAAYB,C;;kFAAzB,Y;MAAA,0B;K,OAAA,gB;M  
AAA,0B;K;4CA8BA,uB;MAOI,IAAI,cAAc,CAAIB,C;QAAqB,MAAM,6BAAsB,mBAAtB,C;MAC3B,IAAI,eAA  
e,kBAAY,OAA/B,C;QAAqC,M;MACrC,IAAI,uBAAGB,qDAApB,C;QACI,qBAAc,gBAAYB,gBAAZ,WAAAY,EA  
Ac,EAAd,CAAzB,O;QACd,M;OAGJ,kBAakB,uDAAY,kBAAY,OAAxB,EA8B,WAA9B,C;MACIB,oBAAa,W  
AAb,C;K;0CAGJ,uB;MAII,kBAakB,gBAAmB,WAAAnB,O;M9J20BtB,U8J10BI,kB9J00BJ,E8J10ByB,W9J00BzB  
,E8J10BsC,C9J00BtC,E8J10ByC,W9J00BzC,E8J10B+C,kBAAY,O9J00B3D,C;MAAA,U8Jz0BI,kB9Jy0BJ,E8Jz0  
ByB,W9Jy0BzB,E8Jz0BsC,kBAAY,OAAZ,GAAM,B,WAAAnB,I9Jy0BtC,E8Jz0B+D,C9Jy0B/D,E8Jz0BkE,W9Jy0  
BIE,C;M8Jx0BI,cAAO,C;MACP,qBAAc,W;K;yCAGIB,yB;MAGW,Q;MAAP,OAAO,2BAAAY,aAAZ,4D;K;yCAG

X,iB;MAA2C,OAAI,SAAS,kBAAY,OAAzB,GAA+B,QAAQ,kBAAY,OAApB,IAA/B,GAA6D,K;K;yCAExG,iB;  
MAA2C,OAAI,QAAQ,CAAZ,GAAe,QAAQ,kBAAY,OAApB,IAAf,GAA6C,K;K;2CAExF,iB;MACoD,0BAAY,c  
AAO,KAAP,IAAZ,C;K;yCAEpD,iB;MAA2C,OAAI,UAAqB,cAAZ,kBAAY,CAAzB,GAAoC,CAApC,GAA2C,Q  
AAQ,CAAR,I;K;yCAEtF,iB;MAA2C,OAAI,UAAZ,CAAb,GAA4B,cAAZ,kBAAY,CAA5B,GAA2C,QAAQ,CAA  
R,I;K;mCAEtF,Y;MAAkC,qBAAQ,C;K;iCAE1C,Y;MAGwB,IAAI,cAAJ,C;QAAe,MAAM,2BAAUb,sBAAvB,C;;  
QAnBIC,Q;QAmBa,OAnBb,2BAmBkG,WAnBiG,4D;;K;uCAqBX,Y;MAG+B,Q;MAAA,IAAI,cAAJ,C;QAAA,O  
AAe,I;;QAxBnC,U;QAwBoB,OAxBpB,6BAwByD,WAxBzD,gE;;MAwBoB,W;K;gCAE/B,Y;MAGuB,IAAI,cAAJ  
,C;QAAe,MAAM,2BAAUb,sBAAvB,C;;QA7BjC,Q;QA6BY,OA7BZ,2BAQyC,mBAAY,cAqB0D,sBArB1D,IAA  
Z,CARzC,4D;;K;sCA+BX,Y;MAG8B,Q;MAAA,IAAI,cAAJ,C;QAAA,OAAe,I;;QAICiC,U;QAKcMB,OAIcNB,6B  
AQyC,mBAAY,cA0BiB,sBA1BjB,IAAZ,CARzC,gE;;MAkCmB,W;K;0CAE9B,mB;MAII,sBAAe,YAAO,CAAP,I  
AAf,C;MAEA,cAAO,mBAAY,WAAZ,C;MACP,mBAAY,WAAZ,IAAoB,O;MACpB,wBAAQ,CAAR,I;K;yCAGJ  
,mB;MAII,sBAAe,YAAO,CAAP,IAAf,C;MAEA,mBA7CgD,mBAAY,cA6CIC,SA7CkC,IAAZ,CA6ChD,IAAmC,  
O;MACnC,wBAAQ,CAAR,I;K;uCAGJ,Y;MAII,IAAI,cAAJ,C;QAAe,MAAM,2BAAUb,sBAAvB,C;MA7Dd,Q;M  
A+DP,cA/DO,2BA+DmB,WA/DnB,4D;MAGeP,mBAAY,WAAZ,IAAoB,I;MACpB,cAAO,mBAAY,WAAZ,C;M  
ACP,wBAAQ,CAAR,I;MACA,OAAO,O;K;6CAGX,Y;MAGqC,OAAI,cAAJ,GAAe,IAAf,GAAYB,kB;K;sCAE9D,  
Y;MAII,IAAI,cAAJ,C;QAAe,MAAM,2BAAUb,sBAAvB,C;MAErB,wBAzEgD,mBAAY,cAyEtB,sBAzEsB,IAAZ  
,C;MARzC,Q;MAkFP,cAlFO,2BAkFmB,iBAIfnB,4D;MAmFP,mBAAY,iBAAZ,IAAiC,I;MACjC,wBAAQ,CAA  
R,I;MACA,OAAO,O;K;4CAGX,Y;MAGoC,OAAI,cAAJ,GAAe,IAAf,GAAYB,iB;K;qCAE7D,mB;MAEI,mBAAQ  
,OAAr,C;MACA,OAAO,I;K;uCAGX,0B;MACI,oCAAA,4BAAmB,KAAAnB,EAA0B,SAA1B,C;MAEb,IAAI,UAA  
S,SAAb,C;QACI,mBAAQ,OAAr,C;QACA,M;aACG,IAAI,UAAZ,CAAb,C;QACH,oBAAS,OAAT,C;QACA,M;O  
AGJ,sBAAe,YAAO,CAAP,IAAf,C;MA2BA,oBAjIgd,mBAAY,cAi1B,KAjI0B,IAAZ,C;MAmIhd,IAAI,QAAS,S  
AAD,GAAQ,CAAR,IAAe,CAA3B,C;QAEI,+BAA+B,mBAAY,aAAZ,C;QAC/B,sBAAsB,mBAAY,WAAZ,C;QA  
EtB,IAAI,4BAA4B,WAAhC,C;UACI,mBAAY,eAAZ,IAA+B,mBAAY,WAAZ,C;U9JgrB3C,U8J/qBY,kB9J+qBZ,  
E8J/qBiC,kB9J+qBjC,E8J/qB8C,W9J+qB9C,E8J/qBoD,cAAO,CAAP,I9J+qBpD,E8J/qB8D,2BAA2B,CAA3B,I9J  
+qB9D,C;;UAAA,U8J7qBY,kB9J6qBZ,E8J7qBiC,kB9J6qBjC,E8J7qB8C,cAAO,CAAP,I9J6qB9C,E8J7qBwD,W9  
J6qBxD,E8J7qB8D,kBAAY,O9J6qB1E,C;U8J5qBY,mBAAY,kBAAY,OAAZ,GAAmB,CAAnB,IAAZ,IAAoC,mB  
AAAY,CAAZ,C;U9J4qBhD,U8J3qBY,kB9J2qBZ,E8J3qBiC,kB9J2qBjC,E8J3qB8C,C9J2qB9C,E8J3qBiD,C9J2qBj  
D,E8J3qBoD,2BAA2B,CAA3B,I9J2qBpD,C;;Q8JxqBQ,mBAAY,wBAAZ,IAAwC,O;QACxC,cAAO,e;;QAGP,W  
ArJ4C,mBAAY,cAqJ/B,SArJ+B,IAAZ,C;QAUJ5C,IAAI,gBAAGB,IAApB,C;U9JkqBR,U8JjqBY,kB9JiqBZ,E8Jjq  
BiC,kB9JiqBjC,E8JjqB8C,gBAAGB,CAAhB,I9JiqB9C,E8JjqBiE,a9JiqBjE,E8JjqBgF,I9JiqBhF,C;;UAAA,U8J/pB  
Y,kB9J+pBZ,E8J/pBiC,kB9J+pBjC,E8J/pB8C,C9J+pB9C,E8J/pBiD,C9J+pBjD,E8J/pBoD,I9J+pBpD,C;U8J9pBY,  
mBAAY,CAAZ,IAAiB,mBAAY,kBAAY,OAAZ,GAAmB,CAAnB,IAAZ,C;U9J8pB7B,U8J7pBY,kB9J6pBZ,E8J7  
pBiC,kB9J6pBjC,E8J7pB8C,gBAAGB,CAAhB,I9J6pB9C,E8J7pBiE,a9J6pBjE,E8J7pBgF,kBAAY,OAAZ,GAAm  
B,CAAnB,I9J6pBhF,C;;Q8J1pBQ,mBAAY,aAAZ,IAA6B,O;;MAEjC,wBAAQ,CAAR,I;K;oDAGJ,mC;MAGkD,U  
AIxB,M;MANtB,eAAe,QAAS,W;MAEsB,OAAZ,kBAAY,O;MAA9C,iBAAc,aAAAd,wB;QACI,IAAI,CAAC,QAA  
S,UAAAd,C;UAAyB,K;QACzB,mBAAY,KAAZ,IAAqB,QAAS,O;;MAEZ,oB;MAAtB,mBAAc,CAAd,8B;QACI,IA  
AI,CAAC,QAAS,UAAAd,C;UAAyB,K;QACzB,mBAAY,OAAZ,IAAqB,QAAS,O;;MAGIC,wBAAQ,QAAS,KAAj  
B,I;K;0CAGJ,oB;MACI,IAAI,QAAS,UAAb,C;QAAwB,OAAO,K;MAC/B,sBAAe,IAAK,KAAL,GAAY,QAAS,K  
AArB,IAAf,C;MACA,8BAAtLgD,mBAAY,cAsLvB,SAtLuB,IAAZ,CAsLhD,EAA4C,QAA5C,C;MACA,OAAO,I;K  
;0CAGX,2B;MACI,oCAAA,4BAAmB,KAAAnB,EAA0B,SAA1B,C;MAEb,IAAI,QAAS,UAAb,C;QACI,OAAO,K;a  
ACJ,IAAI,UAAZ,SAAb,C;QACH,OAAO,oBAAO,QAAP,C;OAGX,sBAAe,IAAK,KAAL,GAAY,QAAS,KAArB,I  
AAf,C;MAEA,WArMgD,mBAAY,cAqMnC,SArMmC,IAAZ,C;MAsMhD,oBAAtMgD,mBAAY,cAsM1B,KAtM0B,  
IAAZ,C;MAuMhD,mBAAmB,QAAS,K;MAE5B,IAAI,QAAS,SAAD,GAAQ,CAAR,IAAe,CAA3B,C;QAGI,kBA  
AkB,cAAO,YAAP,I;QAEIB,IAAI,iBAAiB,WAArB,C;UACI,IAAI,eAAe,CAAnB,C;Y9J0mBZ,U8JzmBgB,kB9Jy  
mBhB,E8JzmBqC,kB9JymBrC,E8JzmBkD,W9JymBlD,E8JzmB+D,W9JymB/D,E8JzmBqE,a9JymBrE,C;;Y8Jvmb  
gB,4BAAe,kBAAY,OAA3B,I;YACA,sBAAsB,gBAAGB,WAAhB,I;YACtB,kBAAkB,kBAAY,OAAZ,GAAmB,W  
AAnB,I;YAEIB,IAAI,eAAe,eAAnB,C;c9JmmBhB,U8JlmBoB,kB9JkmBpB,E8JlmByC,kB9JkmBzC,E8JlmBsD,W  
9JkmBtD,E8JlmBmE,W9JkmBnE,E8JlmByE,a9JkmBzE,C;;cAAA,U8JhmBoB,kB9JgmBpB,E8JhmByC,kB9JgmB

zC,E8JhmBsD,W9JgmBtD,E8JhmBmE,W9JgmBnE,E8JhmByE,cAAO,WAAP,I9JgmBzE,C;:cAAA,U8J/lBoB,kB9  
J+lBpB,E8J/lByC,kB9J+lBzC,E8J/lBsD,C9J+lBtD,E8J/lByD,cAAO,WAAP,I9J+lBzD,E8J/lB6E,a9J+lB7E,C;:;UA  
AA,U8J3lBY,kB9J2lBZ,E8J3lBiC,kB9J2lBjC,E8J3lB8C,W9J2lB9C,E8J3lB2D,W9J2lB3D,E8J3lBiE,kBAAY,O9J  
2lB7E,C;:U8J1lBY,IAAI,gBAAGb,aAaPb,C;:Y9J0lBZ,U8JzlBgB,kB9JylBhB,E8JzlBqC,kB9JylBrC,E8JzlBkD,kB  
AAY,OAAZ,GAAMb,YAAnB,I9JylBID,E8JzlBmF,C9JylBnF,E8JzlBsF,a9JylBtF,C;:YAAA,U8JvlBgB,kB9JulBh  
B,E8JvlBqC,kB9JulBrC,E8JvlBkD,kBAAY,OAAZ,GAAMb,YAAnB,I9JulBID,E8JvlBmF,C9JulBnF,E8JvlBsF,Y9  
JulBtF,C;:YAAA,U8JtlBgB,kB9JslBhB,E8JtlBqC,kB9JslBrC,E8JtlBkD,C9JslBID,E8JtlBqD,Y9JslBrD,E8JtlBmE,a  
9JslBnE,C;:;Q8JnlBQ,cAAO,W;:QACP,8BAaUB,mBAAY,gBAAGb,YAAhB,IAAZ,CAAvB,EAAkE,QAAIE,C;:;Q  
AIA,2BAA2B,gBAAGb,YAAhB,I;:QAE3B,IAAI,gBAAGb,IAApB,C;:UACI,IAAI,QAAO,YAAP,SAaUB,kBAAY,  
OAAvC,C;:Y9J2kBZ,U8J1kBgB,kB9J0kBhB,E8J1kBqC,kB9J0kBrC,E8J1kBkD,oB9J0kBID,E8J1kBwE,a9J0kBxE,  
E8J1kBuF,I9J0kBvF,C;:;Y8JxkBgB,IAAI,wBAawB,kBAAY,OAAxC,C;:c9JwkBhB,U8JvkBoB,kB9JukBpB,E8Jvk  
ByC,kB9JukBzC,E8JvkBsD,uBAaUB,kBAAY,OAAnc,I9JukBtD,E8JvkB+f,a9JukB/f,E8JvkB8G,I9JukB9G,C;:;c  
8JrkBoB,mBAAMb,OAAO,YAAP,GAASb,kBAAY,OAAIC,I;:c9JqkBVc,U8JpkBoB,kB9JokBpB,E8JpkByC,kB9J  
okBzC,E8JpkBsD,C9JokBtD,E8JpkByD,OAAO,YAAP,I9JokBzD,E8JpkB8E,I9JokB9E,C;:cAAA,U8JnkBoB,kB9J  
mkBpB,E8JnkByC,kB9JmkBzC,E8JnkBsD,oB9JmkBtD,E8JnkB4E,a9JmkB5E,E8JnkB2F,OAAO,YAAP,I9JmkB3  
F,C;:;UAAA,U8J/jBY,kB9J+jBZ,E8J/jBiC,kB9J+jBjC,E8J/jB8C,Y9J+jB9C,E8J/jB4D,C9J+jB5D,E8J/jB+D,I9J+j  
B/D,C;:U8J9jBY,IAAI,wBAawB,kBAAY,OAAxC,C;:Y9J8jBZ,U8J7jBgB,kB9J6jBhB,E8J7jBqC,kB9J6jBrC,E8J7j  
BkD,uBAaUB,kBAAY,OAAnc,I9J6jBID,E8J7jB2F,a9J6jB3F,E8J7jB0G,kBAAY,O9J6jBtH,C;:;YAAA,U8J3jBgB,  
kB9J2jBhB,E8J3jBqC,kB9J2jBrC,E8J3jBkD,C9J2jBID,E8J3jBqD,kBAAY,OAAZ,GAAMb,YAAnB,I9J2jBrD,E8J  
3jBsF,kBAAY,O9J2jBIG,C;:YAAA,U8J1jBgB,kB9J0jBhB,E8J1jBqC,kB9J0jBrC,E8J1jBkD,oB9J0jBID,E8J1jBwE  
,a9J0jBxE,E8J1jBuF,kBAAY,OAAZ,GAAMb,YAAnB,I9J0jBvF,C;:;Q8JvjBQ,8BAaUB,aAAvB,EAAc,QAAc,  
C;:MAGJ,OAAO,I;:K;:uCAGX,iB;:MACI,oCAaa,2BAakB,KAAIB,EAAyB,SAazB,C;:MAjRN,Q;:MAmRP,OAnR  
O,2BAQyC,mBAAY,cA2Q3B,KA3Q2B,IAAZ,CARzC,4D;:K;:uCAAsRX,0B;:MACI,oCAaa,2BAakB,KAAIB,EAAy  
B,SAazB,C;:MAEb,oBAjRgD,mBAAY,cAiR1B,KAjR0B,IAAZ,C;:MARzC,Q;:MA0RP,iBA1RO,2BA0RsB,aA1Rt  
B,4D;:MA2RP,mBAAY,aAAZ,IAA6B,O;:MAE7B,OAAO,U;:K;:0CAGX,mB;:MAAoD,0BAAQ,OAAR,MAAoB,E;:K  
;:yCAExE,mB;:MAIsB,IAIA,IAJA,EAIuB,M;:MAPzC,WA3RgD,mBAAY,cA2RnC,SA3RmC,IAAZ,C;:MA6RhD,IA  
AI,cAAO,IAAX,C;:QACI,iBAAc,WAAd,UAAyB,IAAZB,U;:UACI,IAAI,gBAAW,mBAAY,KAAZ,CAAX,CAAJ,C  
;:YAAmC,OAAO,QAAQ,WAAR,I;:;aAE3C,IAAI,eAAQ,IAAZ,C;:QACW,kB;:QAAuB,SAAZ,kBAAY,O;:QAARc,q  
D;:UACI,IAAI,gBAAW,mBAAY,OAAZ,CAAX,CAAJ,C;:YAAmC,OAAO,UAAQ,WAAR,I;:QAE9C,mBAAc,CA  
Ad,YAAsB,IAAtB,Y;:UACI,IAAI,gBAAW,mBAAY,OAAZ,CAAX,CAAJ,C;:YAAmC,OAAO,UAAQ,kBAAY,OA  
ApB,GAA2B,WAA3B,I;:OAIID,OAAO,E;:K;:6CAGX,mB;:MAIsC,UAOJ,MAPI,EAOa,M;:MAV/C,WA9SgD,mBA  
AY,cA8SnC,SA9SmC,IAAZ,C;:MAGThD,IAAI,cAAO,IAAX,C;:QACKc,kB;:QAA9B,iBAAc,OAAO,CAAP,IAAd,y  
B;:UACI,IAAI,gBAAW,mBAAY,KAAZ,CAAX,CAAJ,C;:YAAmC,OAAO,QAAQ,WAAR,I;:;aAE3C,IAAI,cAAO,I  
AAX,C;:QACH,mBAAc,OAAO,CAAP,IAAd,aAA8B,CAA9B,Y;:UACI,IAAI,gBAAW,mBAAY,OAAZ,CAAX,CA  
AJ,C;:YAAmC,OAAO,UAAQ,kBAAY,OAAP,GAA2B,WAA3B,I;:QAEpB,uBAAZ,kBAAY,C;:QAAiB,oB;:QAA  
3C,wD;:UACI,IAAI,gBAAW,mBAAY,OAAZ,CAAX,CAAJ,C;:YAAmC,OAAO,UAAQ,WAAR,I;:OAIID,OAAO,E  
;:K;:wCAGX,mB;:MACI,YAAY,mBAAQ,OAAR,C;:MACZ,IAAI,UAAS,EAAb,C;:QAAiB,OAAO,K;:MACxB,sBAA  
S,KAAT,C;:MACA,OAAO,I;:K;:4CAGX,iB;:MACI,oCAaa,2BAakB,KAAIB,EAAyB,SAazB,C;:MAEb,IAAI,UAA  
S,sBAAb,C;:QACI,OAAO,iB;:ACJ,IAAI,UAAS,CAAb,C;:QACH,OAAO,kB;:OAGX,oBAhVgD,mBAAY,cAgV1B,  
KAhV0B,IAAZ,C;:MARzC,Q;:MAyVP,cAzVO,2BAyVmB,aAzVnB,4D;:MA2VP,IAAI,QAAQ,aAAS,CAArB,C;:Q  
AEI,IAAI,iBAAiB,WAAR,C;:U9JoeR,U8JneY,kB9JmeZ,E8JneiC,kB9JmejC,E8Jne8C,cAAO,CAAP,I9Jme9C,E8J  
newD,W9JmexD,E8Jne8D,a9Jme9D,C;:UAAA,U8JjeY,kB9JieZ,E8JjeiC,kB9JiejC,E8Jje8C,C9Jie9C,E8JjeiD,C9Ji  
ejD,E8JjeoD,a9JjepD,C;:U8JheY,mBAAY,CAAZ,IAAiB,mBAAY,kBAAY,OAAZ,GAAMb,CAAnB,IAAZ,C;:U9Jg  
e7B,U8J/dY,kB9J+dZ,E8J/diC,kB9J+djC,E8J/d8C,cAAO,CAAP,I9J+d9C,E8J/dwD,W9J+dxD,E8J/d8D,kBAAY,O  
AAZ,GAAMb,CAAnB,I9J+d9D,C;:;Q8J5dQ,mBAAY,WAAZ,IAAoB,I;:QACpB,cAAO,mBAAY,WAAZ,C;:;QAGP  
,wBAjW4C,mBAAY,cAiWlB,sBAjWkB,IAAZ,C;:QAmW5C,IAAI,iBAAiB,iBAArB,C;:U9JsdR,U8JrdY,kB9JqdZ,  
E8JrdiC,kB9JqdjC,E8Jrd8C,a9Jqd9C,E8Jrd6D,gBAAGb,CAAhB,I9Jqd7D,E8JrdgF,oBAAoB,CAApB,I9JqdhF,C;:  
UAAA,U8JndY,kB9JmdZ,E8JndiC,kB9JmdjC,E8Jnd8C,a9Jmd9C,E8Jnd6D,gBAAGb,CAAhB,I9Jmd7D,E8JndgF,

kBAAY,O9Jmd5F,C;U8JldY,mBAAY,kBAAY,OAAZ,GAAMb,CAAnB,IAAZ,IAAoC,mBAAY,CAAZ,C;U9Jkdh  
D,U8JjdY,kB9JidZ,E8JjdiC,kB9JidjC,E8Jjd8C,C9Jid9C,E8JjdiD,C9JidjD,E8JjdoD,oBAAoB,CAApB,I9JidpD,C;;  
Q8J9cQ,mBAAY,iBAAZ,IAAiC,I;;MAErC,wBAAQ,CAAR,I;MAEA,OAAO,O;K;6CAGX,oB;MAAkE,OB;;QAA5  
C,wD;QART,aAAL,IAAK,U;QAAL,Y;UAA8B,SAAZ,kB7K6wOnB,YAAQ,C;S6K7wOX,W;UACI,yBAAO,K;U  
AAP,2B;SAEJ,WA1XgD,mBAAY,cA0XnC,SA1XmC,IAAZ,C;QA2XhD,cAAc,W;QACd,eAAe,K;QAEf,IAAI,cA  
AO,IAAX,C;UACI,iBAAc,WAAAd,UAAyB,IAAzB,U;YACI,cAAc,mBAAY,KAAZ,C;YAGd,IAjBsE,CAAU,wBAi  
BIE,0EAjBkE,CAiBhF,C;cACI,mBAAY,gBAAZ,EAAY,wBAAZ,YAAyB,O;;cAEzB,WAAW,I;;UAGP,OAAZ,kB  
AAY,EAkK,IAAL,EAAW,OAAx,EAAoB,IAApB,C;;UAGE,oB;UAAuB,SAAZ,kBAAY,O;UAArC,uD;YACI,gB  
AAc,mBAAY,OAAZ,C;YACd,mBAAY,OAAZ,IAAqB,I;YAGrB,IA/BsE,CAAU,wBA+BIE,kFA/BkE,CA+BhF,C;  
cACI,mBAAY,gBAAZ,EAAY,wBAAZ,YAAyB,S;;cAEzB,WAAW,I;;UAGnB,UAAU,mBAAY,OAAZ,C;UAEV,  
mBAAc,CAAd,YAAsB,IAAtB,Y;YACI,gBAAc,mBAAY,OAAZ,C;YACd,mBAAY,OAAZ,IAAqB,I;YAGrB,IA5  
CsE,CAAU,wBA4CIe,kFA5CkE,CA4ChF,C;cACI,mBAAY,OAAZ,IAAuB,S;cACvB,UAAU,mBAAY,OAAZ,C;;  
cAEV,WAAW,I;;;QAIvB,IAAI,QAAJ,C;UACI,YAAO,mBAAY,UAAU,WAAV,IAAZ,C;QAEX,yBAAO,Q;;MA  
vDuD,6B;K;6CAEIE,oB;MAAkE,OB;;QAW5C,wD;QART,aAAL,IAAK,U;QAAL,Y;UAA8B,SAAZ,kB7K6wOnB  
,YAAQ,C;S6K7wOX,W;UACI,yBAAO,K;UAAP,2B;SAEJ,WA1XgD,mBAAY,cA0XnC,SA1XmC,IAAZ,C;QA2  
XhD,cAAc,W;QACd,eAAe,K;QAEf,IAAI,cAAO,IAAX,C;UACI,iBAAc,WAAAd,UAAyB,IAAzB,U;YACI,cAAc,m  
BAAY,KAAZ,C;YAGd,IAf+E,wBAejE,0EAfiE,CAe/E,C;cACI,mBAAY,gBAAZ,EAAY,wBAAZ,YAAyB,O;;cA  
EzB,WAAW,I;;UAGP,OAAZ,kBAAY,EAkK,IAAL,EAAW,OAAx,EAAoB,IAApB,C;;UAGE,oB;UAAuB,SAAZ  
,kBAAY,O;UAArC,uD;YACI,gBAAc,mBAAY,OAAZ,C;YACd,mBAAY,OAAZ,IAAqB,I;YAGrB,IA7B+E,wBA  
6BjE,kFA7BiE,CA6B/E,C;cACI,mBAAY,gBAAZ,EAAY,wBAAZ,YAAyB,S;;cAEzB,WAAW,I;;UAGnB,UAAU,  
mBAAY,OAAZ,C;UAEV,mBAAc,CAAd,YAAsB,IAAtB,Y;YACI,gBAAc,mBAAY,OAAZ,C;YACd,mBAAY,OA  
AZ,IAAqB,I;YAGrB,IA1C+E,wBA0CjE,kFA1CiE,CA0C/E,C;cACI,mBAAY,OAAZ,IAAuB,S;cACvB,UAAU,mB  
AAY,OAAZ,C;;cAEV,WAAW,I;;;QAIvB,IAAI,QAAJ,C;UACI,YAAO,mBAAY,UAAU,WAAV,IAAZ,C;QAEX,  
yBAAO,Q;;MArDuD,6B;K;2CAEIE,qB;MASSb,IAII,IAJJ,EAKM,MALN,EAaA,MAbA,EAuB,MAbvB,EAkBI,  
MAIBJ,EAmBM,MANBN,EA+BI,M;MAvCb,aAAL,IAAK,U;MAAL,Y;QAA8B,SAAZ,kB7K6wOnB,YAAQ,C;O  
6K7wOX,W;QACI,OAAO,K;MAEX,WA1XgD,mBAAY,cA0XnC,SA1XmC,IAAZ,C;MA2XhD,cAAc,W;MACd,e  
AAe,K;MAEf,IAAI,cAAO,IAAX,C;QACI,iBAAc,WAAAd,UAAyB,IAAzB,U;UACI,cAAc,mBAAY,KAAZ,C;UAG  
d,IAAI,UAAU,0EAAV,CAAJ,C;YACI,mBAAY,gBAAZ,EAAY,wBAAZ,YAAyB,O;;YAEzB,WAAW,I;;QAGP,O  
AAZ,kBAAY,EAkK,IAAL,EAAW,OAAx,EAAoB,IAApB,C;;QAGE,oB;QAAuB,SAAZ,kBAAY,O;QAARc,uD;  
UACI,gBAAc,mBAAY,OAAZ,C;UACd,mBAAY,OAAZ,IAAqB,I;UAGrB,IAAI,UAAU,kFAAV,CAAJ,C;YACI,  
mBAAY,gBAAZ,EAAY,wBAAZ,YAAyB,S;;YAEzB,WAAW,I;;QAGnB,UAAU,mBAAY,OAAZ,C;QAEV,mBA  
Ac,CAAd,YAAsB,IAAtB,Y;UACI,gBAAc,mBAAY,OAAZ,C;UACd,mBAAY,OAAZ,IAAqB,I;UAGrB,IAAI,UA  
AU,kFAAV,CAAJ,C;YACI,mBAAY,OAAZ,IAAuB,S;YACvB,UAAU,mBAAY,OAAZ,C;;YAEV,WAAW,I;;;M  
AIvB,IAAI,QAAJ,C;QACI,YAAO,mBAAY,UAAU,WAAV,IAAZ,C;MAEX,OAAO,Q;K;iCAGX,Y;MACI,WA7a  
gD,mBAAY,cA6anC,SA7amC,IAAZ,C;MA8ahD,IAAI,cAAO,IAAX,C;QACgB,OAAZ,kBAAY,EAkK,IAAL,EA  
AW,WAAx,EAaiB,IAAjB,C;;QACT,IvKtS6C,CAAC,cuKsS9C,C;UACS,OAAZ,kBAAY,EAkK,IAAL,EAAW,  
WAAx,EAaiB,kBAAY,OAA7B,C;UACA,OAAZ,kBAAY,EAkK,IAAL,EAAW,CAAX,EAAC,IAAd,C;;MAEhB,  
cAAO,C;MACP,YAAO,C;K;2CAGX,iB;MAGe,IAAC,IAAD,EAcJ,M;MAfP,WACW,eAAC,OAAI,KAAM,OAA  
N,IAAc,SAAlB,GAAwB,KAAxB,GAAmC,aAAa,KAAb,EAAoB,SAApB,CAApC,uB;MAEX,WA7bgD,mBAAY,  
cA6bnC,SA7bmC,IAAZ,C;MA8bhD,IAAI,cAAO,IAAX,C;Q9J2XJ,U8J1XQ,kB9J0XR,E8J1X6B,I9J0X7B,EAD+F  
,CAC/F,E8J1XgD,W9J0XhD,E8J1XiE,I9J0XjE,C;;Q8JzXW,IvKtT6C,CAAC,cuKsT9C,C;U9JyXX,U8JxXQ,kB9J  
wXR,E8JxX6B,I9JwX7B,E8JxXuD,C9JwXvD,E8JxXuE,W9JwXvE,E8JxXwF,kBAAY,O9JwXpG,C;UAAA,U8Jv  
XQ,kB9JuXR,E8JvX6B,I9JuX7B,E8JvXuD,kBAAY,OAAZ,GAAMb,WAAAnB,I9JuXvD,E8JvX6F,C9JuX7F,E8Jv  
X2G,I9JuX3G,C;;M8JrXI,IAAI,IAAK,OAAL,GAAY,SAAhB,C;QACI,KAAK,SAAL,IAAa,I;OAIjB,OAAO,qD;K;  
mCAGX,Y;MAEI,OAAO,qBAAQ,gBAAmB,SAAnB,OAAR,C;K;+CAGX,iB;MAC0D,4BAAQ,KAAR,C;K;+CA  
C1D,Y;MAA0C,qB;K;IAE1C,gC;MAAA,oC;MACI,0BpHriBuC,E;MoHsiBvC,sBAAiC,U;MACjC,4BAAuC,E;K;  
yDAEvC,oC;MAEI,kBAAkB,eAAe,eAAgB,CAA/B,K;MACIB,IAAI,eAAc,WAAAd,QAA4B,CAAhC,C;QACI,cAA  
c,W;MACIB,IAAI,eAAc,UAAAd,QAA6B,CAAjC,C;QACI,cAAkB,cAAc,UAAIB,GAAgC,UAAhC,GAAMd,U;MA

CrE,OAAO,W;K;;;IAZf,4C;MAAA,2C;QAAA,0B;OAAA,oC;K;qDAgBA,qB;MAEI,WAVEgD,mBAAY,cAuenC,S  
AvenC,IAAZ,C;MAwehD,WAAe,kBAaA,cAAO,IAAxB,GAA8B,WAA9B,GAAwC,cAAO,kBAAY,OAAAnB,I;M  
ACnD,UAAU,IAAV,EAAgB,cAAhB,C;K;;IA5iBJ,iD;MAAA,oD;MAGwC,+B;MAPb5C,sB;MAqBsB,Q;MACV,  
wBAAmB,CAAnB,C;QAAwB,4D;WACxB,sBAakB,CAAIb,C;QAAuB,uBAaA,eAAb,O;;QACf,MAAM,gCAAY  
B,uBAAoB,eAA7C,C;MAHIB,0B;MAJJ,Y;K;IAWA,kC;MAAA,oD;MAGoB,+B;MA/BxB,sB;MAGCQ,sBAAc,qD  
;MAJIB,Y;K;IAOA,4C;MAAA,oD;MAG2C,+B;MATc/C,sB;MAuCQ,sBxJrB8D,YwJqBhD,QxJrBgD,C;MwJsB9D  
,aAAO,mBAAY,O;MACnB,IAAI,mB7K+qPD,YAAQ,C6K/qPX,C;QAA2B,sBAAc,qD;MAN7C,Y;K;IC5BJ,4B;M  
AMoB,Q;M9KghqBA,U;MADhB,UAAe,C;MACf,uD;QAAgB,cAAhB,iB;QACI,YAAgB,O8KlHqBiB,O9KkhqBjC  
,I;;M8KlHqBJ,aAAa,iB9KohqBN,G8KphqBM,C;MACb,wBAAGB,SAAhB,gB;QAAgB,gBAAA,SAAhB,M;QAC  
W,SAAP,MAAO,EAAO,SAAP,C;;MAEX,OAAO,M;K;IAGX,0B;MASiB,Q;MAFb,YAAY,iBAAa,gBAAb,C;MA  
CZ,YAAY,iBAAa,gBAAb,C;MACZ,wBAaA,SAAb,gB;QAAa,WAAA,SAAb,M;QACI,KAAM,WAAI,IAAK,MA  
AT,C;QACN,KAAM,WAAI,IAAK,OAAT,C;;MAEV,OAAO,UAAS,KAAT,C;K;gGAGX,qB;MAWW,4B;MAAA,  
U;QAAqB,OAAL,S9K0qPhB,YAAQ,C;O8K1qPf,W;K;oFAGJ,mC;MAUI,O9K6pPO,qBAAQ,C8K7pPf,GAAe,cA  
Af,GAAmC,S;K;IAGvC,iD;MAMI,IAAI,cAAS,KAAb,C;QAAoB,OAAO,I;MAC3B,IAAI,qBAAGB,aAAhB,IAAI  
C,SAAK,OAAL,KAAa,KAAM,OAAXD,C;QAA8D,OAAO,K;MAErE,4C;QACI,SAAS,UAAK,CAAL,C;QACT,S  
AAS,MAAM,CAAN,C;QAET,IAAI,OAAO,EAAX,C;UACI,Q;eACG,IAAI,cAAc,UAAIB,C;UACH,OAAO,K;SAI  
P,0BAAsB,kBAAtB,C;UAA4C,IAAI,CAAI,kBAAH,EAAG,EAakB,EAAIB,CAAR,C;YAA+B,OAAO,K;eACIF,8  
BAAsB,sBAAtB,C;UAA4C,IAAI,CAAI,cAAH,EAAG,EAac,EAAd,CAAR,C;YAA2B,OAAO,K;eAC9E,+BAAsB  
,uBAAtB,C;UAA4C,IAAI,CAAI,cAAH,EAAG,EAac,EAAd,CAAR,C;YAA2B,OAAO,K;eAC9E,6BAAsB,qBAAt  
B,C;UAA4C,IAAI,CAAI,cAAH,EAAG,EAac,EAAd,CAAR,C;YAA2B,OAAO,K;eAC9E,8BAAsB,sBAAtB,C;U  
AA4C,IAAI,CAAI,cAAH,EAAG,EAac,EAAd,CAAR,C;YAA2B,OAAO,K;eAC9E,+BAAsB,uBAAtB,C;UAA4C,  
IAAI,CAAI,cAAH,EAAG,EAac,EAAd,CAAR,C;YAA2B,OAAO,K;eAC9E,gCAAsB,wBAAtB,C;UAA4C,IAAI,  
CAAI,cAAH,EAAG,EAac,EAAd,CAAR,C;YAA2B,OAAO,K;eAC9E,8BAAsB,sBAAtB,C;UAA4C,IAAI,CAAI,c  
AAH,EAAG,EAac,EAAd,CAAR,C;YAA2B,OAAO,K;eAC9E,iCAAsB,yBAAtB,C;UAA4C,IAAI,CAAI,cAAH,E  
AAG,EAac,EAAd,CAAR,C;YAA2B,OAAO,K;eAE9E,qCAAsB,6BAAtB,C;UAA4C,IAAI,CAAI,gBAAH,EAAG,  
EAac,EAAd,CAAR,C;YAA2B,OAAO,K;eAC9E,sCAAsB,8BAAtB,C;UAA4C,IAAI,CAAI,gBAAH,EAAG,EAac,  
EAAd,CAAR,C;YAA2B,OAAO,K;eAC9E,oCAAsB,4BAAtB,C;UAA4C,IAAI,CAAI,gBAAH,EAAG,EAac,EAAd,  
CAAR,C;YAA2B,OAAO,K;eAEtE,IAAI,YAAM,EAAN,CAAJ,C;UAAc,OAAO,K;;MAIrC,OAAO,I;K;IAGX,4C;MA  
KI,IAAI,iBAAJ,C;QAAkB,OAAO,M;MACzB,aAAa,CAAK,eAAL,gBAAK,EAAa,SAAb,CAAL,GAA6C,CAA7C,  
QAAiD,CAAjD,I;MvC6SkB,kBAAxB,mBuC5SY,MvC4SZ,C;MuC3SH,oDxK5BgD,gBwK4BhD,C;MADJ,O7JnC  
O,WsH+U6C,W;K;IuCvSxD,mE;MAEI,IAAY,SAAR,0BAAJ,C;QACI,MAAO,gBAAO,OAAP,C;QACP,M;OAEJ,  
SAAU,WAAI,SAAJ,C;MACV,MAAO,gBAAO,EAAP,C;MAEP,4C;QACI,IAAI,MAAK,CAAT,C;UACI,MAAO,g  
BAAO,IAAP,C;SAEX,cAAc,UAAK,CAAL,C;QAEV,IADE,OACF,S;UAAmB,MAAO,gBAAO,MAAP,C;aAC1B,  
mBAFE,OAEF,E;UAA2B,4BAAR,OAAQ,EAA4B,MAA5B,EAAoC,SAAPC,C;aAC3B,uBAHE,OAGF,E;UAAm  
B,MAAO,gBA Ae,gBAAR,OAAQ,CAAf,C;aAC1B,wBAJE,OAIF,E;UAAmB,MAAO,gBA Ae,gBAAR,OAAQ,CA  
Af,C;aAC1B,sBALE,OAKF,E;UAAmB,MAAO,gBA Ae,gBAAR,OAAQ,CAAf,C;aAC1B,uBANE,OAMF,E;UAA  
mB,MAAO,gBA Ae,gBAAR,OAAQ,CAAf,C;aAC1B,wBAPE,OAOF,E;UAAmB,MAAO,gBA Ae,gBAAR,OAAQ,  
CAAf,C;aAC1B,yBARE,OAQF,E;UAAmB,MAAO,gBA Ae,gBAAR,OAAQ,CAAf,C;aAC1B,uBATE,OASF,E;UA  
AmB,MAAO,gBA Ae,gBAAR,OAAQ,CAAf,C;aAC1B,0BAVE,OAUF,E;UAAmB,MAAO,gBA Ae,gBAAR,OAA  
Q,CAAf,C;aAE1B,kBAZE,OAYF,c;UAAmB,MAAO,gBA Ae,kBAAR,OAAQ,CAAf,C;aAC1B,kBAbE,OAaF,e;U  
AAmB,MAAO,gBA Ae,kBAAR,OAAQ,CAAf,C;aAC1B,kBAdE,OAcF,a;UAAmB,MAAO,gBA Ae,kBAAR,OAA  
Q,CAAf,C;aAC1B,kBAFE,OAeF,c;UAAmB,MAAO,gBA Ae,kBAAR,OAAQ,CAAf,C;;UAEP,MAAO,gBAAO,OA  
AQ,WAAf,C;;MAIIC,MAAO,gBAAO,EAAP,C;MACP,SAAU,kBAAmB,iBAAV,SAAU,CAAnB,C;K;ICpJd,uC;  
MAIqD,+CAAwC,iBAAO,CAA/C,IAAoD,mC;K;IAEzG,4D;MAWQ,kBADE,SACF,O;QADJ,OACc,S;WACV,kB  
AFE,SAEF,c;QAEQ,yCAAwB,MAAO,KAAP,GAAc,CAAT,C;UAJZ,OAIuD,S;;UAJvD,OAK6B,mBAAL,SAAK  
,CAAT,GAA+B,sBAA/B,GAAgD,S;;QALpE,OAOGb,oCAAJ,GAA0C,sBAA1C,GAA2D,mB;K;IAG3E,gD;MAW  
Q,kBADE,SACF,O;QADJ,OACc,S;WACV,kBAFE,SAEF,c;QAFJ,OAe8B,mBAAL,SAAK,CAAT,GAA+B,sBAA

/B,GAAgD,S;;QAFrE,OAGgB,oCAAJ,GAA0C,sBAA1C,GAA2D,mB;K;IAG3E,kD;MAKI,OAAI,oCAAJ,GAA0C ,sBAA1C,GAA2D,oB;K;IAE/D,kD;MAKI,OAAI,oCAAJ,GAA0C,oBAA1C,GAA2D,iB;K;IzKnD/D,yB;MAAA,6 B;K;sCACI,Y;MAAkC,Y;K;0CACIC,Y;MAAsC,Y;K;wCACtC,Y;MAAgC,Q;K;4CACHC,Y;MAAoC,S;K;mCACp C,Y;MAA+B,MAAM,6B;K;uCACrC,Y;MAAmC,MAAM,6B;K;;;IAN7C,qC;MAAA,oC;QAAA,mB;OAAA,6B;K; IASA,qB;MAAA,yB;MACI,+C;K;iCAEA,iB;MAA4C,qCAAoB,KAAM,U;K;mCACtE,Y;MAA+B,Q;K;mCAC/B, Y;MAAkC,W;K;iFAEX,Y;MAAQ,Q;K;kCAC/B,Y;MAAkC,W;K;yCACIC,mB;MAAmD,Y;K;8CACnD,oB;MAA mE,OAAA,QAAS,U;K;sCAE5E,iB;MAAwC,MAAM,8BAA0B,iDAA8C,KAA9C,MAA1B,C;K;wCAC9C,mB;M AA8C,S;K;4CAC9C,mB;MAAkD,S;K;mCAEID,Y;MAA6C,kC;K;uCAC7C,Y;MAAqD,kC;K;+CACrD,iB;MACI, IAAI,UAAS,CAAb,C;QAAgB,MAAM,8BAA0B,YAAS,KAAnC,C;MACtB,OAAO,2B;K;0CAGX,8B;MACI,IAAI ,cAAa,CAAb,IAAkB,YAAW,CAAjC,C;QAAoC,OAAO,I;MAC3C,MAAM,8BAA0B,gBAAa,SAAb,mBAAkC,O AA5D,C;K;wCAGV,Y;MAAiC,8B;K;;;IA5BrC,iC;MAAA,gC;QAAA,e;OAAA,yB;K;IA+BA,iC;MAA8D,6BAAk B,SAAlB,EAAoC,KAApC,C;K;IAE5B,8C;MAAC,oB;MAA0B,0B;K;yFACIC,Y;MAAQ,OAAA,WAAO,O;K;0C ACtC,Y;MAAkC,OAAA,WNqqP3B,YAAQ,C;K;iDMpqPf,mB;MAA6C,OAAO,SAAP,WAAO,EAAS,OAAT,C;K ;sDACpD,oB;MAAsE,c;;Qc4nDtD,Q;QADhB,IAAI,cd3nDyD,Qc2nDzD,iBd3nDyD,Qc2nDnD,UAA1B,C;UAAqC ,aAAO,I;UAAP,e;SACrB,Od5nD6C,Qc4nD7C,W;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;UAAM,IAAI,Cd5nDkD ,oBc4nDvC,Od5nDuC,Cc4nDtD,C;YAAyB,aAAO,K;YAAP,e;;QAC/C,aAAO,I;;;Md7nDsD,iB;K;2CAC7D,Y;MA AuC,OAAO,qBAAP,WAAO,C;K;0CAC9C,Y;MAC+C,gBAAP,W;MAAA,OAAwB,cAAxB,GegKpC,SfhKoC,Gek KpC,SN83BoB,Q;K;;IT7hC5B,qB;MAIsC,8B;K;IAEtC,4B;MAIqD,OAAI,QAAS,OAAT,GAAgB,CAApB,GAAg C,OAAT,QAAS,CAAhC,GAA8C,W;K;mFAEnG,yB;MAAA,qD;MAAA,mB;QAK0C,kB;O;KAL1C,C;+FAOA,y B;MAAA,+D;MAAA,mB;QAMwD,uB;O;KANxD,C;2FAQA,yB;MAAA,+D;MAAA,mB;QAMoD,uB;O;KANpD, C;IAQA,mC;MAKI,OAAI,QAAS,OAAT,KAAiB,CAArB,GAAwB,gBAAxB,GAAyC,iBAAU,sBAAkB,QAAIB,E AAwC,IAAxC,CAAV,C;K;IAE7C,iC;MAKI,OAAI,QAAS,OAAT,KAAiB,CAArB,GAAwB,gBAAxB,GAAyC,iB AAU,sBAAkB,QAAIB,EAAwC,IAAxC,CAAV,C;K;IAE7C,gC;MAI2D,OAAI,eAAJ,GAAqB,OAAO,OAAP,CAA rB,GAA0C,W;K;IAErG,mC;MAImE,OAAS,cAAT,QAAS,C;K;gFAE5E,yB;MAAa,gE;MAbA,6B;QAYBI,WAAW ,eAduE,IAcvE,C;QWCX,iBAAc,CAAd,UXfkF,IWefU,U;UXA6B,eAf2D,IAevD,CWCtB,KXDsb,CAAJ,C;;QAFyC ,OAgB/D,I;O;KA3BX,C;8FAaA,yB;MAAA,gE;MAAA,6B;QAYI,WAAW,eAAa,IAAb,C;QWCX,iBAAc,CAAd,U XAO,IWAP,U;UXA6B,eAAI,KWCtB,KXDsb,CAAJ,C;;QAC7B,OAAO,I;O;KAdX,C;wFAiBA,yB;Me1FA,+D;M f0FA,gC;QetF0B,gBAAf,gB;QfsGkB,aW3FzB,W;QX2FA,OW1FO,SIZoC,Q;O;KfsF/C,C;yFAwBA,yB;Me3GA,4 E;MAAA,gE;Mf2GA,0C;QevGI,qBf2HyB,Qe3HzB,C;QAC8B,gBAAvB,ef0HkB,Qe1HIB,C;Qf0H4B,aWvHnC,W; QXuHA,OWtHO,SIJ4C,Q;O;KfsGvD,C;IAiCI,mC;MAAQ,uBAAG,iBAAO,CAAP,IAAH,C;K;IAQR,qC;MAAQ, OAAA,SAAK,KAAL,GAAy,CAAZ,I;K;4FAEZ,qB;MAK4D,QAAC,mB;K;kGAE7D,qB;MAWI,OAAO,qBAAGB ,SAAK,U;K;sFAGhC,yB;MAAA,qD;MAAA,4B;QAKgE,uCAAQ,W;O;KALxE,C;sFAOA,yB;MAAA,qD;MAAA, 4B;QAKoD,uCAAQ,W;O;KAL5D,C;sFAOA,mC;MASI,OAAI,mBAAJ,GAAe,cAAf,GAAMC,S;K;4FAGvC,+B; MAQoH,OAAA,SAAK,qBAAY,QAAZ,C;K;IAGzH,uC;MAK+E,kBAAhB,0B;MAAwB,+B;MAAxB,OW5MpD, W;K;IX+MX,yC;MAAkD,QAAM,cAAN,C;aAC9C,C;UAD8C,OACzC,W;aACL,C;UAF8C,OAeZC,OAAO,sBAA K,CAAL,CAAP,C;gBAFyC,OAGtC,S;;K;IAGZ,8D;MAGbKE,yB;QAAA,YAAiB,C;MAAG,uB;QAAA,UAAe,c;M ACjG,WAAW,cAAX,EAAiB,SAAjB,EAA4B,OAA5B,C;MAEA,UAAU,S;MACV,WAAW,UAAU,CAAV,I;MAE X,OAAO,OAAO,IAAd,C;QACI,UAAW,GAAY,GAAN,IAAM,KAAK,C;QAC5B,aAAa,sBAAI,GAAJ,C;QACb,U AAU,cAAc,MAAd,EAAsB,OAAtB,C;QAEV,IAAI,MAAM,CAAV,C;UACI,MAAM,MAAM,CAAN,I;aACL,IAAI ,MAAM,CAAV,C;UACD,OAAO,MAAM,CAAN,I;;UAEP,OAAO,G;;MAEf,OAAO,EAAE,MAAM,CAAN,IAAF, K;K;IAGX,4E;MAe8E,yB;QAAA,YAAiB,C;MAAG,uB;QAAA,UAAe,c;MAC7G,WAAW,cAAX,EAAiB,SAAjB, EAA4B,OAA5B,C;MAEA,UAAU,S;MACV,WAAW,UAAU,CAAV,I;MAEX,OAAO,OAAO,IAAd,C;QACI,UAA W,GAAY,GAAN,IAAM,KAAK,C;QAC5B,aAAa,sBAAI,GAAJ,C;QACb,UAAU,UAAW,SAAQ,MAAR,EAAgB, OAAhB,C;QAErB,IAAI,MAAM,CAAV,C;UACI,MAAM,MAAM,CAAN,I;aACL,IAAI,MAAM,CAAV,C;UACD, OAAO,MAAM,CAAN,I;;UAEP,OAAO,G;;MAEf,OAAO,EAAE,MAAM,CAAN,IAAF,K;K;kGAGX,yB;MAAA,8 D;MAAA,4D;MAAsBqC,8D;QAAA,qB;UAAE,qBAAc,iBAAS,EAAT,CAAd,EAA4B,WAA5B,C;S;O;MATBvC,+D ;QAKBI,yB;UAAA,YAAiB,C;QACjB,uB;UAAA,UAAe,c;QAGf,+BAAa,SAAb,EAAwB,OAAxB,EAAiC,oCAAjC ,C;O;KAtBJ,C;IA6BA,mE;MAmBoC,yB;QAAA,YAAiB,C;MAAG,uB;QAAA,UAAe,c;MACnE,WAAW,cAAX,E

AAiB,SAAjB,EAA4B,OAA5B,C;MAEA,UAAU,S;MACV,WAAW,UAAU,CAAV,I;MAEX,OAAO,OAAO,IAAd,  
C;QACI,UAAW,GAAY,GAAN,IAAM,KAAC,C;QAC5B,aAAa,sBAAI,GAAC,C;QACb,UAAU,WAAW,MAAX,C  
;QAEV,IAAI,MAAM,CAAV,C;UACI,MAAM,MAAM,CAAN,I;aACL,IAAI,MAAM,CAAV,C;UACD,OAAO,M  
AAM,CAAN,I;;UAEP,OAAO,G;;MAEf,OAAO,EAAE,MAAM,CAAN,IAAF,K;K;IAGX,8C;MAMQ,gBAAY,OA  
AZ,C;QAAuB,MAAM,gCAAYB,gBAAa,SAAb,mCAAKD,OAAID,OAAzB,C;WAC7B,gBAAY,CAAZ,C;QAAiB,  
MAAM,8BAA0B,gBAAa,SAAb,yBAA1B,C;WACvB,cAAU,IAAV,C;QAAkB,MAAM,8BAA0B,cAAW,OAAx,g  
CAA2C,IAA3C,OAA1B,C;K;IAchC,8B;MAEoC,MAAM,wBAAoB,8BAApB,C;K;IAE1C,8B;MAEoC,MAAM,w  
BAAoB,8BAApB,C;K;;;wF2Gjb1C,yB;M1GgCA,wE;M0GhCA,uC;QAmBW,kB1GqBiD,oB;Q0GM9C,Q;QAAA,  
OAAK,0B;QAAf,OAAU,cAAV,C;UAAU,mB;UACN,UAAU,sBAAM,CAAN,C;UACV,kBAaKB,sBAAY,GAAZ,  
C;UACIB,W1GuKJ,a0GvKgB,G1GuKhB,E0GrMyC,SA8BIB,CAAU,GAAY,EAAe,WAAf,EAA4B,CAA5B,EAA  
+B,uBAAuB,CAAC,WAAy,mBAAY,GAAZ,CAAnE,C1GuKvB,C;;Q0GrMA,OAGCO,W;O;KAnDX,C;4FAsBA,  
6C;MAwBc,Q;MAAA,OAAA,SAAK,iB;MAAf,OAAU,cAAV,C;QAAU,mB;QACN,UAAU,sBAAM,CAAN,C;Q  
ACV,kBAaKB,sBAAY,GAAZ,C;QACIB,W1GuKJ,a0GvKgB,G1GuKhB,E0GvKuB,UAAU,GAAY,EAAe,WAAf,  
EAA4B,CAA5B,EAA+B,uBAAuB,CAAC,WAAy,mBAAY,GAAZ,CAAnE,C1GuKvB,C;;M0GrKA,OAAO,W;K;  
iFAGX,yB;MAAA,gB;MAAA,8B;M1GtBA,wE;M0GsBA,6D;QAnCW,kB1GqBiD,oB;Q0GM9C,Q;QAAA,OAA  
K,0B;QAAf,OAAU,cAAV,C;UAAU,mB;UACN,UAAU,sBAAM,CAAN,C;UACV,kBAaKB,sBAAY,GAAZ,C;U  
A8BwE,U;UA7B1F,W1GuKJ,a0GvKgB,G1GuKhB,E0G1IkC,UA7BD,GA6BC,EA7BoB,uBAAuB,CAAC,WAAy  
,mBAAY,GAAZ,CA6BzC,GAAY,qBA7B3B,GA6B2B,EA7BT,CA6BS,CAAX,GAA6C,UA7BxD,WA6BwD,6D  
AA5D,EA7BiB,CA6BjB,C1G0IIC,C;;Q0G3IA,OA1BO,W;O;KAGX,C;kFA0BA,yB;MAAA,gB;MAAA,8B;MAA  
A,0E;QAICc,Q;QAAA,OAAK,0B;QAAf,OAAU,cAAV,C;UAAU,mB;UACN,UAAU,sBAAM,CAAN,C;UACV,k  
BA6DQ,WA7DU,WAAy,GAAZ,C;UA6DuF,U;UAAjG,W1G2GZ,a0GvKgB,G1GuKhB,E0G3GiD,UA5DhB,GA4  
DgB,EA5DK,uBAAuB,CA4DjE,WA5D8E,mBAAY,GAAZ,CA4D1B,GAAY,qBA5D1C,GA4D0C,EA5DxB,CA4  
DwB,CAAX,GAA6C,UA5DvE,WA4DuE,6DAA5D,EA5DE,CA4DF,C1G2GjD,C;;Q0G5GA,OACY,W;O;KA7Bh  
B,C;iFAgCA,yB;MAAA,gB;MAAA,8B;M1GhFA,wE;M0GgFA,qD;QA7FW,kB1GqBiD,oB;Q0GM9C,Q;QAAA,  
OAAK,0B;QAAf,OAAU,cAAV,C;UAAU,mB;UACN,UAAU,sBAAM,CAAN,C;UACV,kBAaKB,sBAAY,GAAZ,  
C;UAKfiD,U;UAjFnE,W1GuKJ,a0GvKgB,G1GuKhB,E0GtFgC,UajFsB,uBAAuB,CAAC,WAAy,mBAAY,GAA  
Z,CAiFhD,kBAA6B,UajFjC,WaiFiC,6DAAvC,EajFmB,CAiFnB,C1GsFhC,C;;Q0GvFA,OA9EO,W;O;KA6DX,  
C;oFAoBA,yB;MAAA,gB;MAAA,8B;MAAA,kE;QAtFc,Q;QAAA,OAAK,0B;QAAf,OAAU,cAAV,C;UAAU,mB;  
UACN,UAAU,sBAAM,CAAN,C;UACV,kBA2GQ,WA3GU,WAAy,GAAZ,C;UA2GgE,U;UAA1E,W1G6DZ,a0G  
vKgB,G1GuKhB,E0G7D+C,UA1GO,uBAAuB,CA0GjE,WA1G8E,mBAAY,GAAZ,CA0GjC,kBAA6B,UA1GhD,  
WA0GgD,6DAAvC,EA1GI,CA0GJ,C1G6D/C,C;;Q0G9DA,OACY,W;O;KAvBhB,C;qFA0BA,yB;MAAA,gB;MA  
AA,8B;M1G9HA,wE;M0G8HA,uC;QA3IW,kB1GqBiD,oB;Q0GM9C,Q;QAAA,OAAK,0B;QAAf,OAAU,cAAV,  
C;UAAU,mB;UACN,UAAU,sBAAM,CAAN,C;UACV,kBAaKB,sBAAY,GAAZ,C;UACC,oB;UAKIc,U;UAAjC,I  
AIIkD,uBAAuB,CAAC,WAAy,mBAAY,GAAZ,CAKIc,C;YADA,mBAjI+C,C;;YAI/C,mBACKB,UAIW,GAkIX  
,EAAe,UAIIC,WakID,6DAAf,EAI6B,CAkI7B,C;;UAIIB,W1GuKJ,a0GvKgB,G1GuKhB,mB;;Q0GvCA,OA9HO  
,W;O;KA2GX,C;sFAwBA,yB;MAAA,gB;MAAA,8B;MAAA,oD;QAxIc,Q;QAAA,OAAK,0B;QAAf,OAAU,cAA  
V,C;UAAU,mB;UACN,UAAU,sBAAM,CAAN,C;UACV,kBA6JQ,WA7JU,WAAy,GAAZ,C;UACC,oB;UA8Jc,U  
;UAAjC,IA9JkD,uBAAuB,CA4JjE,WA5J8E,mBAAY,GAAZ,CA8Jf,C;YADA,mBA7J+C,C;;YA6J/C,mBACKB,  
UA9JW,GA8JX,EAAe,UA9JC,WA8JD,6DAAf,EA9J6B,CA8J7B,C;;UAFV,W1GWZ,a0GvKgB,G1GuKhB,mB;;Q  
0GXa,OAAY,W;O;KAvBhB,C;IA6BA,6C;MarKc,Q;MAAA,OAAK,0B;MAAf,OAAU,cAAV,C;QAAU,mB;QA  
CN,UAAU,sBAAM,CAAN,C;QACV,kBA+KG,WA/Ke,WAAy,GAAZ,C;QA2GgE,U;QAoE/E,W1GPP,a0GvKgB  
,G1GuKhB,E0GomC,CA9KmB,uBAAuB,CA8KtE,WA9KmF,mBAAY,GAAZ,CA0GjC,GAoErC,CAPeQc,GAA6  
B,UA1GhD,WA0GgD,6DAoEnD,IAAM,CAAN,I1GPnC,C;;M0GOA,OAAO,W;K;I+DnPOB,oC;MAAC,kB;MAA  
uB,kB;K;;wCAN7D,Y;MAMsC,iB;K;wCANtC,Y;MAM6D,iB;K;0CAN7D,wB;MAAA,wBAMsC,qCANtC,EAM6  
D,qCAN7D,C;K;sCAA,Y;MAAA,OAMsC,mDANtC,IAM6D,wCAN7D,O;K;sCAA,Y;MAAA,c;MAMsC,sD;  
MAAuB,sD;MAN7D,a;K;oCAA,iB;MAAA,4IAMsC,sCANtC,IAM6D,sCAN7D,I;K;wFpKEA,yB;MAAA,kC;M  
AAA,4C;MAAA,kD;QAMuF,wC;O;MANvF,4CAOI,Y;QAAuC,8B;O;MAP3C,8E;MAAA,2B;QAMuF,2C;O;KA  
NvF,C;IAcsC,2C;MAAC,wC;K;0CACnC,Y;MAAqD,4BAAiB,wBAAjB,C;K;;IAIzD,yC;MAI4D,OAAI,oCAAJ,G

AA2B, SAAK, KAAhC, GAA0C, I; K; IAEtG, uD; MAI0E, OAAI, oCAAJ, GAA2B, SAAK, KAAhC, GAA0C, S; K; IAGp  
H, 8B; MAMoB, Q; MADhB, aAAa, gB; MACG, 2B; MAAhB, OAAgB, cAAhB, C; QAAgB, yB; QACL, OAAp, MAAO, E  
AAO, OAAp, C; MAEX, OAAO, M; K; IAGX, 4B; MAUiB, Q; MAHb, mBAAmB, mCAAwB, EAAXB, C; MACnB, YAA  
Y, iBAAa, YAAb, C; MACZ, YAAy, iBAAa, YAAb, C; MACC, 2B; MAAb, OAAa, cAAb, C; QAAa, sB; QACT, KAAM, W  
AAI, IAAK, MAAT, C; QACN, KAAM, WAAI, IAAK, OAAAT, C; MAEV, OAAO, UAAS, KAAT, C; K; wFUxDX, qB; MA  
KqE, gB; K; IAERe, iC; MAMoE, 4BAAiB, SAAjB, C; K; uFAEpE, gC; MAKI, OAAgB, mBAAhB, C; QAAgB, 8B; QAAM,  
UAAU, OAAV, C; K; IAMy, oC; MAAC, 0B; MACnC, eAAoB, C; K; yCACpB, Y; MAAwC, OAAA, eAAS, U; K; sCACjD  
, Y; MAA6E, Q; MAAhC, wBAAa, oBAAmB, mBAAnB, EAAMb, 2BAAnB, QAAb, EAA0C, eAAS, OAAAnD, C; K; ; sF2J  
5BjD, yB; MAAA, 4E; MAAA, gB; MAAA, 8B; MAAA, +C; QAUiC, Q; QAA7B, OAA6B, wCAAqB, QAAS, aAA9B, 0D;  
O; KAVjC, C; wFAYA, yB; MAAA, 4E; MAAA, gB; MAAA, 8B; MAAA, +C; QAWiC, Q; QAA7B, OAA6B, wCAAqB, Q  
AAS, aAA9B, 0D; O; KAXjC, C; sFAaA, +C; MAQI, SAAK, aAAI, QAAS, aAAb, EAAMb, KAAAnB, C; K; ICnCT, 8C; MA  
UI, IAAI, wCAAJ, C; QACI, OAAO, SAAK, 4BAAqB, GAARb, C; MAET, 4B; M3KoTI, Q; MALX, YAAy, oB2K/Sa, G3  
K+Sb, C; MACZ, IAAI, iBAAiB, CAAC, 4B2KhTG, G3KgTH, CAAtB, C; Q2KhTgC, MAAM, 2BAAuB, wCAAvB, C; Q  
3KoTIC, 2BAAO, sE; ; M2KpTX, +B; K; IAGJ, 8C; MAUQ, kBADE, SACF, kB; QADJ, OACKc, YAAT, SAAK, IAAI, EA  
AY, YAAZ, C; ; QADIC, OAEY, uBAAMb, SAAnB, EAAyB, YAAzB, C; K; IAGhB, gD; MAWQ, kBADE, SACF, yB; QA  
DJ, OACyC, cAAT, SAAK, IAAI, EAAy, YAAZ, C; ; QADzC, OAEY, 8BAA0B, SAA1B, EAAgC, YAAhC, C; K; ; ; ; ; IAc  
0B, 4C; MAAC, wB; MAAoC, 0B; K; qEAApC, Y; MAAA, yB; K; 0CACvC, iB; MAA4C, OAAI, OAAJ, QAAI, EAAO, KA  
AP, C; K; 4CACHD, Y; MAA+B, OAAI, SAAJ, QAAI, C; K; 4CACnC, Y; MAAkC, OAAA, QAAI, W; K; 0FACf, Y; MAAQ,  
OAAA, QAAI, K; K; 2CACnC, Y; MAAkC, OAAA, QAAI, U; K; qDACtC, e; MAA4C, OAAA, QAAI, mBAAY, GAAZ, C;  
K; uDACHD, iB; MAAgE, OAAA, QAAI, qBAAc, KAAd, C; K; 6CACpE, e; MAA+B, OAAA, QAAI, WAAI, GAAJ, C; K; 0  
FACT, Y; MAAQ, OAAA, QAAI, K; K; 4FACH, Y; MAAQ, OAAA, QAAI, O; K; 6FACJ, Y; MAAQ, OAAA, QAAI, Q; K; 8  
DAEvD, e; MAAMd, gBAAJ, Q; MAAI, 4B; M3K4PxC, Q; MALX, YAAy, oB2KvPyD, G3KuPzD, C; MACZ, IAAI, iBA  
AiB, CAAC, 4B2KxP+C, G3KwP/C, CAAtB, C; QACI, 2B2KzPwE, mB; ; Q3K4PxE, 2BAAO, sE; ; M2K5PoC, +B; K; ; IA  
GN, mD; MAAC, wB; MAA2C, 0B; K; 4EAA3C, Y; MAAA, yB; K; iDAC1C, iB; MAA4C, OAAI, OAAJ, QAAI, EAAO, K  
AAP, C; K; mDACHD, Y; MAA+B, OAAI, SAAJ, QAAI, C; K; mDACnC, Y; MAAkC, OAAA, QAAI, W; K; iGACf, Y; MA  
AQ, OAAA, QAAI, K; K; kDACnC, Y; MAAkC, OAAA, QAAI, U; K; 4DACtC, e; MAA4C, OAAA, QAAI, mBAAY, GAA  
Z, C; K; 8DACHD, iB; MAAgE, OAAA, QAAI, qBAAc, KAAd, C; K; oDACpE, e; MAA+B, OAAA, QAAI, WAAI, GAAJ, C  
; K; iGACf, Y; MAAQ, OAAA, QAAI, K; K; mGACH, Y; MAAQ, OAAA, QAAI, O; K; oGACU, Y; MAAQ, OAAA, QAAI,  
Q; K; sDAE5E, sB; MAAyC, OAAA, QAAI, aAAI, GAAJ, EAAS, KAAT, C; K; uDAC7C, e; MAAkC, OAAA, QAAI, cAA  
O, GAAP, C; K; yDACtC, gB; MAA2C, QAAI, gBAAO, IAAP, C; K; gDAC/C, Y; MAAuB, QAAI, Q; K; qEAE3B, e; MAAM  
D, gBAAJ, Q; MAAI, 4B; M3KuOxC, Q; MALX, YAAy, oB2KIOyD, G3KkOzD, C; MACZ, IAAI, iBAAiB, CAAC, 4B2K  
nO+C, G3KmO/C, CAAtB, C; QACI, 2B2KpOwE, mB; ; Q3KuOxE, 2BAAO, sE; ; M2KvOoC, +B; K; ; I3KvFnD, oB; MAA  
A, wB; MACI, 8C; K; gCAEA, iB; MAA4C, oCAAsB, KAAM, U; K; kCACxE, Y; MAA+B, Q; K; kCAC/B, Y; MAAkC, W; K  
; gFAEX, Y; MAAQ, Q; K; iCAC/B, Y; MAAkC, W; K; 2CAEIC, e; MAA+C, Y; K; 6CAC/C, iB; MAAsD, Y; K; mCACtD, e;  
MAAwC, W; K; mFACY, Y; MAAQ, 6B; K; gFAC/B, Y; MAAQ, 6B; K; kFACI, Y; MAAQ, 8B; K; uCAEjD, Y; MAAiC, 6B;  
K; ; ; IAjBrC, gC; MAAA, +B; QAAA, c; OAAA, wB; K; IAoBA, oB; MAMuE, Q; MAA7B, OAA6B, uE; K; IAEvE, wB; MAa  
I, OAAI, KAAM, OAAAN, GAAa, CAAjB, GAA0B, QAAN, KAAM, EAAM, qBAAc, YAAy, KAAM, OAAIB, CAAd, CA  
AN, CAA1B, GAA6E, U; K; kFAEjF, yB; MAAA, oD; MAAA, mB; QAO8C, iB; O; KAP9C, C; 8FASA, yB; MAAA, wE; M  
AAA, mB; QAQ4D, 2B; O; KAR5D, C; IAUA, +B; MAYiD, gBAA7C, qBAAoB, YAAy, KAAM, OAAIB, CAAPB, C; MA  
AqD, wB; MAArD, OUJO, S; K; wFVMX, yB; MAAA, 4D; MAAA, mB; QAOsD, qB; O; KAPtD, C; IASA, 4B; MAM8G, gB  
AAvC, eAAc, YAAy, KAAM, OAAIB, CAAd, C; MAA+C, wB; MAA/C, OUrB5D, S; K; 4FVuBX, yB; MAAA, wE; MAA  
A, mB; QAK8D, 2B; O; KAL9D, C; IAOA, 8B; MAU+E, OAAAM, QAAN, KAAM, EAAM, qBAAc, YAAy, KAAM, OAAI  
B, CAAd, CAAN, C; K; sFAERf, yB; MchBA, wE; MdgBA, gC; QcZiC, gBAAtB, oB; Qd8BiB, aU7DxB, W; QV6DA, OU5  
DO, SI8B2C, Q; O; KdYtD, C; uFA0BA, yB; McnCA, uE; MdmCA, 0C; Qc/ByC, gBAA9B, mBdqDiB, QcrDjB, C; QdqD2B  
, aU3FIC, W; QV2FA, OU1FO, SIqCmD, Q; O; Kd+B9D, C; 4FAoCA, qB; MAK+D, QAAC, mB; K; kGAehE, qB; MAWI, O  
AAO, qBAAgB, mB; K; sFAG3B, yB; MAAA, oD; MAAA, 4B; QAM2D, uCAAQ, U; O; KANnE, C; sFAQA, mC; MASi, O  
AAI, mBAAJ, GAAe, cAAf, GAAMC, S; K; yFAEvC, yB; MAyBA, kC; MAAA, 8B; MAzBA, iC; QAgCiC, Q; QAxB2E, O  
AwBxD, CAAnB, wDAAMb, oBAxBoE, GAwBpE, C; O; KAhCpD, C; +EAUA, yB; MAAA, kC; MAAA, 8B; MAAA, iC;



QAKiC,Q;QAA7B,OAAgD,CAAnB,wDAAmB,YAAI,GAAJ,C;O;KALpD,C;+EAOA,iC;MAKI,sBAAI,GAAJ,EAAS,KAAT,C;K;4FAGJ,yB;MAAA,kC;MAAA,8B;MAAA,iC;QAOiC,Q;QAA7B,OAAgD,CAAnB,wDAAmB,oBAAAY,GAAZ,C;O;KAPpD,C;gGASA,4B;MASsG,OAAA,SAAK,qBAAC,KAAd,C;K;kFAG3G,yB;MAAA,gD;MAAA,8B;MAAA,iC;QASiC,Q;QAA7B,OAAuD,CAA1B,+DAA0B,eAAO,GAAP,C;O;KAT3D,C;6FAWA,qB;MAWoE,oB;K;6FAEpE,qB;MAWoE,sB;K;kFAEpE,yB;MAAA,6B;MAAA,4B;QAIgE,qBAAK,aAAL,EAAU,eAAV,C;O;KAJhE,C;2FAMA,wC;MAMiF,Q;MAAA,mCAAI,GAAJ,oBAAAY,c;K;uGAG7F,yB;MAAA,gB;MAAA,8B;MAAA,+C;QAMe,Q;QALX,YAAAY,oBAAI,GAAJ,C;QACZ,IAAI,iBAAiB,CAAC,4BAAAY,GAAZ,CAAtB,C;UACI,OA AO,c;;UAGP,OAAO,sE;;O;KANf,C;IAUA,oC;MAUkD,uCAAqB,GAARb,C;K;sFAEID,wC;MAUW,Q;MADP,YA AY,oBAAI,GAAJ,C;MACL,IAAI,aAAJ,C;QACH,aAAa,c;QACb,sBAAI,GAAJ,EAAS,MAAT,C;QACA,a;;QAEA ,Y;;MALJ,W;K;wFASJ,qB;MAMwF,OAAA,iBAAQ,W;K;wFAEHg,qB;MAMgH,OAAA,iBAAQ,W;K;4FAExH,6 C;Maq1BoB,Q;MAAA,Obh1BT,iBag1BS,W;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;Qbh1Ba,Wai1Bb,aAAgB,O bj1Be,Iai1B/B,Ebj1BsC,Sai1BZ,CAAE,OAAf,CAA1B,C;;Mbj1BhB,OAA6B,W;K;wFAGjC,6C;Ma60BoB,Q;MAA A,Obr0BT,iBaq0BS,W;MAAhB,OAAgB,cAAhB,C;QAAgB,yB;Qbr0Ba,Was0Bb,abt0B0B,Sas0BtB,CAAY,OAAZ ,CAAJ,EAAYC,Obt0BC,Mas0B1C,C;;Mbt0BhB,OAA6B,W;K;IAGjC,kC;MAIyB,Q;MAArB,wBAAqB,KAARb,g B;QAAqB,aAAA,KAARb,M;QAAK,IAAC,yBAAD,EAAM,2B;QACP,sBAAI,GAAJ,EAAS,KAAT,C;;K;IAIR,oC; MAIyB,Q;MAAA,uB;MAArB,OAAqB,cAArB,C;QAAqB,wB;QAAhB,IAAC,yBAAD,EAAM,2B;QACP,sBAAI, GAAJ,EAAS,KAAT,C;;K;IAIR,oC;MAIyB,Q;MAAA,uB;MAArB,OAAqB,cAArB,C;QAAqB,wB;QAAhB,IAAC, yBAAD,EAAM,2B;QACP,sBAAI,GAAJ,EAAS,KAAT,C;;K;wFAIR,yB;MAAA,0D;MAAA,uE;MAAA,uC;QAS W,kBAAy,mBAAoB,YAAy,cAAZ,CAApB,C;Qa8xBH,Q;QAAA,Obh1BT,iBag1BS,W;QAAhB,OAAgB,cAAhB, C;UAAgB,yB;Ubh1Ba,Wai1Bb,aAAgB,Obj1Be,Iai1B/B,Eb/xB2C,Sa+xBjB,CAAE,OAAf,CAA1B,C;;Qb/xBhB,O AID6B,W;O;KAYCjC,C;oFAYAY,yB;MAAA,0D;MAAA,uE;MAAA,uC;QAYW,kBAAU,mBAAoB,YAAy,cAAZ, CAApB,C;Qa+wBD,Q;QAAA,Obr0BT,iBaq0BS,W;QAAhB,OAAgB,cAAhB,C;UAAgB,yB;Ubr0Ba,Was0Bb,abh xByC,SagxBrc,CAAY,OAAZ,CAAJ,EAAYC,Obt0BC,Mas0B1C,C;;QbhxBhB,OAtD6B,W;O;KA0CjC,C;0FAeA,y B;MAAA,wE;MAAA,uC;QAQkB,Q;QADd,aAAa,oB;QACC,OAAA,SA3FsE,QAAQ,W;QA2F5F,OAAc,cAAAd,C; UAAc,uB;UACV,IAAI,UAAU,KAAM,IAAhB,CAAJ,C;YACI,MAAO,aAAI,KAAM,IAAV,EA Ae,KAAM,MAAr B,C;;QAGf,OAAO,M;O;KAbX,C;8FAGBA,yB;MAAA,wE;MAAA,uC;QAQkB,Q;QADd,aAAa,oB;QACC,OAAA, SA3GsE,QAAQ,W;QA2G5F,OAAc,cAAAd,C;UAAc,uB;UACV,IAAI,UAAU,KAAM,MAAhB,CAAJ,C;YACI,MA AO,aAAI,KAAM,IAAV,EA Ae,KAAM,MAArB,C;;QAGf,OAAO,M;O;KAbX,C;yFAiBA,6C;MAOoB,Q;MAAA, OAAA,SA3HoE,QAAQ,W;MA2H5F,OAAgB,cAAhB,C;QAAgB,yB;QACZ,IAAI,UAAU,OAAV,CAAJ,C;UACI, WAAY,aAAI,OAAQ,IAAZ,EAAiB,OAAQ,MAAzB,C;;MAGpB,OAAO,W;K;qFAGX,yB;MAAA,wE;MAAA,uC; QAOw,kBAAS,oB;QAFa,Q;QAAA,OA3HoE,iBAAQ,W;QA2H5F,OAAgB,cAAhB,C;UAAgB,yB;UACZ,IAcmC, SAd/B,CAAU,OAAV,CAAJ,C;YACI,WAAY,aAAI,OAAQ,IAAZ,EAAiB,OAAQ,MAAzB,C;;QAapB,OAVO,W; O;KAGX,C;+FAUA,6C;MAOoB,Q;MAAA,OAAA,SAPJoE,QAAQ,W;MAoJ5F,OAAgB,cAAhB,C;QAAgB,yB;Q ACZ,IAAI,CAAC,UAAU,OAAV,CAAL,C;UACI,WAAY,aAAI,OAAQ,IAAZ,EAAiB,OAAQ,MAAzB,C;;MAGp B,OAAO,W;K;2FAGX,yB;MAAA,wE;MAAA,uC;QAOw,kBAAy,oB;QAFh,Q;QAAA,OAPOJoE,iBAAQ,W;QAoJ 5F,OAAgB,cAAhB,C;UAAgB,yB;UACZ,IAAI,CAckC,SAdjC,CAAU,OAAV,CAAL,C;YACI,WAAY,aAAI,OAA Q,IAAZ,EAAiB,OAAQ,MAAzB,C;;QAapB,OAVO,W;O;KAGX,C;IAUA,0B;MAQqB,IAAN,I;MADX,IAAI,oCA AJ,C;QACW,QAAM,cAAN,C;eACH,C;YAAK,iB;YAAL,K;eACA,C;YAAK,aAAU,8BAAJ,GAaKB,sBAAK,CA AL,CAAIB,GAA+B,oBAAW,OAAd,C;YAAL,K;kBACQ,0BAAM,qBAAoB,YAAy,cAAZ,CAApB,CAAN,C;Y AHL,K;;QAAP,W;OAMJ,OAAoC,oBAA7B,mBAAM,oBAAN,CAA6B,C;K;IAGxC,yC;MAIwB,SAApB,WAAoB ,Y;MAApB,kB;K;IAEJ,4B;MAM6D,QAAM,gBAAN,C;aAcZD,C;UADyD,OACpD,U;aACL,C;UAFyD,OAEPD, MAAM,UAAK,CAAL,CAAN,C;gBAFoD,OAGjD,mBAAM,qBAAoB,YAAy,gBAAZ,CAApB,CAAN,C;;K;IAG Z,yC;MAIwB,OAAPB,WAAoB,Y;MAApB,kB;K;IAEJ,4B;MAM4D,OAA6B,oBAA7B,mBAAM,oBAAN,CAA6B ,C;K;IAEzF,yC;MAIwB,SAApB,WAAoB,Y;MAApB,kB;K;IAEJ,4B;MAMqD,QAAM,cAAN,C;aACjD,C;UADiD ,OAC5C,U;aACL,C;UAFiD,OC/X8B,uB;gBd+X9B,OAGzC,uB;;K;IAGZ,iC;MAMmE,4BAAC,SAAd,C;K;IAEnE, yC;MAKI,WAAoB,0B;MAApB,kB;K;IAEJ,kC;MAOI,Q;MAAA,IAAI,SAAK,UAAT,C;QAAA,OAAoB,MAAM,I AAN,C;;QAAqC,kBAAPB,qBAAC,SAAd,C;QAA4B,wBAAS,UAAT,EAaqB,WAArB,C;QAAjE,OUhiBO,W;;M VgiBP,W;K;IAEJ,mC;MAOI,Q;MAAA,IAAI,SAAK,UAAT,C;QAAA,OAA0B,MAAN,KAAM,C;;QAAiC,kBAAP

B,qBAAc,SAAd,C;QAA4B,4B;QAAAnE,OUziBO,W;;MVyiBP,W;K;IAEJ,mC;MAOI,Q;MAAA,IAAI,SAAK,UAA  
T,C;QAAA,OAA0B,QAAN,KAAM,C;;QAAiC,kBAAPB,qBAAc,SAAd,C;QAA4B,0B;QAAAnE,OUljBO,W;;MVkj  
BP,W;K;IAEJ,mC;MAOWB,kBAAPB,qBAAc,SAAd,C;MAA4B,4B;MAA5B,OAA4C,oBU3jBrC,WV2jBqC,C;K;I  
AEhD,iC;MAOWB,kBAAPB,qBAAc,SAAd,C;MAA4B,+B;MAA5B,OUpkBO,W;K;0FVukBX,2B;MAKI,sBAAI,I  
AAK,MAAT,EAAgB,IAAK,OAArB,C;K;4FAGJ,yB;MAAA,gD;MAAA,mC;QAKI,kBAAO,KAAP,C;O;KALJ,C;  
4FAQA,yB;MAAA,gD;MAAA,mC;QAKI,kBAAO,KAAP,C;O;KALJ,C;4FAQA,yB;MAAA,gD;MAAA,mC;QAK  
I,kBAAO,KAAP,C;O;KALJ,C;4FAQA,0B;MAKI,yBAAO,GAAP,C;K;IAGJ,kC;MAOWB,kBAAf,aAAL,SAAK,C;  
MAsCL,6B;MAAtCA,OAA+C,oBUtnBxC,WVsnBwC,C;K;IAEnD,mC;MAQwB,kBAAf,aAAL,SAAK,C;MAqCK,  
YAAL,gBAAK,O;MArCV,OAAgD,oBUhoBzC,WVgoByC,C;K;IAEpD,mC;MAQwB,kBAAf,aAAL,SAAK,C;MA  
oCK,YAAL,gBAAK,O;MApCV,OAAgD,oBU1oBzC,WV0oByC,C;K;IAEpD,mC;MAQwB,kBAAf,aAAL,SAAK,  
C;MAMCK,YAAL,gBAAK,O;MANCV,OAAgD,oBUppBzC,WVopByC,C;K;4FAEpD,0B;MAMI,uBAAO,GAAP,  
C;K;8FAGJ,yB;MAAA,sD;MAAA,kC;QAMc,UAAV,SAAK,KAAK,EAAU,IAAV,C;O;KANd,C;8FASA,yB;MA  
AA,sD;MAAA,kC;QAMc,UAAV,SAAK,KAAK,EAAU,IAAV,C;O;KANd,C;8FASA,yB;MAAA,sD;MAAA,kC;Q  
AMc,UAAV,SAAK,KAAK,EAAU,IAAV,C;O;KANd,C;IAUA,wC;MACsD,QAAM,cAAN,C;aACID,C;UADkD,O  
AC7C,U;aACL,C;UAFkD,gB;gBAAA,OAG1C,S;;K;oF4KtwBZ,yB;MAAA,8D;MAAA,8B;MAAA,qC;QAUIC,Q;  
QAA7B,OAA2D,CAA9B,sEAA8B,eAAO,OAAP,C;O;KAV/D,C;wFAYA,yB;MAAA,8D;MAAA,8B;MAAA,sC;  
QASiC,Q;QAA7B,OAA2D,CAA9B,sEAA8B,oBAAU,QAAV,C;O;KAT/D,C;wFAWA,yB;MAAA,8D;MAAA,8B;  
MAAA,sC;QASiC,Q;QAA7B,OAA2D,CAA9B,sEAA8B,oBAAU,QAAV,C;O;KAT/D,C;4FAWA,8B;MAKI,SAA  
K,WAAI,OAAJ,C;K;4FAGT,yB;MAAA,gD;MAAA,sC;QAKS,OAAL,SAAK,EAAO,QAAP,C;O;KALT,C;4FAQ  
A,yB;MAAA,gD;MAAA,sC;QAKS,OAAL,SAAK,EAAO,QAAP,C;O;KALT,C;4FAQA,yB;MAAA,gD;MAAA,sC  
;QAKS,OAAL,SAAK,EAAO,QAAP,C;O;KALT,C;8FAQA,8B;MAKI,SAAK,cAAO,OAAP,C;K;8FAGT,yB;MAA  
A,sD;MAAA,sC;QAKS,UAAL,SAAK,EAAU,QAAV,C;O;KALT,C;8FAQA,yB;MAAA,sD;MAAA,sC;QAKS,UA  
AL,SAAK,EAAU,QAAV,C;O;KALT,C;8FAQA,yB;MAAA,sD;MAAA,sC;QAKS,UAAL,SAAK,EAAU,QAAV,C  
;O;KALT,C;IAQA,qC;MAIU,IAIe,I;MAHjB,kBADE,QACF,c;QAAiB,OAAO,yBAAO,QAAP,C;;QAEpB,aAAsB,  
K;QACT,0B;QAAb,OAAa,cAAb,C;UAAa,sB;UACT,IAAI,oBAAL,IAAJ,CAAJ,C;YAAe,SAAS,I;;QAC5B,OAAO  
,M;;K;IAKnB,uC;MAKiB,Q;MADb,aAAsB,K;MACT,0B;MAAb,OAAa,cAAb,C;QAAa,sB;QACT,IAAI,oBAAL,I  
AAJ,CAAJ,C;UAAe,SAAS,I;;MAE5B,OAAO,M;K;IAGX,uC;MAII,OAAO,yBAAGB,OAAT,QAAS,CAAhB,C;K;  
IAGX,0C;MAIW,iBAAmB,gCAAT,QAAS,EAAgC,SAAhC,C;MAIHG,Q;MAKH7B,OAIH2D,CAA9B,sEAA8B,o  
BAAU,UAAV,C;K;IAqH/D,0C;MAII,UAAmB,8BAAT,QAAS,C;MACnB,O7K0EwD,C6K1EjD,G7K0EkD,U6K1  
EID,IAAoB,4BAAU,GAAV,C;K;IAG/B,0C;MAII,OnLqoPO,EmLroPA,QnL6jPA,YAAQ,CAwER,CmLroPA,IAA  
yB,4BAAmB,8BAAT,QAAS,CAAnB,C;K;IAGpC,0C;MAIW,iBAAmB,gCAAT,QAAS,EAAgC,SAAhC,C;MA7H  
G,Q;MA6H7B,OA7H2D,CAA9B,sEAA8B,oBAAU,UAAV,C;K;IAG/D,0C;MAII,InLunPO,EmLvnPH,QnL+iPG,  
YAAQ,CAwER,CmLvnPP,C;QACI,OAAO,4BAAmB,8BAAT,QAAS,CAAnB,C;;QAEp,OAAO,wB;K;IAGf,0C;  
MAII,UAAmB,8BAAT,QAAS,C;MACnB,I7K0CwD,C6K1CpD,G7K0CqD,U6K1CzD,C;QACI,OAAO,4BAAU,G  
AAV,C;;QAEp,OAAO,wB;K;IAGf,kC;MACI,a7KmCwD,CAAC,mB;M6K1CzD,iB;MACA,OAAO,M;K;IAIX,2C;  
MAKkF,gCAAc,SAAd,EAAyB,IAAzB,C;K;IAEIF,2C;MAKkF,gCAAc,SAAd,EAAyB,KAAzB,C;K;IAEIF,sE;MA  
CI,iBAAa,KAAb,C;MIKIjB,kBkKmJX,oB;MACD,OAAO,qBAAP,C;QACI,IAAI,UAAU,kBAAV,6BAAJ,C;UA  
CI,oB;UACA,WAAS,I;SAGrB,OAAO,Q;K;oFAIX,4B;MAM6D,kCAAS,KAAT,C;K;IAE7D,gC;MAKiD,IAAI,m  
BAAJ,C;QAAe,MAAM,2BAAuB,gBAAvB,C;;QAArB,OAAmE,2BAAS,CAAT,C;K;IAEpH,sC;MAKwD,OAAI,  
mBAAJ,GAAe,IAAf,GAAyB,2BAAS,CAAT,C;K;IAEjF,+B;MAKgD,IAAI,mBAAJ,C;QAAe,MAAM,2BAAuB,g  
BAAvB,C;;QAArB,OAAmE,2BAAS,2BAAT,C;K;IAEnH,qC;MAKuD,OAAI,mBAAJ,GAAe,IAAf,GAAyB,2BA  
AS,2BAAT,C;K;IAEHf,2C;MAK8E,kCAAc,SAAd,EAAyB,IAAzB,C;K;IAE9E,2C;MAK8E,kCAAc,SAAd,EAAy  
B,KAAzB,C;K;IAE9E,wE;MAEgB,UAGS,MAHT,EAcY,MAZ,EA6B,M;MAfzC,IAAI,uCAAJ,C;QACI,OAAO  
C,cAA5B,sEAA4B,EAAc,SAAd,EAAyB,uBAAzB,C;MAExC,iBAAsB,C;MACD,oC;MAArB,qBAAKB,CAAlB,m  
C;QACI,cAAc,sBAAK,SAAL,C;QACd,IAAI,UAAU,OAAV,MAAsB,uBAAIB,C;UACI,Q;QAEJ,IAAI,eAAc,SA  
AlB,C;UACI,sBAAK,UAAAL,EAAmB,OAAmB,C;QAEJ,+B;;MAEJ,IAAI,aAAa,cAAjB,C;QACwB,oC;QAAiB,mB  
;QAArC,oE;UACI,2BAAS,WAAT,C;QAEJ,OAAO,I;;QAEp,OAAO,K;;K;IChS+B,wC;MAAkC,uB;MAAjC,0B;K;  
4FACpB,Y;MAAQ,OAAA,eAAS,K;K;iDACxC,iB;MAAkC,mCAAS,0BAAoB,KAApB,CAAT,C;K;;IAGT,gC;M

AAyC,8B;MAAxC,0B;K;oFACH,Y;MAAQ,OAAA,eAAS,K;K;yCACxC,iB;MAAkC,mCAAS,0BAAoB,KAApB,CAAT,C;K;mCAEIC,Y;MAAuB,eAAS,Q;K;8CACHc,iB;MAAuC,OAAA,eAAS,kBAAS,0BAAoB,KAApB,CAAT,C;K;yCAEHd,0B;MAA8C,OAAA,eAAS,aAAI,0BAAoB,KAApB,CAAJ,EAAGC,OAAhC,C;K;yCACvD,0B;MACI,eAAS,aAAI,2BAAqB,KAArB,CAAJ,EAAiC,OAAjC,C;K;;IAIjB,+C;MACoB,Q;MAAA,kC;MAAhB,IAAa,CAAT,0BAAJ,C;QAAA,OAA2B,8BAA Y,KAAZ,I;;QAAuB,MAAM,8BAA0B,mBAAgB,KAAhB,2BAA0C,gBAAG,2BAAH,CAA1C,OAA1B,C;K;IAE5D,gD;MACoB,Q;MAAA,qB;MAAhB,IAAa,CAAT,0BAAJ,C;QAAA,OAA5B,iBAAO,KAAP,I;;QAAkB,MAAM,8BAA0B,oBAAiB,KAAjB,2BAA2C,gBAAG,cAAH,CAA3C,OAA1B,C;K;IAGID,+B;MAK+C,gCAAqB,SAArB,C;K;IAE/C,iC;MAM6D,wBAAa,SAAb,C;K;;;IvKpC7D,oD;MAQuF,wC;K;IARvF,8CASI,Y;MAAuC,8B;K;IAT3C,gF;IwKY8G,wC;MAAA,mB;QAAE,kBAAS,aAAT,C;O;K;IAThH,yB;MASqG,oCAAS,sBAAT,C;K;8FAErG,yB;MAAA,kD;MxKdA,kC;MAAA,0C;MAAA,kD;QAQuF,wC;O;MARvF,4CASI,Y;QAAuC,8B;O;MAT3C,8E;MwKiB2I,qD;QAAA,mB;UAAE,gBAAS,qBAAT,C;S;O;MAH7I,gC;QAGkI,kCAAS,mCAAT,C;O;KAHII,C;IAKA,2B;MAQI,eAAe,6B;MACf,oBAA0B,+BAAN,KAAM,EAAwC,QAAXC,EAA+D,QAA/D,C;MAC1B,OAAO,Q;K;8FAGX,yB;MAAA,kD;MAAA,gC;QAGkI,gBAAS,aAAT,C;O;KAHII,C;IAGB0C,yB;K;+CAoBtC,kC;MAOI,IAAI,uCAA0B,QAAS,UAAvC,C;QAAkD,M;MACID,OAAO,sBAAS,QAAS,WAAIB,e;K;+CAGX,kC;MAQqD,6BAAS,QAAS,WAAIB,e;K;;;IAezD,mC;MAA2C,wB;MACvC,eAAoB,C;MACpB,mBAA4B,I;MAC5B,sBAAyC,I;MACzC,gBAAoC,I;K;gDAEpC,Y;MACI,OAAO,IAAP,C;QACI,QAAM,YAAN,C;eACI,C;YAAA,K;eACA,C;YACI,IAAI,kCAAe,UAAAnB,C;cACI,eAAQ,C;cACR,OAAO,I;;cAEP,sBAAe,I;;;YALvB,K;eAOA,C;YAAc,OAAO,K;eACrB,C;eAAA,C;YAAgC,OAAO,I;kBAC/B,MAAM,yB;;QAGIB,eAAQ,C;QACR,WAAW,4B;QACX,gBAAW,I;QACX,IxH/FR,oBDgDQ,WyH+CY,kBzH/CZ,CChDR,C;;K;6CwHmGA,Y;MACU,IASe,I;MATrB,QAAM,YAAN,C;aACI,C;aAAA,C;UAAsC,OAAO,qB;aAC7C,C;UACI,eAAQ,C;UACR,OAAO,kCAAe,O;aAE1B,C;UACI,eAAQ,C;UACR,aACa,mF;UACb,mBAA Y,I;UACZ,OAAO,M;gBAEH,MAAM,yB;;K;uDAItB,Y;MACI,IAAI,CAAC,cAAL,C;QAAGB,MAAM,6B;;QAA8B,OAAO,W;K;2DAG/D,Y;MAA4C,QAAM,YAAN,C;aACx C,C;UADwC,OAC1B,6B;aACd,C;UAFwC,OAExB,6BAAsB,sBAAtB,C;gBAFwB,OAGhC,6BAAsB,uCAAoC,YAA1D,C;;K;IAOqC,4E;MAAA,oB;QACzC,wCAAW,C;QAAX,OACA,yB;O;K;oDALR,+B;MACI,mBAA Y,K;MACZ,eAAQ,C;MACR,OAA6C,0CAA tC,c;K;IAUsC,+E;MAAA,oB;QACzC,wCAAW,C;QAAX,OACA,yB;O;K;yDANR,kC;MACI,IAAI,CAAC,QAAS,UAA d,C;QAAYB,M;MACzB,sBAAe,Q;MACf,eAAQ,C;MACR,OAA6C,6CAAtC,c;K;2DAMX,kB;MzHjBO,Q;MADP,eyHoBI,MzHpBJ,C;MACO,QyHmBH,MzHnBG,+D;MyHoBH,eAAQ,C;K;kGAIR,Y;MAAQ,0C;K;;IxK1LhB,oD;MAQuF,wC;K;IARvF,8CASI,Y;MAAuC,8B;K;IAT3C,gF;sFAAA,yB;MAAA,kC;MAAA,0C;MAAA,kD;QAQuF,wC;O;MARvF,4CASI,Y;QAAuC,8B;O;MAT3C,8E;MAAA,2B;QAQuF,2C;O;KARvF,C;IAiBgE,+C;MAAA,mB;QAAE,sB;O;K;IALIE,kC;MAKuD,OAAkB,2CAAT,+BAAS,E;K;IAEzE,8B;MAK6D,OAAI,Qb2rPtD,YAAQ,Ca3rP0C,GAAwB,eAAxB,GAAsD,WAA T,QAAS,C;K;IAEnH,yB;MAG8C,kC;K;IAE9C,yB;MAAA,6B;K;uCACI,Y;MAA6C,kC;K;2CAC7C,a;MAA4B,kC;K;2CAC5B,a;MAA4B,kC;K;;IAHhC,qC;MAAA,oC;QAAA,mB;OAAA,6B;K;oFAMA,yB;MAAA,2D;MAAA,4B;QAM4D,uCAAQ,e;O;KANpE,C;IAGB4F,mH;MAAA,wC;MAAA,6B;MAAA,yB;MAAA,wC;MAAA,wD;MAAA,kC;K;;;kDAAA,Y;;;cACxF,eAAe,uBAAa,W;cAC5B,IAAI,QAAS,UAAb,C;gBACI,gB;gCAAA,sCAAS,QAAT,O;oBAAA,2C;yBAAA,yB;gBAAA,Q;;gBAEA,gB;gCAAA,sCAAS,iCAAT,O;oBAAA,2C;yBAAA,yB;gBAAA,Q;;;cAJJ,W;;cAAA,W;;;K;IADwF,gE;MAAA,yD;uBAAA,uG;YAAA,S;iBAAA,Q;;iBAAA,uB;O;K;IAP5F,4C;MAOmF,gBAAS,uCAAT,C;K;IAGBb,4B;MAAE,OAAA,EAAG,W;K;IAP3E,8B;MAO8D,4BAAQ,cAAR,C;K;IAUQ,8B;MAAE,OAAA,EAAG,W;K;IAR3E,8B;MAQ8D,4BAAQ,gBAAR,C;K;IAM1B,8B;MAAE,S;K;IAJtC,wC;MAEGb,Q;MADZ,IAAI,8CAAJ,C;QACI,OAA4C,CAAPC,2EAAoC,kBAAQ,QAAR,C;OAEhD,OAAO,uBAAmB,SAAnB,EAAyB,gBAAzB,EAAiC,QAAjC,C;K;IAGX,4B;MAYiB,Q;MAFb,YAA Y,gB;MACZ,YAA Y,gB;MACC,2B;MAAb,OAAa,cAAb,C;QAAa,sB;QACT,KAAM,WAAI,IAAK,MAAT,C;QACN,KAAM,WAAI,IAAK,OAAT,C;;MAEV,OAAO,UAA S,KAAT,C;K;IAGX,+B;MAQqD,6BAAS,4BAAT,C;K;IAW0B,+G;MAAA,wC;MAAA,6B;MAAA,yB;MAAA,0C;MAAA,4C;MAAA,0B;MAAA,kC;K;;;mDAAA,Y;;;kCAC9D,0C;cACb,gB;;;cAAA,IAAO,iBPyFkD,UOzFzD,C;gBAAA,gB;;;cACI,QAAQ,yBAAO,iBAAQ,iBAAO,KAAf,C;cACf,WAAkB,WAAP,iBAAO,C;cACIB,YAAgB,IAAI,iBAAO,KAAf,GAAqB,iBAAO,aAAI,CAAJ,EAAO,IAAP,CAA5B,GAA8C,I;cAC1D,gB;8BAAA,iCAAM,KAAN,O;kBAAA,2C;uBAAA,yB;cAAA,Q;;cAJJ,gB;;cAMJ,W;;;K;IAR+E,4D;MAAA,yD;uBAAA,mG;YAAA,S;iBAAA,Q;;iBAAA,uB;O;K;IAT/E,uC;MASmE,gBAA Y,kCAAZ,C;K;IAkBhC,0D;MAE/B,w

B;QAAA,WAAgC,I;MADhC,0B;MACA,0B;MACA,4B;K;IAGuC,0E;MAAA,oD;MACnC,gBA Ae,iCAAS,W;MA CxB,iBA AqB,E;MACrB,gBA AmB,I;K;oEAEnB,Y;MACI,OAAO,aAAS,UAAhB,C;QACI,WAAW,aAAS,O;QAC pB,IAAI,wCAAU,IAAV,MAAmB,sCAA vB,C;UACI,gBA AW,I;UACX,iBAAY,C;UACZ,M;;MAGR,iBAAY,C;K; 8DAGhB,Y;MASW,Q;MARP,IAAI,mBAAa,EAAjB,C;QACI,iB;MACJ,IAAI,mBAAa,CAAjB,C;QACI,MAAM,6 B;MACV,aAAa,a;MACb,gBA AW,I;MACX,iBAAY,E;MAEZ,OAAO,yE;K;iEAGX,Y;MACI,IAAI,mBAAa,EAAj B,C;QACI,iB;MACJ,OAAO,mBAAa,C;K;;2CAhC5B,Y;MAAuC,yD;K;;IA2C3C,qD;MAAY,0B;MAAmC,gC;K;I ACJ,gF;MAAA,0D;MACnC,gBA Ae,oCAAS,W;K;iEACxB,Y;MACI,OAAO,6CAA Y,aAAS,OAArB,C;K;oEAGX, Y;MACI,OAAO,aAAS,U;K;;8CAPxB,Y;MAAuC,4D;K;qDAWvC,oB;MACI,OAAO,uBAA4B,eAA5B,EAA5C,kB AA tC,EAAmD,QAA nD,C;K;;IAUf,4D;MAAY,0B;MAAmC,gC;K;IACJ,8F;MAAA,wE;MACnC,gBA Ae,2CAAS, W;MACxB,aAAY,C;K;wEACZ,Y;MAC0C,Q;MAAtC,OAAO,oDAAY,oBA AmB,iBA AnB,EAAmB,yBA AnB,QA AZ,EAAyC,aAAS,OAAID,C;K;2EAGX,Y;MACI,OAAO,aAAS,U;K;;qDARxB,Y;MAAuC,mE;K;;IAkB3C,oC;M AAY,0B;K;IAC6C,wE;MACjD,gBA Ae,gCAAS,W;MACxB,aAAY,C;K;6DACZ,Y;MAC2C,Q;MAAvC,OAAO,iB AAa,oBA AmB,iBA AnB,EAAmB,yBA AnB,QAAb,EAA0C,aAAS,OAA nD,C;K;gEAGX,Y;MACI,OAAO,aAAS,U ;K;;0CARxB,Y;MAAqD,wD;K;;IAmBzD,0D;MACI,4B;MACA,4B;MACA,4B;K;IAEuC,sE;MAAA,gD;MACnC,i BAAgB,gCAAU,W;MAC1B,iBA AgB,gCAAU,W;K;4DAC1B,Y;MACI,OAAO,sCAAU,cAAU,OAApB,EAA4B,c AAU,OAA tC,C;K;+DAGX,Y;MACI,OAAO,cAAU,UAAV,IAAuB,cAAU,U;K;;yCARhD,Y;MAAuC,uD;K;;IAC3 C,6D;MACI,0B;MACA,gC;MACA,0B;K;IAEuC,4E;MAAA,sD;MACnC,gBA Ae,kCAAS,W;MACxB,oBAAiC,I;K ;+DAEjC,Y;MACI,IAAI,CAAC,2BAAL,C;QACI,MAAM,6B;MACV,OAAO,gCA Ae,O;K;kEAG1B,Y;MACI,OA AO,2B;K;+EAGX,Y;MACQ,Q;MAAJ,IAAI,iEAA2B,KAA/B,C;QACI,oBA Ae,I;MAEnB,OAAO,yBA AP,C;QACI ,IAAI,CAAC,aAAS,UAA d,C;UACI,OAAO,K;;UAEP,cAAc,aAAS,O;UACvB,uBA AuB,wCAAS,2CAA Y,OAAZ, CAAT,C;UACvB,IAAI,gBA AiB,UAArB,C;YACI,oBA Ae,gB;YACf,OAAO,I;;MAInB,OAAO,I;K;;4CA9Bf,Y;M A AuC,0D;K;;IAoC9B,6I;MAAA,wC;MAAA,6B;MAAA,yB;MAAA,4C;MAAA,kD;MAAA,gD;MAAA,wB;MAA A,yB;MAAA,kC;K;;yDAAA,Y;;kBA GyC,I;CAFIC,C;cACI,sD;cAAhB,gB;;cAAA,KAAgB,yBA AhB,C;gBA AA,gB;;cAAgB,oC;cACZ,aAAa,6BA AU,oBA AmB,uBA AnB,EAAmB,+BA AnB,QAAV,EAAuC,OAAvC,C;cAC b,gB;8BAAA,sCAAS,4BAAS,MAAT,CAAT,O;kBAAA,2C;uBAAA,yB;cAAA,Q;cAFJ,gB;;cAIJ,W;;K;I ANS,0F;MAAA,yD;uBAAA,ii;YAAA,S;iBAAA,Q;;iBAAA,uB;O;K;IADb,wD;MACI,gBAAS,kDAAT,C;K;;IAo ByB,qD;MACzB,0B;MACA,8B;MACA,0B;MC3TA,IAAI,ED+TQ,qBA Ac,CC/TtB,CAAJ,C;QACI,cD8T2B,+CA A4C,iB;QC7TvE,MAAM,gCAAyB,OAAQ,WAAjC,C;OAFV,IAAI,EDgUQ,mBAAY,CChUpB,CAAJ,C;QACI,gB D+TyB,6CAA0C,e;QC9TnE,MAAM,gCAAyB,SAAQ,WAAjC,C;OAFV,IAAI,EDiUQ,mBAAY,iBCjUpB,CAAJ, C;QACI,gBDgUkC,0DAAuD,eAAvD,WAAmE,iB;QC/TrG,MAAM,gCAAyB,SAAQ,WAAjC,C;Q;SFDkUa,Y;MA AQ,yBA AW,iBA AX,I;K;yCAE/B,a;MAAYC,OAAI,KAAK,YAAT,GAAGB,eAAhB,GAAqC,gBAAY,eAAZ,EAA5 B,oBAAa,CAAb,IAAtB,EAA5C,eAA tC,C;K;yCAC9E,a;MAAYC,OAAI,KAAK,YAAT,GAAGB,IAAhB,GAA0B,g BAAY,eAAZ,EAA5B,iBA AtB,EAAkC,oBAAa,CAAb,IAAIC,C;K;IAEzC,8D;MAAA,wC;MAEtB,gBA Ae,2BAAS ,W;MACxB,gBA Ae,C;K;0DAEf,Y;MAEI,OAAO,gBA AW,kCAAX,IAAYB,aAAS,UAAzC,C;QACI,aAAS,O;QAC T,qC;;K;2DAIR,Y;MACI,a;MACA,OAAQ,gBA AW,gCAAZ,IAAYB,aAAS,U;K;wDAG7C,Y;MACI,a;MACA,IA AI,iBAAY,gCAAhB,C;QACI,MAAM,6B;MACV,qC;MACA,OAAO,aAAS,O;K;;qCAvBxB,Y;MAA0B,mD;K;;IA gCA,uC;MAC1B,0B;MACA,oB;MC3WA,IAAI,ED+WQ,gBAAS,CC/WjB,CAAJ,C;QACI,cD8WsB,yCAAsC,YA AtC,M;QC7WtB,MAAM,gCAAyB,OAAQ,WAAjC,C;Q;0CDgXV,a;MAAYC,OAAI,KAAK,YAAT,GAAGB,eAAh B,GAAqC,gBAAY,eAAZ,EAA5B,CAAtB,EAAyB,YAAzB,C;K;0CAC9E,a;MAAYC,OAAI,KAAK,YAAT,GAAG B,IAAhB,GAA0B,iBA Aa,eAAb,EAAuB,CAAvB,C;K;IAE5B,gE;MACnC,YAAW,yB;MACX,gBA Ae,4BAAS,W; K;yDAExB,Y;MACI,IAAI,cAAQ,CAAZ,C;QACI,MAAM,6B;MACV,6B;MACA,OAAO,aAAS,O;K;4DAGpB,Y; MACI,OAAO,YAAO,CAAP,IAAY,aAAS,U;K;;sCAZpC,Y;MAAuC,oD;K;;IASB3C,gD;MACI,0B;MACA,4B;K;I AEuC,0E;MAAA,oD;MACnC,gBA Ae,iCAAS,W;MACxB,iBA AqB,E;MACrB,gBA AmB,I;K;oEAEnB,Y;MACI,IA AI,aAAS,UAAb,C;QACI,WAAW,aAAS,O;QACpB,IAAI,wCAAU,IAAV,CAAJ,C;UACI,iBAAY,C;UACZ,gBA AW,I;UACX,M;UAGR,iBAAY,C;K;8DAGhB,Y;MAMiB,Q;MALb,IAAI,mBAAa,EAAjB,C;QACI,iB;MACJ,IAA I,mBAAa,CAAjB,C;QACI,MAAM,6B;MACV,aCA,gF;MAGb,gBA AW,I;MACX,iBAAY,E;MACZ,OAAO,M;K; iEAGX,Y;MACI,IAAI,mBAAa,EAAjB,C;QACI,iB;MACJ,OAAO,mBAAa,C;K;;2CAIC5B,Y;MAAuC,yD;K;;IA2 Cb,uC;MAC1B,0B;MACA,oB;MC5bA,IAAI,ED+bQ,gBAAS,CC/bjB,CAAJ,C;QACI,cD8bsB,yCAAsC,YAAtC,M

;QC7btB,MAAM,gCAAYB,OAAQ,WAAjC,C;Q;0CDgcV,a;MItXO,SJsXmC,eAAQ,CAAR,I;MAAD,OAA4B,KA  
AK,CAAT,GAAY,yBAAZ,GAAuC,iBAAa,eAAb,EAAuB,EAAvB,C;K;0CACxG,a;MIvXO,SJuXmC,eAAQ,CAA  
R,I;MAAD,OAA4B,KAAK,CAAT,GAAY,yBAAZ,GAAuC,gBAAY,eAAZ,EAAbB,YAAtB,EAA6B,EAA7B,C;K;  
IAEjE,gE;MACnC,gBAAe,4BAAS,W;MACxB,YAAW,yB;K;2DAEX,Y;MAEI,OAAO,YAAO,CAAP,IAAY,aAA  
S,UAA5B,C;QACI,aAAS,O;QACT,6B;;K;yDAIR,Y;MACI,a;MACA,OAAO,aAAS,O;K;4DAGpB,Y;MACI,a;MA  
CA,OAAO,aAAS,U;K;;sCAnBxB,Y;MAAuC,oD;K;;IA6B3C,gD;MACI,0B;MACA,4B;K;IAGuC,0E;MAAA,oD;  
MACnC,gBAAe,iCAAS,W;MACxB,iBAAqB,E;MACrB,gBAAmB,I;K;gEAEnB,Y;MACI,OAAO,aAAS,UAAhB,  
C;QACI,WAAW,aAAS,O;QACpB,IAAI,CAAC,wCAAU,IAAV,CAAL,C;UACI,gBAAW,I;UACX,iBAAAY,C;UA  
CZ,M;;MAGR,iBAAAY,C;K;8DAGhB,Y;MAMqB,Q;MALjB,IAAI,mBAAa,EAAjB,C;QACI,a;MAEJ,IAAI,mBAA  
a,CAAjB,C;QACI,aACa,gF;QACb,gBAAW,I;QACX,iBAAAY,C;QACZ,OAAO,M;OAEX,OAAO,aAAS,O;K;iEAG  
pB,Y;MACI,IAAI,mBAAa,EAAjB,C;QACI,a;MACJ,OAAO,mBAAa,CAAb,IAAkB,aAAS,U;K;;2CAIC1C,Y;MA  
AuC,yD;K;;IAuCN,+C;MAAC,sB;MAAiC,gC;K;0CACnE,Y;MAAuC,4BAAiB,aAAO,WAAxB,EAAoC,kBAApC  
,C;K;;IAGP,+C;MAAuE,2B;MAAtE,sB;MAAiC,gC;MACIE,kBAAuB,c;K;6CAEvB,Y;MACI,OAAO,aAAO,UAA  
d,C;QACI,WAAW,aAAO,O;QACIB,UAAU,mBAAAY,IAAZ,C;QAEV,IAAI,eAAS,WAAI,GA AJ,CAAb,C;UACI,  
mBAAQ,IAAR,C;UACA,M;;MAIR,W;K;;IAKgC,0D;MAAC,wC;MAAuC,kC;K;IACrC,0E;MAAA,oD;MACnC,g  
BAAmB,I;MACnB,iBAAqB,E;K;oEAErB,Y;MACI,gBAAe,mBAAa,EAAjB,GAAqB,+CAArB,GAA4C,2CAAa,4  
BAAb,C;MACvD,iBAAgB,qBAAJ,GAAsB,CAAtB,GAA6B,C;K;8DAG7C,Y;MAMiB,Q;MALb,IAAI,iBAAAY,CA  
AhB,C;QACI,iB;MAEJ,IAAI,mBAAa,CAAjB,C;QACI,MAAM,6B;MACV,aAAa,8D;MAEb,iBAAAY,E;MACZ,O  
AAO,M;K;iEAGX,Y;MACI,IAAI,iBAAAY,CAAhB,C;QACI,iB;MACJ,OAAO,mBAAa,C;K;;2CAxB5B,Y;MAAuC  
,yD;K;;IA6B3C,kC;MAWI,OAAW,iDAAJ,GAAwC,SAAxC,GAakD,4BAAwB,SAAxB,C;K;IAelB,uD;MAAA,q  
B;QAAE,6B;O;K;IAX7C,wC;MAWI,OAA2D,cAApD,sBAAkB,YAAIB,EAAgC,qCAAhC,CAAoD,C;K;IAqBrC,i  
D;MAAA,mB;QAAE,mB;O;K;IAlB5B,gD;MAeI,OAAI,YAAJ,GACI,2BADJ,GAGI,sBAAkB,+BAAIB,EAA4B,Y  
AA5B,C;K;IAER,wD;MAcI,6BAAkB,YAAIB,EAAgC,YAAhC,C;K;ILxpBJ,oB;MAAA,wB;MACI,8C;K;gCAEA,  
iB;MAA4C,oCAAmB,KAAM,U;K;kCACrE,Y;MAA+B,Q;K;kCAC/B,Y;MAAkC,W;K;gFAEX,Y;MAAQ,Q;K;iC  
AC/B,Y;MAAkC,W;K;wCACIC,mB;MAAmD,Y;K;6CACnD,oB;MAAmE,OAAA,QAAS,U;K;kCAE5E,Y;MAA6  
C,kC;K;uCAE7C,Y;MAAiC,6B;K;;IAdrC,gC;MAAA,+B;QAAA,c;OAAA,wB;K;IAkBA,oB;MAIoC,6B;K;IAEp  
C,2B;MAMmD,OAAI,QAAS,OAAT,GAAgB,CAApB,GAAgC,MAAT,QAAS,CAAhC,GAA6C,U;K;iFAEHg,yB;  
MAAA,mD;MAAA,mB;QAKwC,iB;O;KALxC,C;6FAOA,yB;MAAA,uE;MAAA,mB;QAQsD,2B;O;KARtD,C;IA  
UA,kC;MAKiE,OAAS,aAAT,QAAS,EAAa,qBAAc,YAAY,QAAS,OAARB,CAAd,CAAb,C;K;uFAE1E,yB;MAA  
A,2D;MAAA,mB;QAGgD,qB;O;KAHhD,C;IAKA,+B;MAC2D,OAAS,aAAT,QAAS,EAAa,eAAQ,YAAY,QAAS,  
OAARB,CAAR,CAAb,C;K;2FAEpE,yB;MAAA,uE;MAAA,mB;QAMwD,2B;O;KANxD,C;IAQA,iC;MAKME,OA  
AS,aAAT,QAAS,EAAa,qBAAc,YAAY,QAAS,OAARB,CAAd,CAAb,C;K;IAE5E,+B;MAMyD,OAAI,eAAJ,GAA  
qB,MAAM,OAAN,CAArB,GAAYC,U;K;IAEIG,kC;MAQI,OAAGB,gBAAT,QAAS,EAGb,sBAAhB,C;K;sFAGp  
B,yB;MavBA,uE;MbuBA,gC;QanB8B,gBAANB,oB;QbqCiB,aS/CxB,W;QT+CA,OS9CO,SISwC,Q;O;KbmBnD,C;  
wFA0BA,yB;Ma1CA,wE;Mb0CA,0C;QatCsC,gBAA3B,mBb4DiB,Qa5DjB,C;Qb4D2B,aS7EiC,W;QT6EA,OS5E  
O,SIgBgD,Q;O;KbsC3D,C;sFA+BA,yB;MAAA,mD;MAAA,4B;QAEkD,uCAAQ,U;O;KAF1D,C;IAIA,wC;MAAg  
D,QAAM,cAAN,C;aAC5C,C;UAD4C,OACvC,U;aACL,C;UAF4C,OAEvC,MAAM,oBAAW,OAAjB,C;gBAFuC,  
OAGpC,S;;K;IKnKZ,oD;MAQuF,wC;K;IARvF,8CASI,Y;MAAuC,8B;K;IAT3C,gF;IyKLA,yC;MxK4BI,IAAI,Ew  
K3BI,OAAO,CAAP,IAAY,OAAO,CxK2BvB,CAAJ,C;QACI,cwK3BI,aAAJ,GACI,yEADJ,GAGI,8C;QxKyBJ,M  
AAM,gCAAYB,OAAQ,WAAjC,C;Q;IwKnBM,mI;MAAA,mB;QAAE,wBAAiB,gCAAjB,EAA6B,YAA7B,EAAm  
C,YAAAnC,EAAyC,sBAAzC,EAAyD,mBAAzD,C;O;K;IAFtB,gF;MACI,oBAAoB,IAApB,EAA0B,IAA1B,C;MAC  
A,oCAAgB,6EAAhB,C;K;IAKyB,yL;MAAA,wC;MAAA,6B;MAAA,yB;MAAA,wC;MAAA,wC;MAAA,gD;MA  
AA,sD;MAAA,4D;MAAA,wB;MAAA,0B;MAAA,uB;MAAA,0B;MAAA,wB;MAAA,qB;MAAA,4B;MAAA,kC;  
K;;;2DAAA,Y;;;cACrB,4BAAiC,eAAL,uBAAK,EAAa,IAAb,C;+BACvB,0BAAO,uBAAP,I;cACV,IAAI,kBAA  
O,CAAX,C;oCACiB,iBAAa,qBAAb,C;kCACF,C;gBACD,6C;gBAAV,iB;;;sCAaa,gBAAc,qBAAAd,C;gBACH,+C;  
gBAAV,gB;;;cAAA,KAAU,2BAAV,C;gBAAA,gB;;;cAAU,kC;cACN,mBAAO,WAAI,GA AJ,C;cACP,IAAI,m  
BAAO,SAAX,C;gBACI,IAAI,mBAAO,KAAP,GAAC,uBAAIB,C;kBAA0B,sBAAS,mBAAO,kBAAuB,uBAAvB,  
C;kBAA8B,gB;;;kBAAxE,gB;;;gBADJ,gB;;;cAGI,gB;8BAAA,iCAAU,8BAAJ,GAAiB,mBAAjB,GAA6B,iBAA

U,mBAAV,CAAnC,O;kBAAA,2C;uBAAA,yB;cAAA,Q;;cACA,mBAAO,qBAAY,uBAAZ,C;cAJX,gB;;cAFJ,gB;  
;;cASA,IAAI,iCAAJ,C;gBACI,gB;;gBADJ,iB;;cACI,IAAO,mBAAO,KAAAd,IAAqB,uBAArB,C;gBAAA,gB;;c  
ACI,gB;8BAAA,iCAAU,8BAAJ,GAAiB,mBAAjB,GAA6B,iBAAU,mBAAV,CAAnC,O;kBAAA,2C;uBAAA,yB;  
cAAA,Q;;cACA,mBAAO,qBAAY,uBAAZ,C;cAFX,gB;;cAIA,IhL4K4C,CgL5KxC,mBhL4KyC,UgL5K7C,C;gB  
AAyB,iB;gCAAA,iCAAM,mBAAN,O;oBAAA,2C;yBAAA,yB;gBAAA,Q;;gBAAzB,iB;;cAjCR,W;;cA4BI,iB;;  
cA1BJ,iB;;cAGI,KAAU,yBAAV,C;gBAAA,iB;;6BAAU,sB;cACN,IAAI,kBAAO,CAAX,C;gBAAGB,oCAAQ,C  
AAR,I;gBAAW,iB;;gBAA3B,iB;;cACA,iBAAO,WAAI,YAAJ,C;cACP,IAAI,iBAAO,KAAP,KAAe,uBAANB,C  
;gBACI,iB;gCAAA,iCAAM,iBAAN,O;oBAAA,2C;yBAAA,yB;gBAAA,Q;;gBADJ,iB;;cAEI,IAAI,8BAAJ,C;gB  
AAiB,iBAAO,Q;;gBAAa,oBAAS,iBAAU,uBAAV,C;cAC9C,kBAAO,c;cAHX,iB;;cAHJ,iB;;cASA,IhL+LgD,Cg  
L/L5C,iBhL+L6C,UgL/LjD,C;gBACI,IAAI,qCAAKB,iBAAO,KAAP,KAAe,uBAArC,C;kBAA2C,iB;kCAAA,iCA  
AM,iBAAN,O;sBAAA,2C;2BAAA,yB;kBAAA,Q;kBAA3C,iB;;gBADJ,iB;;cAdJ,W;;cAcI,iB;;cAZJ,iB;;cAk  
CJ,W;;K;IARCyB,sI;MAAA,yD;uBAAA,6K;YAAA,S;iBAAA,Q;;iBAAA,uB;O;K;IAF7B,6E;MACI,IAAI,  
CAAC,QAAS,UAAAd,C;QAAyB,OAAO,2B;MAChC,OAAO,WAAkB,0EAAiB,C;K;IAwCwB,6B;MAA8B,uB;MA  
A7B,kB;MAChC,mBAA6B,C;MAC7B,eAAyB,C;K;2CAEzB,8B;MACI,+DAaKB,SAAlB,EAA6B,OAA7B,EAAs  
C,WAAK,KAA3C,C;MACa,mBAAiB,S;MACjB,eAAa,UAAU,SAAV,I;K;0CAGjB,iB;MACI,+DAaKB,KAAiB,E  
AAyB,YAAzB,C;MAEA,OAAO,wBAAK,mBAAy,KAAZ,IAAL,C;K;qFAGY,Y;MAAQ,mB;K;;IASR,wC;MAAq  
D,uB;MAApD,sB;MxKrDxB,IAAI,EwKuDQ,cAAc,CxKvDtB,CAAJ,C;QACI,cwKsD2B,wE;QxKrD3B,MAAM,g  
CAAYB,OAAQ,WAAjC,C;OAFV,IAAI,EwKwDQ,cAAc,aAAO,OxKxD7B,CAAJ,C;QACI,gBwKuDqC,wFAA+E  
,aAAO,O;QxKtD3H,MAAM,gCAAYB,SAAQ,WAAjC,C;OwK2DV,kBAAuB,aAAO,O;MAC9B,oBAA8B,C;MAE  
9B,sBAAyB,U;K;kFAAzB,Y;MAAA,0B;K;OAAA,gB;MAAA,0B;K;uCAGA,iB;MAGW,Q;MAFP,+DAaKB,KA  
AlB,EAAyB,SAAzB,C;MAEA,OAAO,sBAAmGmC,CAnG5B,iBAAG6B,GAnGV,KAmGU,IAAD,IAAa,eAnGhD,4  
D;K;kCAGX,Y;MAAe,qBAAQ,e;K;IAEgB,4D;MAAA,sC;MAAS,2B;MAC5C,eAAoB,oB;MACpB,eAAoB,4B;K;  
8DAEpB,Y;MAKgB,Q;MAJZ,IAAI,iBAAS,CAAb,C;QACI,W;;QAGA,mBAAQ,sCAAQ,YAAP,4DAAR,C;QAC  
A,eAoFkC,CAPf1B,YAoF2B,GAPfB,CAoFa,IAAD,IAAa,+B;QANf/C,mC;;K;;oCAXZ,Y;MAAuC,kD;K;2CAGBv  
C,iB;MAGiE,UAQ1C,MAROC,EAe1C,MAf0C,EAqBtD,M;MAtBP,aACQ,KAAM,OAAN,GAAa,IAAK,KAAtB,G  
AAkC,UAAN,KAAM,EAAO,IAAK,KAAZ,CAAlC,GAAyD,kD;MAE7D,WAAW,IAAK,K;MAEHb,WAAW,C;M  
ACX,UAAU,iB;MAEV,OAAO,OAAO,IAAP,IAAe,MAAM,eAA5B,C;QACI,OAAO,IAAP,IAAe,wBAAO,GAAP,  
gE;QACf,mB;QACA,iB;;MAGJ,MAAM,C;MACN,OAAO,OAAO,IAAd,C;QACI,OAAO,IAAP,IAAe,wBAAO,G  
AAP,gE;QACf,mB;QACA,iB;;MAEJ,IAAI,MAAO,OAAP,GAAC,IAAK,KAAvB,C;QAA6B,OAAO,IAAK,KAAZ,  
IAAoB,I;MAEjD,OAAO,uD;K;mCAGX,Y;MACI,OAAO,qBAAQ,gBAAa,SAAb,OAAR,C;K;4CAGX,uB;MAKI,  
kBAAoD,eAAjC,mBAAy,mBAAa,CAAzB,IAA8B,CAA9B,IAAiC,EAAa,WAAb,C;MACpD,gBAAoB,sBAAC,C  
AAIB,GAA4B,UAAP,aAAO,EAAO,WAAP,CAA5B,GAAqD,qBAAQ,gBAAa,WAAb,OAAR,C;MACrE,OAAO,e  
AAW,SAAX,EAAsB,SAAtB,C;K;qCAGX,mB;MAII,IAAI,aAAJ,C;QACI,MAAM,6BAAsB,qBAAtB,C;OAGV,c  
A6B0C,CA7BnC,iBA6BoC,GA7BjB,SA6BiB,IAAD,IAAa,eA7BvD,IAAmC,O;MACnC,6B;K;+CAGJ,a;MxKhJA,  
IAAI,EwKoJQ,KAAK,CxKpJb,CAAJ,C;QACI,cwKmJkC,wC;QxKlJIB,MAAM,gCAAYB,OAAQ,WAAjC,C;OAF  
V,IAAI,EwKqJQ,KAAK,SxKrJb,CAAJ,C;QACI,gBwKoJqB,wEAA8D,S;QxKnJnF,MAAM,gCAAYB,SAAQ,WA  
AjC,C;OwKqJN,IAAI,IAAI,CAAR,C;QACI,YAAy,iB;QACZ,UAGBsC,CAhB5B,KAGb6B,GAhBf,CAGBe,IAAD,  
IAAa,e;QAdnD,IAAI,QAAQ,GAAZ,C;UACW,OAAP,aAAO,EAAK,IAAL,EAAW,KAAx,EAaKB,eAAIB,C;UA  
CA,OAAP,aAAO,EAAK,IAAL,EAAW,CAAX,EAAC,GAAd,C;;UAEA,OAAP,aAAO,EAAK,IAAL,EAAW,KAA  
X,EAaKB,GAAIB,C;;QAGX,oBAAa,G;QACb,wBAAQ,CAAR,I;Q;qCAKR,wB;MAC8C,QAAC,YAAO,CAAP,I  
AAD,IAAa,e;K;;IA9G3D,0C;MAAA,oD;MAA6B,uBAAK,gBAAMb,QAANB,OAAL,EAAMC,CAAnC,C;MAA7  
B,Y;K;ICvFJ,0C;MAII,QAAQ,I;MACR,QAAQ,K;MACR,YAAy,kBAAM,CAAC,OAAO,KAAP,IAAD,IAAiB,C  
AAjB,IAAN,C;MACZ,OAAO,KAAK,CAAZ,C;QACI,OrL+B4E,0BqL/BrE,kBAAM,CAAN,CrL0Q2B,KAAL,GA  
AiB,GA3O8B,EqL/B1D,KrL0QgB,KAAL,GAAiB,GA3O8B,CqL/BrE,IAAP,C;UACI,a;;QACJ,OrL6B4E,0BqL7Br  
E,kBAAM,CAAN,CrLwQ2B,KAAL,GAAiB,GA3O8B,EqL7B1D,KrLwQgB,KAAL,GAAiB,GA3O8B,CqL7BrE,I  
AAP,C;UACI,a;;QACJ,IAAI,KAAK,CAAT,C;UACI,UAAU,kBAAM,CAAN,C;UACV,kBAAM,CAAN,EAAW,k  
BAAM,CAAN,CAAX,C;UACA,kBAAM,CAAN,EAAW,GAAX,C;UACA,a;UACA,a;;MAGR,OAAO,C;K;IAGX,  
uC;MAGI,YAAy,aAAU,KAAV,EAAiB,IAAjB,EAAuB,KAAvB,C;MACZ,IAAI,QAAO,QAAQ,CAAR,IAAP,CA

AJ,C;QACI,UAAU,KAAV,EAAiB,IAAjB,EAAuB,QAAQ,CAAR,IAAvB,C;MACJ,IAAI,QAAQ,KAAZ,C;QACI,  
 UAAU,KAAV,EAAiB,KAAjB,EAAwB,KAAxB,C;K;IAGR,0C;MAII,QAAQ,I;MACR,QAAQ,K;MACR,YAAY,k  
 BAAM,CAAC,OAAO,KAAP,IAAD,IAAiB,CAAjB,IAAN,C;MACZ,OAAO,KAAK,CAAZ,C;QACI,OnLM6E,0B  
 mLNtE,kBAAM,CAAN,CnL002B,KAAL,GAAiB,KApO+B,EmLN3D,KnL00gB,KAAL,GAAiB,KApO+B,CmL  
 NtE,IAAP,C;UACI,a;;QACJ,OnLI6E,0BmLJtE,kBAAM,CAAN,CnLwO2B,KAAL,GAAiB,KApO+B,EmLJ3D,Kn  
 LwOgB,KAAL,GAAiB,KApO+B,CmLJtE,IAAP,C;UACI,a;;QACJ,IAAI,KAAK,CAAT,C;UACI,UAAU,kBAAM,  
 CAAN,C;UACV,kBAAM,CAAN,EAAW,kBAAM,CAAN,CAAX,C;UACA,kBAAM,CAAN,EAAW,GAAX,C;UA  
 CA,a;UACA,a;;MAGR,OAAO,C;K;IAGX,yC;MAGI,YAAY,aAAU,KAAV,EAAiB,IAAjB,EAAuB,KAAvB,C;M  
 ACZ,IAAI,QAAO,QAAQ,CAAR,IAAP,CAAJ,C;QACI,YAAU,KAAV,EAAiB,IAAjB,EAAuB,QAAQ,CAAR,IAA  
 vB,C;MACJ,IAAI,QAAQ,KAAZ,C;QACI,YAAU,KAAV,EAAiB,KAAjB,EAAwB,KAAxB,C;K;IAGR,0C;MAII,  
 QAAQ,I;MACR,QAAQ,K;MACR,YAAY,kBAAM,CAAC,OAAO,KAAP,IAAD,IAAiB,CAAjB,IAAN,C;MACZ,  
 OAAO,KAAK,CAAZ,C;QACI,OpLnB8D,YoLmBvD,kBAAM,CAAN,CpLnBwE,KAAjB,EoLmB5C,KpLnByE,K  
 AA7B,CoLmBvD,IAAP,C;UACI,a;;QACJ,OpLrB8D,YoLqBvD,kBAAM,CAAN,CpLrBwE,KAAjB,EoLqB5C,Kp  
 LrByE,KAA7B,CoLqBvD,IAAP,C;UACI,a;;QACJ,IAAI,KAAK,CAAT,C;UACI,UAAU,kBAAM,CAAN,C;UAC  
 V,kBAAM,CAAN,EAAW,kBAAM,CAAN,CAAX,C;UACA,kBAAM,CAAN,EAAW,GAAX,C;UACA,a;UACA,a;  
 ;MAGR,OAAO,C;K;IAGX,yC;MAGI,YAAY,aAAU,KAAV,EAAiB,IAAjB,EAAuB,KAAvB,C;MACZ,IAAI,QAA  
 O,QAAQ,CAAR,IAAP,CAAJ,C;QACI,YAAU,KAAV,EAAiB,IAAjB,EAAuB,QAAQ,CAAR,IAAvB,C;MACJ,IA  
 AI,QAAQ,KAAZ,C;QACI,YAAU,KAAV,EAAiB,KAAjB,EAAwB,KAAxB,C;K;IAGR,0C;MAII,QAAQ,I;MACR  
 ,QAAQ,K;MACR,YAAY,kBAAM,CAAC,OAAO,KAAP,IAAD,IAAiB,CAAjB,IAAN,C;MACZ,OAAO,KAAK,C  
 AAZ,C;QACI,OpK5C+D,aoK4CxD,kBAAM,CAAN,CpK5C0E,KAAiB,EoK4C7C,KpK5C2E,KAA9B,CoK4CxD,  
 IAAP,C;UACI,a;;QACJ,OpK9C+D,aoK8CxD,kBAAM,CAAN,CpK9C0E,KAAiB,EoK8C7C,KpK9C2E,KAA9B,C  
 oK8CxD,IAAP,C;UACI,a;;QACJ,IAAI,KAAK,CAAT,C;UACI,UAAU,kBAAM,CAAN,C;UACV,kBAAM,CAAN,  
 EAAW,kBAAM,CAAN,CAAX,C;UACA,kBAAM,CAAN,EAAW,GAAX,C;UACA,a;UACA,a;;MAGR,OAAO,C;  
 K;IAGX,yC;MAGI,YAAY,aAAU,KAAV,EAAiB,IAAjB,EAAuB,KAAvB,C;MACZ,IAAI,QAAO,QAAQ,CAAR,I  
 AAP,CAAJ,C;QACI,YAAU,KAAV,EAAiB,IAAjB,EAAuB,QAAQ,CAAR,IAAvB,C;MACJ,IAAI,QAAQ,KAAZ,  
 C;QACI,YAAU,KAAV,EAAiB,KAAjB,EAAwB,KAAxB,C;K;IAKR,gD;MAI6E,UAAU,KAAV,EAAiB,SAAjB,E  
 AA4B,UAAU,CAAV,IAA5B,C;K;IAC7E,gD;MAC6E,YAAU,KAAV,EAAiB,SAAjB,EAA4B,UAAU,CAAV,IAA  
 5B,C;K;IAC7E,gD;MAC6E,YAAU,KAAV,EAAiB,SAAjB,EAA4B,UAAU,CAAV,IAA5B,C;K;IAC7E,gD;MAC6  
 E,YAAU,KAAV,EAAiB,SAAjB,EAA4B,UAAU,CAAV,IAA5B,C;K;IvK9I7E,0C;MF0BI,IAAI,EEjBI,SAAU,OA  
 AV,GAAiB,CfIbRb,CAAJ,C;QACI,cAda,qB;QAeb,MAAM,gCAAYb,OAAQ,WAAjC,C;OEIBV,OAAO,oBAAoB  
 ,CAApB,EAAuB,CAAvB,EAA0B,SAA1B,C;K;IAGX,8C;MACe,Q;MAAX,wBAAW,SAAX,gB;QAAW,SAAA,S  
 AAX,M;QACI,SAAS,GAAG,CAAH,C;QACT,SAAS,GAAG,CAAH,C;QACT,WAAW,cAAc,EAAAd,EAAkB,EAA  
 IB,C;QACX,IAAI,SAAQ,CAAZ,C;UAAe,OAAO,I;;MAE1B,OAAO,C;K;sGAGX,yB;MAAA,8D;MAAA,iC;QASI  
 ,OAAO,cAAc,SAAS,CAAT,CAAd,EAA2B,SAAS,CAAT,CAA3B,C;O;KATX,C;sGAYA,sC;MASI,OAAO,UAA  
 W,SAAQ,SAAS,CAAT,CAAR,EAAqB,SAAS,CAAT,CAArB,C;K;IAatB,6B;MAWY,Q;MALR,IAAI,MAAM,CA  
 AV,C;QAAa,OAAO,C;MACpB,IAAI,SAAJ,C;QAAe,OAAO,E;MACTb,IAAI,SAAJ,C;QAAe,OAAO,C;MAGtB,O  
 AA8B,iBAAtB,mDAAsB,EAAU,CAAV,C;K;IAaZ,6C;MAAA,uB;QAAU,2BAAoB,CAApB,EAAuB,CAAvB,EA  
 A0B,iBAA1B,C;O;K;IAVhC,8B;MF7CI,IAAI,EEsDI,SAAU,OAAV,GAAiB,CfTDrB,CAAJ,C;QACI,cAda,qB;QA  
 eb,MAAM,gCAAYb,OAAQ,WAAjC,C;OEqDV,OAAO,eAAW,2BAAAX,C;K;0FAIX,yB;MAAA,sC;MAAA,oC;M  
 AAA,uBAOe,yB;QArEf,8D;eAqEe,4B;UAAA,uB;YAAU,eAAsB,gB;YAAtB,OA5Dd,cAAc,SA4DgB,CA5DhB,C  
 AAd,EAA2B,SA4DM,CA5DN,CAA3B,C;W;S;OA4DI,C;MAPf,2B;QAOI,sBAAW,0BAAAX,C;O;KAPJ,C;0FASA,  
 yB;MAAA,oC;MAQe,gE;QAAA,uB;UAAU,iBAAsB,kB;UAAtB,eAAkC,gB;UAAIC,OA1Dd,UAAW,SAAQ,SA0  
 DW,CA1DX,CAAR,EAAqB,SA0DC,CA1DD,CAArB,C;S;O;MAkDtB,uC;QAQI,sBAAW,sCAAX,C;O;KARJ,C;4  
 GAUA,yB;MAAA,sC;MAAA,oC;MAAA,iCAOe,yB;QAxFf,8D;eAwFe,4B;UAAA,uB;YAAU,eAAsB,gB;YAAtB,  
 OA/Ed,cAAc,SA+EgB,CA/EhB,CAAd,EAA2B,SA+EM,CA/EN,CAA3B,C;W;S;OA+EI,C;MAPf,2B;QAOI,sBAA  
 W,oCAAX,C;O;KAPJ,C;8GASA,yB;MAAA,oC;MAUe,0E;QAAA,uB;UAAU,iBAAsB,kB;UAAtB,eAAkC,gB;U  
 AAIC,OA/Ed,UAAW,SAAQ,SA+EW,CA/EX,CAAR,EAAqB,SA+EC,CA/ED,CAArB,C;S;O;MAqEtB,uC;QAUI,s  
 BAAW,gDAAX,C;O;KAVJ,C;kFAYA,yB;MAAA,sC;MAAA,oC;MAAA,oBAQe,yB;QA9Gf,8D;eA8Ge,yC;UAA

A,uB;YACP,sBAAsB,WAAY,SAAQ,CAAR,EA AW,CAAX,C;YACIC,Q;YAAA,IAAI,oBAAmB,CAAvB,C;CAA  
A,OAA0B,e;;cAAqB,eAAsB,gB;cAArE,OA vGG,cAAc,SauG8C,CavG9C,CAAd,EAA2B,SauGoC,CavGpC,CA  
A3B,C;;YAsGH,W;W;S;OADO,C;MARf,sC;QAQI,sBAAW,kCAAX,C;O;KARJ,C;oFAaA,yB;MAAA,oC;MAQe,  
0E;QAAA,uB;UACP,sBAAsB,WAAY,SAAQ,CAAR,EA AW,CAAX,C;UACIC,Q;UAAA,IAAI,oBAAmB,CAAvB  
,C;YAAA,OAA0B,e;;YAAqB,iBAAsB,kB;YAAtB,eAAkC,gB;YAAjF,OA xGG,UAAW,SAAQ,SAwGyC,CAXGz  
C,CAAR,EA AqB,SAwG+B,CAXG/B,CAArB,C;;UAuGd,W;S;O;MATR,kD;QAQI,sBAAW,8CAAX,C;O;KARJ,C;  
sGAaA,yB;MAAA,sC;MAAA,oC;MAAA,8BAQe,yB;QA xIf,8D;eAwIe,mD;UAAA,uB;YACP,sBAAsB,qBAAsB,  
SAAQ,CAAR,EA AW,CAAX,C;YAC5C,Q;YAAA,IAAI,oBAAmB,CAAvB,C;cAAA,OAA0B,e;;cAAqB,eAAsB,g  
B;cAArE,OA jIG,cAAc,SAiI8C,CAjI9C,CAAd,EAA2B,SAiIoC,CAjIpC,CAA3B,C;;YAgIH,W;W;S;OADO,C;MA  
Rf,sC;QAQI,sBAAW,4CAAX,C;O;KARJ,C;wGAaA,yB;MAAA,oC;MAQe,8F;QAAA,uB;UACP,sBAAsB,qBAAs  
B,SAAQ,CAAR,EA AW,CAAX,C;UAC5C,Q;UAAA,IAAI,oBAAmB,CAAvB,C;YAAA,OAA0B,e;;YAAqB,iBAA  
sB,kB;YAAtB,eAAkC,gB;YAAjF,OAlIG,UAAW,SAAQ,SAkIyC,CAIzC,CAAR,EA AqB,SAkI+B,CAII/B,CAArB  
,C;;UAiId,W;S;O;MATR,kD;QAQI,sBAAW,wDAAX,C;O;KARJ,C;kGAcA,yB;MAAA,oC;MAOe,wE;QAAA,uB;  
UACP,sBAAsB,mBAAoB,SAAQ,CAAR,EA AW,CAAX,C;UAA1C,OACI,oBAAmB,CAAvB,GAA0B,eAA1B,GA  
A+C,mBAAW,CAAX,EA Ac,CAAd,C;S;O;MATvD,wC;QAOI,sBAAW,4CAAX,C;O;KAPJ,C;IAmBe,oD;MAAA,  
uB;QACP,sBAAsB,SAAU,SAAQ,CAAR,EA AW,CAAX,C;QAaHc,OACI,oBAAmB,CAAvB,GAA0B,eAA1B,G  
AA+C,kBAAW,SAAQ,CAAR,EA AW,CAAX,C;O;K;IATIE,uC;MAOI,sBAAW,kCAAX,C;K;IA Yc,wE;MAAA,u  
B;QACV,sBAAsB,mBAAoB,SAAQ,CAAR,EA AW,CAAX,C;QAA1C,OACI,oBAAmB,CAAvB,GAA0B,eAA1B,  
GAA+C,kBAAW,SAAQ,CAAR,EA AW,CAAX,C;O;K;IATIE,+C;MAOI,sBAAc,4CAAd,C;K;IAaW,+C;MAAA,u  
B;QAEH,UAAM,CAAN,C;UADJ,OACe,C;aACX,c;UAFJ,OAEiB,E;aACb,c;UAHJ,OAGiB,C;;UAHjB,OAIY,kB  
AAW,SAAQ,CAAR,EA AW,CAAX,C;O;K;IAZ/B,gC;MAOI,sBAAW,6BAAX,C;K;4FASJ,yB;MAAA,4D;MAAA  
,wD;MAAA,mB;QAOqE,kBAAW,cAA X,C;O;KAPrE,C;IAGBe,8C;MAAA,uB;QAEH,UAAM,CAAN,C;UADJ,O  
ACe,C;aACX,c;UAFJ,OAEiB,C;aACb,c;UAHJ,OAGiB,E;;UAHjB,OAIY,kBAAW,SAAQ,CAAR,EA AW,CAAX,  
C;O;K;IAZ/B,+B;MAOI,sBAAW,4BAAX,C;K;0FASJ,yB;MAAA,4D;MAAA,sD;MAAA,mB;QAOoE,iBAAU,cA  
AV,C;O;KAPpE,C;IASA,wB;MAK4F,Q;MAA7B,OAA6B,4F;K;IAE5F,wB;MAK4F,Q;MAA7B,OAA6B,4F;K;IA  
E5F,gC;MAM+D,IAEJ,IAFI,EAGJ,M;MAFvD,kBAD2D,SAC3D,sB;QADqD,OAC5B,SAAK,W;WAC9B,WAF2D  
,SAE3D,wC;QAFqD,OAEE,4F;WACvD,WAH2D,SAG3D,wC;QAHqD,OAGE,gG;;QAHF,OAI7C,uBAAmB,SAA  
nB,C;K;IAIuB,wC;MAAC,4B;K;2CACHc,gB;MAAwC,OAAA,eAAW,SAAQ,CAAR,EA AW,CAAX,C;K;4CACn  
D,Y;MACgC,sB;K;;IAGpC,kC;MAAA,sC;K;+CACI,gB;MAAoE,OAAE,iBAAF,CAAE,EAAU,CAAV,C;K;gDAC  
tE,Y;MAC8C,2C;K;;IAHID,8C;MAAA,6C;QAAA,4B;OAAA,sC;K;IAMA,kC;MAAA,sC;K;+CACI,gB;MAAoE,  
OAAE,iBAAF,CAAE,EAAU,CAAV,C;K;gDACtE,Y;MAC8C,2C;K;;IAHID,8C;MAAA,6C;QAAA,4B;OAAA,sC  
;K;8EwKjTA,4B;MAUI,OAk,iBAAL,SAAK,EAAU,KAAV,C;K;ICTT,iC;K;;;oDA2DI,0C;MAiB+D,oB;QAAA  
,2C;aAjB/D,kG;K;;IAoBJ,uC;MAAA,e;MAAA,iB;MAAA,uB;K;IAAA,qC;MAAA,wC;O;MASI,4E;MAMA,8E;M  
AOA,4E;MAOA,kE;K;;IApBA,mD;MAAA,2B;MAAA,2C;K;;IAMA,oD;MAAA,2B;MAAA,4C;K;;IAOA,mD;M  
AAA,2B;MAAA,2C;K;;IAOA,8C;MAAA,2B;MAAA,sC;K;;IA7BJ,iC;MAAA,+K;K;;IAAA,sC;MAAA,a;aAAA,c;  
UAAA,gD;aAAA,e;UAAA,iD;aAAA,c;UAAA,gD;aAAA,S;UAAA,2C;gBAAA,oE;;K;;oFAqCA,mB;K;;;::;  
;I5HiBiD,gD;MAAA,oB;QACzC,WAAW,sBAAmB,YAAF,CAAE,CAAnB,C;QACX,cAAM,IAAN,C;QADA,OA  
EA,IAAK,a;O;K;;;IAtHb,+B;K;;iFAUA,yB;MAAA,4B;MAAA,mC;QAMI,6BDgDQ,WChDkB,KDgDIB,CChDR,  
C;O;KANJ,C;2GAQA,yB;MAAA,4B;MDgDQ,kD;MChDR,uC;QAOI,6BDgDQ,WAAO,cChDW,SDgDX,CAAP,C  
ChDR,C;O;KAPJ,C;+FAUA,yB;MAAA,kC;MAAA,mD;MAAA,yE;QASI,sC;QAAA,4C;O;MATJ,iGAWY,Y;QA  
AQ,2B;OAXpB,E;MAAA,0DAaQ,kB;QACI,wBAAW,MAAX,C;O;MAdZ,sF;MAAA,sC;QASI,0D;O;KATJ,C;IAi  
BA,gD;MAaI,4BAA0D,YAAzC,wCAA6B,UAA7B,CAAyC,CAA1D,EAAYe,yBAAzE,C;K;IAEJ,4D;MAcI,4BAA  
oE,YAA nD,0CAA6B,QAA7B,EAAuC,UAAvC,CAAmD,CAApE,EAAMf,yBAAnF,C;K;IAEJ,+C;MAU6C,YAAz  
C,wCAA6B,UAA7B,CAAyC,CAtEzC,oBDgDQ,WCSBsD,kBDtBtD,CChDR,C;K;IAyEJ,2D;MAWuD,YAA nD,0C  
AA6B,QAA7B,EAAuC,UAAvC,CAAmD,CAPFnD,oBDgDQ,WCoCgE,kBDpChE,CChDR,C;K;IAuFJ,+C;MAYI,  
OAA6C,8BAAtC,c;K;8EAZX,yB;MAAA,oE;MAAA,6E;MAYiD,gD;QAAA,oB;UACzC,WAAW,sBAAmB,YAA  
F,CAAE,CAAnB,C;UACX,cAAM,IAAN,C;UADA,OAEA,IAAK,a;S;O;MAfb,sC;QAYW,mBAAsC,8BAAtC,6B;  
QAAP,OAAO,kD;O;KAZX,C;qGA0BI,yB;MAAA,2D;MAAA,mB;QACI,MAAM,6BAAoB,0BAApB,C;O;KADV



,C;;M6HzIA,yC;;IAAA,uC;MAAA,2C;K;;IAAA,mD;MAAA,kD;QAAA,iC;OAAA,2C;K;+EakBA,wB;K;oDAaA  
,e;MAK2C,IAAI,IAAJ,EAGK,M;MAL5C,IAAI,+CAAJ,C;QAEI,OAAW,GAAl,kBAAS,IAAK,IAAd,CAAR,GAA  
4B,cAAI,OAAJ,GAAl,iBAAQ,IAAR,CAAJ,yCAA5B,GAAyD,I;OAGpE,OAAW,8CAA4B,GAAhC,GAAqC,8EA  
ArC,GAAoD,I;K;yDAI/D,e;MAGI,IAAI,+CAAJ,C;QACI,OAAW,GAAl,kBAAS,IAAK,IAAd,CAAJ,IAA0B,GAA  
I,iBAAQ,IAAR,CAAJ,QAA9B,GAAyD,mCAAzD,GAAoF,I;OAE/F,OAAW,8CAA4B,GAAhC,GAAqC,mCAArC  
,GAAgE,I;K;;;ICtChD,oD;MACf,cAAc,GAAl,kBAAS,OAAQ,IAAJB,C;MACIB,IAAI,YAAY,mCAAhB,C;QAD  
A,OACuC,O;;QAEnC,kBAaKB,oBAAQ,yCAAR,C;QACIB,IAAI,mBAAJ,C;UAJJ,OAI6B,oBAAgB,OAAhB,EA  
AyB,OAAzB,C;;UACrB,WAAW,OAAQ,kBAAS,yCAAT,C;UAL3B,OAMY,SAAS,mCAAb,GAAoC,oBAAgB,O  
AAhB,EAAyB,WAAzB,CAApC,GACI,oBAAgB,oBAAgB,IAAhB,EAA5B,OAAtB,CAAhB,EAAGD,WAAhD,C;;;  
K;8CAdxB,mB;MAKI,OAAI,YAAY,mCAAhB,GAAuC,IAAvC,GACI,OAAQ,cAAK,IAAL,EAAY,4BAAx,C;K;  
;;;qDAiCZ,e;MAEyB,Q;MADrB,OACI,OAAA,IAAK,IAAL,EAAY,GAAZ,CAAJ,GAAqB,0EAArB,GAAoC,I;K;  
sDAExC,8B;MACI,iBAAU,OAAV,EAAMB,IAAnB,C;K;0DAEJ,e;MACI,OAAI,OAAA,IAAK,IAAL,EAAY,GAA  
Z,CAAJ,GAAqB,mCAArB,GAAgD,I;K;;IC1DP,8C;MAAC,wB;K;kFAAA,Y;MAAA,yB;K;;IAiCe,wD;MAEjE,k  
C;MAEA,4BAAqC,mDAAJ,GAAkD,OAAQ,qBAA1D,GAA0E,O;K;4DAE3G,mB;MAA6C,+BAAS,OAAT,C;K;6  
DAC7C,e;MAA8C,eAAQ,IAAR,IAAgB,8BAaE,G;K;;IAGjF,+C;MAW2C,IAAI,IAAJ,EAGV,M;MAL7B,IAAI,+  
CAAJ,C;QAEI,OAAW,GAAl,kBAAS,SAAK,IAAd,CAAR,GAA4B,cAAI,OAAJ,GAAl,iBAAQ,SAAR,CAAJ,yC  
AA5B,GAAyD,I;OAGpE,OAAW,SAAK,IAAL,KAAa,GAAjB,GAAsB,mFAAtB,GAAqC,I;K;IAGhD,6C;MAUI,I  
AAI,+CAAJ,C;QACI,OAAW,GAAl,kBAAS,SAAK,IAAd,CAAJ,IAA0B,GAAl,iBAAQ,SAAR,CAAJ,QAA9B,GA  
AyD,mCAAzD,GAAoF,S;OAE/F,OAAW,SAAK,IAAL,KAAa,GAAjB,GAAsB,mCAAtB,GAAiD,S;K;IAG5D,iC;  
MAAA,qC;MAKI,4B;K;oDACA,Y;MAAiC,0C;K;kDAEjC,e;MAAyD,W;K;mDACzD,8B;MAA4E,c;K;mDAC5E,  
mB;MAAwE,c;K;uDACxE,e;MAA8D,W;K;+CAC9D,Y;MAAsC,Q;K;+CACtC,Y;MAAyC,8B;K;;Iab7C,6C;MA  
AA,4C;QAAA,2B;OAAA,qC;K;IAqB8B,wC;MAC1B,kB;MACA,wB;K;4CAGA,e;MAGQ,Q;MAFJ,UAAU,I;MA  
CV,OAAO,IAAP,C;QACI,YAAA,GAAl,UAAJ,aAAy,GAAZ,W;UAAwB,W;SACxB,WAAW,GAAl,O;QACf,IA  
AI,oCAAJ,C;UACI,MAAM,I;;UAEN,OAAO,iBAAK,GAAL,C;;K;6CAKnB,8B;MACI,iBAAU,WAAK,cAAK,O  
AAL,EAAC,SAAd,CAAf,EAAyC,cAAzC,C;K;iDAEJ,e;UAGW,I;MAFP,+BAAQ,GAAR,U;QAAoB,OAAO,W;O  
AC3B,cAAc,WAAK,kBAAS,GAAT,C;MAEf,gBAAy,WAAZ,C;QAAoB,W;WACpB,gBAAy,mCAAZ,C;QAAq  
C,qB;;QAC7B,2BAAgB,OAAhB,EAAyB,cAAzB,C;MAHZ,W;K;uCAOJ,Y;MAIc,IAAI,IAAJ,Q;MAHV,UAAU,I;  
MACV,WAAW,C;MACX,OAAO,IAAP,C;QACU,uBAAI,OAAJ,GAAl,OAAJ,gC;QAAA,mB;UAAgC,OAAO,I;S  
AA7C,MAAM,M;QACN,mB;;K;2CAIR,mB;MACI,+BAAI,OAAQ,IAAZ,GAAoB,OAAPB,C;K;8CAEJ,mB;MAQ  
4B,Q;MAPxB,UAAU,O;MACV,OAAO,IAAP,C;QACI,IAAI,CAAC,gBAAS,GAAl,UAAb,CAAL,C;UAA4B,OA  
AO,K;QACnC,WAAW,GAAl,O;QACf,IAAI,oCAAJ,C;UACI,MAAM,I;;UAEN,OAAO,gBAAS,0EAAT,C;;K;uC  
AKnB,iB;MACI,gBAAS,KAAT,KAaKB,yCAA4B,KAAM,SAAN,KAAGB,aAA5C,IAAsD,KAAM,eAAy,IAAZ,C  
AA9E,C;K;yCAEJ,Y;MAA+B,OAAK,SAAL,WAAK,CAAL,GAA0B,SAAR,cAAQ,CAA1B,I;K;IAGZ,uD;MACX  
,OAAI,G3JyHoC,YAAU,C2JzHID,GAAMB,OAAQ,WAA3B,GAA6C,GAAF,UAAQ,O;K;yCAF3D,Y;MACI,aAA  
M,kBAAK,EAAL,EAAS,+BAAT,CAAN,GAEl,G;K;IAMO,8E;MAAA,6B;QAAyB,Q;QAAT,iBAAS,sBAAT,EA  
AS,8BAAT,UAAoB,O;QAAQ,W;O;K;+CAJ3D,Y;MAOsB,Q;MANIB,QAAQ,a;MACR,eAAe,gBAA+B,CAA/B,O  
;MACf,gBAAy,CAAZ,C;MACA,kBAAK,kBAAL,EAAY,oDAAX,C;M9KtFJ,IAAI,E8KuFM,YAAS,C9KvFf,CA  
AJ,C;QACI,cAdW,e;QAeX,MAAM,6BAAsB,OAAQ,WAA9B,C;O8KuFN,OAAO,+BAAW,qDAAX,C;K;IAGa,8  
C;MACpB,kD;MADqB,wB;K;IACrB,gD;MAAA,oD;MACI,4B;K;;IADJ,4D;MAAA,2D;QAAA,0C;OAAA,oD;K;  
yDAIA,Y;MAA0C,gBAAT,a;M5Lm9YrB,Q;MADhB,kB4Ll9YmD,mC;M5Lm9YnD,wBAAgB,SAAhB,gB;QAAg  
B,cAAA,SAAhB,M;QAAsB,cAAwB,yBAAa,OAAb,C;;M4Ln9YT,O5Lo9Y9B,W;K;;I6LtoZX,oE;MA4BI,MAA  
M,wBAAoB,sEAApB,C;K;8GA5BV,yB;MAAA,2D;MAAA,sC;QA4BI,MAAM,6BAAoB,sEAApB,C;O;KA5BV,  
C;IA0CoC,mC;MAAQ,4D;K;IAE5C,4C;MAAA,e;MAAA,iB;MAAA,uB;K;IAAA,0C;MAAA,6C;O;MAK0C,oG;  
MAAqB,gF;MAAW,4E;K;;IAAhC,+D;MAAA,gC;MAAA,uD;K;;IAAqB,qD;MAAA,gC;MAAA,6C;K;;IAAW,m  
D;MAAA,gC;MAAA,2C;K;;IAL1E,sC;MAAA,sJ;K;;IAAA,2C;MAAA,a;aaaa,qB;UAAA,4D;aaaa,W;UAAA,k  
D;aaaa,S;UAAA,gD;gBAAA,qF;;K;;6ECnDA,yB;MAAA,0B;MAAA,mC;QAGsD,OAAiC,OAA3B,SAAL,GAA  
uB,KAAS,C;O;KAHvF,C;2EAKA,yB;MAAA,0B;MAAA,mC;QAGqD,OAAgC,OAA1B,SAAL,GAAsB,KAAS,C;  
O;KAHrF,C;6EAKA,yB;MAAA,0B;MAAA,mC;QAGsD,OAAiC,OAA3B,SAAL,GAAuB,KAAS,C;O;KAHvF,C;6

EAKA,yB;MAAA,0B;MAAA,4B;QAGqC,OAAqB,OAAP,CAAR,SAAe,C;O;KAH1D,C;+EAMA,yB;MAAA,4B; MAAA,mC;QAGyD,OAAiC,QAA3B,SAAL,GAAuB,KAAS,C;O;KAH1F,C;6EAKA,yB;MAAA,4B;MAAA,mC; QAGwD,OAAgC,QAA1B,SAAL,GAAsB,KAAS,C;O;KAHxF,C;+EAKA,yB;MAAA,4B;MAAA,mC;QAGyD,OA AiC,QAA3B,SAAL,GAAuB,KAAS,C;O;KAH1F,C;+EAKA,yB;MAAA,4B;MAAA,4B;QAGuC,OAAqB,QAAP,C AAR,SAAe,C;O;KAH5D,C;ICpCA,qC;K;;ICAA,mB;K;;IAOA,iB;K;;IAOA,2C;K;;IAOA,wB;K;;IAQA,0B;K;;IA OAsB;K;;IAOA,4B;K;;IAOA,6C;K;;IA+BuC,wE;MAEnC,uB;QAAA,UAAAsB,E;MACtB,qB;QAAA,8B;MACA,2 B;QAAA,qE;MACA,yB;QAAA,YAAqB,E;MAJrB,sB;MACA,sB;MACA,kB;MACA,8B;MACA,0B;K;;IAGJ,iD; MAAA,e;MAAA,iB;MAAA,uB;K;IAAA,+C;MAAA,kD;O;MAKI,wG;MACA,wG;MACA,8F;K;;IAFA,iE;MAAA ,qC;MAAA,yD;K;;IACA,iE;MAAA,qC;MAAA,yD;K;;IACA,4D;MAAA,qC;MAAA,oD;K;;IAPJ,2C;MAAA,6K;K ;;IAAA,gD;MAAA,a;MAAA,kB;UAAA,8D;aAAA,kB;UAAA,8D;aAAA,a;UAAA,yD;gBAAA,6E;;K;;IAUA,wB;K ;;ICjGA,qB;MAAA,yB;K;OCAII,Y;MAO6D,uB;K;2HAE7D,yB;MAAA,+D;MAAA,kC;MAAA,0F;MAAA,6F;MA AA,4E;QAUI,wC;QAAS,2C;O;MAVb,mEAWQ,wC;QAA6E,sBAAS,QAAT,EAAmB,QAAnB,EAA6B,QAA7B,C ;O;MAXrF,oG;MAAA,yC;QAUI,wDAA+B,YAA/B,C;O;KAVJ,C;uHAcA,yB;MAAA,+D;MAAA,kC;MAAA,wF; MAAA,yF;MAAA,0E;QAcI,wC;QAAS,2C;O;MADB,kEAEQ,wC;QAAuF,6BAAS,QAAT,EAAmB,QAAnB,EAA6 B,QAA7B,C;O;MAf/F,kG;MAAA,yC;QAcI,sDAA+B,YAA/B,C;O;KADJ,C;;;IA3BJ,iC;MAAA,gC;QAAA,e;OAA A,yB;K;IAGDiC,sB;MAC7B,eAAwB,I;K;4CAExB,6B;MACW,Q;MAAA,mB;MAAA,iB;QAAS,MAAM,6BAAsB ,cAAY,QAAS,aAArB,uCAAtB,C;OAAtB,OAAO,I;K;4CAGX,oC;MACI,eAAa,K;K;;;kDC9CjB,6B;;K;;;iEA+ CA,6B;;K;;ICrDuC,0C;MACvC,uBAAoB,Y;K;wDAEPB,wC;MAM6F,W;K;uDAE7F,wC;K;oDAMA,6B;MACI,O AAO,oB;K;oDAGX,oC;MACI,eAAe,IAAK,gB;MACpB,IAAI,CAAC,0BAAa,QAAb,EAAuB,QAAvB,EAAiC,KA AjC,CAAL,C;QACI,M;OAEJ,uBAAa,K;MACb,yBAAY,QAAZ,EAAAsB,QAAtB,EAAgC,KAAhC,C;K;;4EC9BR, wC;MAqBI,OAAO,e;K;4EAGX,+C;MAuBI,cAAI,KAAJ,C;K;4EAIJ,wC;MAMBI,OAAO,cAAI,OAAJ,C;K;4EAG X,+C;MAqBI,cAAI,OAAJ,EAAa,KAAb,C;K;IC/FJ,kB;MA6PI,4B;K;+BAtoA,Y;MAOiC,6BAAS,EAAT,C;K;uC AEjC,iB;MAW2C,4BAAQ,CAAR,EAAW,KAAx,C;K;uC AE3C,uB;MAAkB,Q;MAHd,iBAAiB,IAAjB,EAAuB,K AAvB,C;MACA,QAAQ,QAAQ,IAAR,I;MACR,IAAI,IAAI,CAAJ,IAAS,MAAK,WAAIB,C;QACc,IAAI,MAAM, CAAC,CAAD,IAAN,OAAy,CAAhB,C;UACN,eAAe,SAAS,CAAT,C;UACf,6BAAS,QAAT,C;;UAEA,K;;YAEI, WAAW,cAAU,KAAK,C;YAC1B,IAAI,OAAO,C;;UACN,gBAAO,CAAP,IAAY,CAAZ,GAAgB,CAAhB,SAAqB, CAArB,C;UACT,Q;;QATJ,c;QAWA,OAAO,OAAO,GAAP,I;;QAEP,OAAO,IAAP,C;UACI,YAAU,c;UACV,IAA W,IAAP,qBAAkB,KAAtB,C;YAA6B,OAAO,K;;K;gCAKhD,Y;MAOmC,OAAU,oBAAV,cAAU,CAAS,WAAI,E AAJ,CAAnB,yBAA6B,cAA7B,E;K;wCAEnC,iB;MAW8C,iCAAY,KAAZ,C;K;wCAE9C,uB;MAiBkB,Q;MAPd,m BAAiB,IAAjB,EAAuB,KAAvB,C;MACA,QAAQ,eAAQ,IAAR,C;MACR,IAAI,eAAI,CAAR,C;QACI,O;QACA,I AAI,aAAO,CAAD,aAAN,GAAY,CAAZ,CAAJ,C;UACI,WAAW,CAAE,Q;UACb,YAAa,qBAAO,EAAP,CAAW, Q;UAEpB,aAAQ,CAAR,C;YACI,eAAe,SAAS,IAAT,C;YAEf,OAAmB,oBAAAnB,sBAAS,QAAT,CAAmB,CAAn B,iB;iBAEJ,cAAS,CAAT,C;YAEI,OAAU,oBAAV,cAAU,CAAV,iB;;YAEA,iBAAe,SAAS,KAAT,C;YACf,OAA mB,oBAAAnB,sBAAS,UAAT,CAAmB,CAAS,WAAI,EAAJ,CAA5B,KAAiD,oBAAV,cAAU,CAAV,iBAAvC,C;;U AXR,U;;UAeA,K;;YAEI,WAAW,eAAW,oBAAK,CAAL,C;YACTB,IAAI,YAAO,CAAP,C;;UACC,sBAAO,CAAP ,MAAY,+BAAI,CAAJ,EAAZ,eAAqB,CAArB,C;UACT,MAAM,C;;QAEV,OAAO,SAAO,GAAP,C;;QAEp,OAA O,IAAP,C;UACI,YAAU,e;UACV,IAAW,IAAP,0CAAkB,KAAIB,CAAJ,C;YAA6B,OAAO,K;;K;mCAKhD,Y;M AKyC,6BAAS,CAAT,MAAe,C;K;kCAExD,Y;MAKuC,uBAAgB,sBAAS,EAAT,CAAhB,EAA8B,sBAAS,EAAT, CAA9B,C;K;OCAEvC,iB;MASoD,+BAAW,GAAX,EAAgB,KAHhB,C;K;OCAEPD,uB;MACy,Q;MAFR,mBAAiB ,IAAjB,EAAuB,KAAvB,C;MACA,WAAW,QAAQ,I;MACX,IAAS,WAAI,IAAK,CAAL,IAA0B,SAAL,IAAK,CA A1B,IAA8C,SAAN,KAAM,CAAD,C;QACJ,SAAS,qBAAgB,QAAQ,CAAR,GAAY,OAAO,CAAnC,C;QACT,cA AO,EAAP,GAAY,E;;QAEZ,cAAO,oBAAe,I;;MAJ1B,Y;MAMA,OAAW,KAAK,KAAT,GAAsB,SAAN,KAAM,C AAtB,GAAsC,C;K;iCAGjD,Y;MAKqC,6BAAS,EAAT,IAA0B,Q;K;IAWK,oF;MAAA,mB;QAAE,uBAAa,iBAAb, sBAAqC,eAArC,+BAAqE,aAAM,OAA3E,M;O;K;iDATtE,qC;MvLjLA,IAAI,EUl0LqB,CAAb,8BAAgB,KAAM, OvL1L9B,GuL0LiD,CAAX,0BAAc,KAAM,OvL1L1D,GuL0LsC,KvL1LtC,CAAJ,C;QACI,cuLyLgE,kDvLzLID,E ;QACd,MAAM,gCAAYB,OAAQ,WAAjC,C;OAFV,IAAI,EUl2LQ,aAAa,OvL3LrB,CAAJ,C;QACI,gBuL0LgC,mF ;QvLzLhC,MAAM,gCAAYB,SAAQ,WAAjC,C;OuL2LN,YAAY,CAAC,UAAU,SAAV,IAAD,IAAwB,CAAxB,I; MAEZ,mBAAe,SAAf,C;MPLzEJ,iBAAc,CAAd,UoL0EW,KpL1EX,U;QoL2EQ,QAAQ,c;QACR,MAAM,UAAN,I

AAoB,OAAF,CAAE,C;QACpB,MAAM,aAAW,CAAX,IAAN,IAAgC,OAAV,CAAE,KAAK,CAAG,C;QACHC,M  
AAM,aAAW,CAAX,IAAN,IAAiC,OAAAX,CAAE,KAAK,EAAL,C;QACjC,MAAM,aAAW,CAAX,IAAN,IAAiC,O  
AAX,CAAE,KAAK,EAAL,C;QACjC,0BAAy,CAAZ,I;MAGJ,gBAAGB,UAAU,UAAV,I;MACHB,SAAS,sBAAS,  
YAAy,CAAZ,IAAT,C;MACT,aAAU,CAAV,MAAkB,SAALB,M;QACI,MAAM,aAAW,CAAX,IAAN,IAAqC,OA  
Af,EAAG,MAAK,IAAI,CAAJ,IAAL,CAAY,C;MAGzC,OAAO,K;K;yCACX,uD;MAvB4C,yB;QAAA,YAAiB,C;  
MAAG,uB;QAAA,UAAe,KAAM,O;aArF,0H;K;yCAiCA,iB;MAOyD,8BAAU,KAAY,EAAB,CAAjB,EAAB,  
KAAM,OAA1B,C;K;yCAEzD,gB;MAKkD,8BAAU,cAAU,IAAV,CAAV,C;K;IAGiD,0B;MAAA,8B;MAO2B,iB;  
MACvB,uBAAoC,uB;K;IAEpC,qC;MAAA,yC;MACI,4B;K;wDAEA,Y;MAAiC,mC;K;IAHrC,iD;MAAA,gD;Q  
AAA,+B;OAAA,yC;K;8CAMA,Y;MAAkC,8C;K;gDAEIC,oB;MAA4C,OAAA,oBAAc,kBAAS,QAAT,C;K;uCAC  
ID,Y;MAA8B,OAAA,oBAAc,U;K;+CAC5C,iB;MAAwC,OAAA,oBAAc,iBAAQ,KAAR,C;K;+CACtD,uB;MAA  
mD,OAAA,oBAAc,iBAAQ,IAAR,EAAC,KAAD,C;K;wCAEjE,Y;MAAGC,OAAA,oBAAc,W;K;gDAC9C,iB;MAA  
2C,OAAA,oBAAc,kBAAS,KAAT,C;K;gDACzD,uB;MAAuD,OAAA,oBAAc,kBAAS,IAAT,EAAC,KAAC,C;K;2C  
AErE,Y;MAAsC,OAAA,oBAAc,c;K;0CAEpD,Y;MAAoC,OAAA,oBAAc,a;K;kDACID,iB;MAAiD,OAAA,oBAA  
c,oBAAW,KAAX,C;K;kDAC/D,uB;MAA+D,OAAA,oBAAc,oBAAW,IAAX,EAAB,KAAB,C;K;yCAE7E,Y;MA  
AkC,OAAA,oBAAc,Y;K;iDAEhD,iB;MAAsD,OAAA,oBAAc,mBAAU,KAAY,C;K;iDACpE,gB;MAA+C,OAAA  
,oBAAc,mBAAU,IAAV,C;K;yDAC7D,qC;MACI,OAAA,oBAAc,mBAAU,KAAY,EAAB,SAAB,EAAB4B,OAA5  
B,C;K;IAiCtB,sC;MAAA,qC;QAAA,oB;OAAA,8B;K;IA0CJ,wB;MAAuC,yBAAa,IAAb,EAAB,IAAK,IAAL,EA  
AA5B,C;K;IAEvC,wB;MAAwC,yBAAa,IAAK,QAALB,EAAB2B,IAAK,YAAL,EAAB,CAAQ,QAAX,C;K;IAGxC,  
mC;MAUI,IAAA,KAAM,UAAN,C;QAAMB,MAAM,gCAAYB,uCAAoC,KAA7D,C;WACzB,IAAA,KAAM,KAA  
N,GAAa,UAAb,C;QAF8C,OAEB,0BAAQ,KAAM,MAAD,EAABqB,KAAM,KAAN,GAAa,CAAb,IAArB,C;WAC  
9B,IAAA,KAAM,MAAN,GAAc,WAAD,C;QAH8C,OAGf,0BAAQ,KAAM,MAAN,GAAc,CAAD,IAAR,EAAYB,  
KAAM,KAA/B,IAAuC,CAAvC,I;QAHe,OAIc,mB;K;IAGZ,oC;MAUI,IAAA,KAAM,UAAN,C;QAAMB,MAA  
M,gCAAYB,uCAAoC,KAA7D,C;WACzB,IAAA,KAAM,KAAN,+C;QAFiD,OAEB,2BAAS,KAAM,MAAF,EAAS  
B,KAAM,KAAN,yBAAa,CAAb,EAATB,C;WAC/B,IAAA,KAAM,MAAN,+C;QAHiD,OAGjB,2BAAS,KAAM,M  
AAN,8BAAC,CAAD,EAAT,EAAB0B,KAAM,KAAC,0BAAwC,CAAxC,E;QAHiB,OAIzC,oB;K;IAOZ,yB;MAAY  
C,YjFrTkB,MAAO,OiFqTpB,KjFrToB,CiFqTzB,I;K;IAEzC,4C;MAEI,OAAA,SAAK,KAAK,EAAL,GAAU,QA  
Af,GAAyC,CAAX,CAAC,QAAD,IAAW,KAAL,E;K;IAEjD,uC;MvLTVI,IAAI,EUlsVuD,QAAQ,IvLTV/D,CAAJ,C;  
QACI,cuLqVuE,+B;QvLpVvE,MAAM,gCAAYB,OAAQ,WAAjC,C;Q;IuLqVd,yC;MvLvVI,IAAI,EUluVyD,sBA  
AQ,IAAR,KvLvVzD,CAAJ,C;QACI,cuLsVyE,+B;QvLrVzE,MAAM,gCAAYB,OAAQ,WAAjC,C;Q;IuLsVd,yC;M  
vLxVI,IAAI,EUlwV6D,QAAQ,IvLxVrE,CAAJ,C;QACI,cuLuV6E,+B;QvLTV7E,MAAM,gCAAYB,OAAQ,WAAj  
C,C;Q;IuLwVd,yC;MAAYD,oCAA0B,IAA1B,qBAAiC,KAAjC,kB;K;ICrXzD,6B;MAOqC,OnMmYE,SmMnYF,m  
BnMmYE,C;K;ImMjYvC,sC;MASgD,6BAAS,WAAT,EAAB,KAAB,C;K;IAEhD,4C;MAUI,qBAAqB,IAArB,EA  
2B,KAA3B,C;MAEA,iBAAiB,InMqQgB,KmMrQhB,GAAiB,W;MACIC,kBAAkB,KnMoQe,KmMpQf,GAAB,W  
;MAEpC,mBAAmB,0BAAQ,UAAR,EAAB,WAApB,IAAqC,W;MACxD,OnMsWmC,SmMtW5B,YnMsW4B,C;  
K;ImMnWvC,sC;MAWI,IAAA,KAAM,UAAN,C;QAAMB,MAAM,gCAAYB,uCAAoC,KAA7D,C;QACzB,InMG  
kE,YmMHIE,KAAM,KnMG6E,KAAB,EmMHRD,4BAAK,UnMG6E,KAA7B,CmMHIE,K;UAFiD,OAEB,sBAA  
S,KAAM,MAAF,EnMqBsB,SmMrBA,KAAM,KnMqBI,KAAK,GAAY,CmMrBb,WnMqBa,MAAX,IAAF,CmMrB  
tB,C;UAC/B,InMEkE,YmMFIE,KAAM,MnME6E,KAAB,EmMFpD,4BAAK,UnME4E,KAA7B,CmMFIE,K;YA  
HiD,OnMuBI,SmMpBrB,sBnMiCsB,SmMjCb,KAAM,MnMiCiB,KAAK,GAAY,CmMjC1B,WnMiC0B,MAAZ,IA  
Af,CmMjCtB,EAAB2B,KAAM,KAAjC,CnMoB+B,KAAK,GAAY,CmMpBN,WnMoBM,MAAX,IAAF,C;YmMvB  
J,OAIzC,mB;K;IAGZ,8B;MAOuC,OnL0VG,Uml1VH,oBnL0VG,C;K;ImLxV1C,uC;MASmD,8BAAU,2BAAV,  
EAAC,KAAC,C;K;IAEnD,6C;MAUI,sBAASB,IAATB,EAAB4B,KAA5B,C;MAEA,iBAAiB,InLwNkB,KmLxNIB,8B;  
MACjB,kBAAkB,KnLuNiB,KmLvNjB,8B;MAEIB,mBAAmB,2BAAS,UAAT,EAABqB,WAArB,+B;MACnB,OnL  
6TsC,Uml7T/B,YnL6T+B,C;K;ImL1T1C,uC;MAWI,IAAA,KAAM,UAAN,C;QAAMB,MAAM,gCAAYB,uCAAo  
C,KAA7D,C;QACzB,InL7CmE,amL6CnE,KAAM,KnL7C+E,KAAIB,EmL6CtD,6BAAM,UnL7C8E,KAA9B,Cm  
L6CnE,K;UAFoD,OAEPB,uBAAU,KAAM,MAAHB,EnLhCuB,UmlgCA,KAAM,KnLhCK,KAAK,KAAY,ChBs  
Q7C,UAAW,oBAAL,CmMtOyB,WnMsOzB,MAAK,CAAL,iBAAN,CgBtQ6C,MAAX,CAAHB,CmLgCvB,C;UA  
ChC,InL9CmE,amL8CnE,KAAM,MnL9C+E,KAAIB,EmL8CrD,6BAAM,UnL9C6E,KAA9B,CmL8CnE,K;YAHo

D,OnL9BG,UmLiCtB,uBnLpBuB,UmLoBb,KAAM,MnLpBkB,KAAK,UAAy,ChByP/C,UAAW,oBAAL,CmMrO  
c,WnMqOd,MAAK,CAAL,iBAAN,CgBzP+C,MAAZ,CAAhB,CmLoBvB,EAA4B,KAAM,KAAIC,CnLjCiC,KAA  
K,KAAW,ChBsQ7C,UAAW,oBAAL,CmMrOgC,WnMqOhC,MAAK,CAAL,iBAAN,CgBtQ6C,MAAX,CAAhB,C  
;;YmL8BH,OAI5C,oB;;;K;IAGZ,sC;MAQI,4BAAU,KhK4+FH,QgK5+FP,C;MACA,OAAO,K;K;IAGX,uC;MAKs  
D,OhK2iG3C,egK3iG2C,4BAAU,IAAV,ChK2iG3C,C;K;IgKziGX,4D;MAOgD,yB;QAAA,YAAiB,C;MAAG,uB;  
QAAA,UAAe,KAAM,K;MACrF,4BAAU,KhKy9FH,QgKz9FP,EAA+B,SAA/B,EAA0C,OAA1C,C;MACA,OAA  
O,K;K;IAIX,2C;MxLrHI,IAAI,EX2B8D,YmM0FD,KnM1FkB,KAAjB,EmM0FO,InM1FsB,KAA7B,CmM0FD,Ix  
LrH7D,CAAJ,C;QACI,cwLoH6E,+B;QxLnH7E,MAAM,gCAAyB,OAAQ,WAAjC,C;Q;IwLoHd,4C;MxLrHI,IAAI  
,EKmC+D,amLmFC,KnLnFiB,KAAiB,EmLmFS,InLnFqB,KAA9B,CmLmFC,IxLtHhE,CAAJ,C;QACI,cwLqHgF,  
+B;QxLpHhF,MAAM,gCAAyB,OAAQ,WAAjC,C;Q;IyLpBc,6C;MASCxB,oC;MA/BA,iB;MANA,Y;MACA,Y;M  
ACA,Y;MACA,Y;MACA,Y;MACA,sB;MzLYA,IAAI,EyLLQ,CAAC,WAAK,QAAL,GAAU,QAAY,GAAe,QAaf  
,GAAoB,QAARb,MAA2B,CzLKnC,CAAJ,C;QACI,cyLNwC,wD;QzLOxC,MAAM,gCAAyB,OAAQ,WAAjC,C;O  
GoHV,iBAAc,CAAd,UsLxHW,EtLwHX,U;QsLxHiB,c;;K;qCAGjB,Y;MAGI,QAAQ,Q;MACR,IAAI,IAAO,MAA  
O,C;MACIB,WAAI,Q;MACJ,WAAI,Q;MACJ,WAAI,Q;MACJ,SAAS,Q;MACT,WAAI,E;MACJ,IAAK,IAAO,KA  
AM,CAAd,GAAsB,EAAtB,GAA8B,MAAO,C;MACzC,WAAI,C;MACJ,gCAAU,MAAV,I;MACA,OAAO,IAAI,a  
AAJ,I;K;8CAGX,oB;MACI,OAAU,cAAV,cAAU,EAAC,QAAd,C;K;IAEd,kC;MAAA,sC;MACI,4B;K;;;IADJ,8C;  
MAAA,6C;QAAA,4B;OAAA,sC;K;;IA7BA,gD;MAAA,sD;MACQ,yBAAK,KAAL,EAAy,KAAZ,EAAMb,CAAn  
B,EAAsB,CAAtB,EAA+B,CAAN,KAAzB,EAAuC,SAAU,EAAX,GAAoB,UAAW,CAArE,C;MADR,Y;K;ICbiD,  
8C;MACjD,4B;MACA,0C;K;oEADA,Y;MAAA,2B;K;2EACA,Y;MAAA,kC;K;uCAGA,iB;MACI,OAAO,0CAA  
C,kBAaA,KAAM,UAAAnB,KAC/B,mBAAS,KAAM,MAAf,KAawB,0BAAGb,KAAM,aAAtB,CADO,CAAhC,C;  
K;yCAIX,Y;MACI,OAAW,cAAJ,GAAe,EAaf,GAAuB,MAAW,SAAN,UAAm,CAAX,QAAqC,SAAb,iBAaA,CA  
ArC,I;K;yCAGIC,Y;MAAkC,OAAE,UAAf,qBAAU,iB;K;;IAGhd,kC;MAM6E,2BAAGb,SAAhB,EAAsB,IAAtB,  
C;K;;;ODAYzE,iB;MAA2C,qCAAiB,UAAjB,EAawB,KAAxB,KAAkC,8BAAiB,KAAjB,EAawB,iBAAXB,C;K;i  
DAC7E,Y;MAAkC,QAAC,8BAAiB,UAAjB,EAawB,iBAAXB,C;K;;IAcR,gD;MAI3B,gBAAqB,K;MACrB,uBAA  
4B,Y;K;0FACD,Y;MAAQ,oB;K;iGACD,Y;MAAQ,2B;K;2DAE1C,gB;MAA+D,YAAK,C;K;mDAEpE,iB;MAA  
gD,gBAAS,aAAT,IAAmB,SAAS,oB;K;0CAC5E,Y;MAAkC,SAAE,iBAAU,oBAAZ,C;K;yCAEIC,iB;MACI,OAA  
O,4CAA+B,kBAaA,KAAM,UAAAnB,KAC9B,kBAAU,KAAM,SAAhB,IAA0B,yBAAiB,KAAM,gBADnB,CAA/B,  
C;K;2CAIX,Y;MACI,OAAW,cAAJ,GAAe,EAaf,GAAuB,MAAY,SAAP,aAAO,CAAZ,QAAuC,SAAd,oBAAC,C  
AAvC,I;K;2CAGIC,Y;MAAkC,OAAE,aAAF,qBAAW,oB;K;;IAGjD,oC;MAOqF,6BAAkB,SAAIb,EAawB,IAAx  
B,C;K;IAQvD,+C;MAI1B,gBAAqB,K;MACrB,uBAA4B,Y;K;yFACF,Y;MAAQ,oB;K;gGACD,Y;MAAQ,2B;K;0  
DAEzC,gB;MAA6D,YAAK,C;K;kDAEIE,iB;MAA+C,gBAAS,aAAT,IAAmB,SAAS,oB;K;yCAC3E,Y;MAAkC,S  
AAE,iBAAU,oBAAZ,C;K;wCAEIC,iB;MACI,OAAO,2CAA8B,kBAaA,KAAM,UAAAnB,KAC7B,kBAAU,KAAM  
,SAAhB,IAA0B,yBAAiB,KAAM,gBADpB,CAA9B,C;K;0CAIX,Y;MACI,OAAW,cAAJ,GAAe,EAaf,GAAuB,M  
AAY,SAAP,aAAO,CAAZ,QAAuC,SAAd,oBAAC,CAAvC,I;K;0CAGIC,Y;MAAkC,OAAE,aAAF,qBAAW,oB;K;;  
IAGjD,oC;MAOkF,4BAAiB,SAAjB,EAauB,IAAvB,C;K;oFAGIF,8B;MAQI,0BAAmB,2BAAS,OAAT,C;K;IAGv  
B,+C;MACI,IAAI,CAAC,UAAAL,C;QAAiB,MAAM,gCAAyB,iCAA8B,IAA9B,iBAAZB,C;K;IC5I3B,gC;MACw,  
Q;MADP,IAAI,CAAC,6BAAW,KAAX,CAAL,C;QAAwB,MAAM,uBAAmB,sC/EjBzC,oB+EiByC,CAAnB,C;O  
AC9B,OAAO,sD;K;IAMX,oC;MAAkC,Q;MAA9B,OAAW,6BAAW,KAAX,CAAJ,GAAuB,sDAAvB,GAAuC,I;K;  
;;;;;ICvBhB,yC;MA2B9B,uC;MA1BA,wB;MAIA,gB;M5LQA,IAAI,E4LDS,iBAAY,IAAb,MAAuB,iBAAvB,C5L  
CR,CAAJ,C;QACI,c4LDQ,iBAAY,IAAhB,GACI,8CADJ,GAGI,sCAA0B,aAA1B,qC;Q5LDR,MAAM,gCAAyB,  
OAAQ,WAAjC,C;Q;yC4LKV,Y;MAAwC,Q;MAAA,oB;MACpC,iB;QAD8B,OACtB,G;WACR,oD;QAF8B,OAE  
F,SAAL,SAAK,C;WAC5B,6C;QAH8B,OAGd,iBAAK,SAAL,C;WACHB,8C;QAJ8B,OAIb,kBAAM,SAAN,C;;Q  
AJa,mC;K;IAOIC,qC;MAAA,yC;MACI,YAGqC,oBAAGb,IAAhB,EAAsB,IAAtB,C;K;iGAQJ,Y;MAAQ,gB;K;4D  
AEzC,gB;MAOI,8DAAqC,IAArC,C;K;gEAEJ,gB;MAMI,uDAA8B,IAA9B,C;K;4DAEJ,gB;MAMI,wDAA+B,IA  
A/B,C;K;;;IArCR,iD;MAAA,gD;QAAA,+B;OAAA,yC;K;;2CArCJ,Y;MAWI,oB;K;2CAXJ,Y;MAeI,gB;K;6CAfJ,0  
B;MAAA,2BAWI,8CAXJ,EAeI,kCAfJ,C;K;yCAA,Y;MAAA,c;MAWI,yD;MAIA,qD;MAfJ,a;K;uCAA,iB;MA  
AA,4IAWI,4CAXJ,IAeI,oCAfJ,I;K;ICLA,kC;MAAA,e;MAAA,iB;MAAA,uB;K;IAAA,gC;MAAA,mC;O;MAYI,4  
D;MAKA,8C;MAKA,gD;K;;IAVA,2C;MAAA,sB;MAAA,mC;K;;IAKA,oC;MAAA,sB;MAAA,4B;K;;IAKA,qC;

MAAA,sB;MAAA,6B;K;;IAtBJ,4B;MAAA,mG;K;;IAAA,iC;MAAA,a;AAAA,W;UAAA,wC;AAAA,I;UAAA,iC;a  
AAA,K;UAAA,kC;gBAAA,6D;;K;;6ECAA,yB;MAAA,4F;MAAA,2B;QAMI,MAAM,mCAA8B,0EAA9B,C;O;K  
ANV,C;ICkCA,+D;MAaW,Q;MAAP,OAAO,8CAA0,KAAP,EAAC,UAAAd,EAA0B,QAA1B,oC;K;IAGX,kC;MAIi  
B,Q;MAAb,wBAAa,KAAb,gB;QAAa,WAAA,KAAb,M;QACI,yBAAO,IAAP,C;;MACJ,OAAO,S;K;mFAGX,qB;  
MAGwD,gCAA0,EAAP,C;K;qFAExD,4B;MAG4E,OAAA,yBAAO,KAAP,CALpB,gBAAO,EAAP,C;K;qFAOXD  
,4B;MAGmE,OAAA,yBAAO,KAAP,CAVX,gBAAO,EAAP,C;K;IAaxD,wD;MAEQ,sB;QAAqB,yBAAO,UAAU,  
OAAV,CAAP,C;WACrB,sD;QAA4B,yBAAO,OAAP,C;WAC5B,2B;QAAmB,yBAAO,kBAAP,C;;QACX,yBAAE,  
SAAR,OAAQ,CAAf,C;K;IjL7EhB,+B;MAY6B,kBAaIB,QAAQ,SAAR,EAAC,EAAd,C;MACH,IX0EE,WW1EE,  
GAAK,CAAT,C;QAAY,MAAM,gCAAYB,oEAAzB,C;MADtB,OX4EO,W;K;IWvEX,wC;MAGbW,Q;MAAA,qC  
AAiB,KAAjB,C;MAAA,iB;QAA2B,MAAM,gCAAYB,8BAAO,SAAP,4CAA+C,KAAxE,C;OAAxC,OAAO,I;K;I  
AGX,qC;MAY6B,kBAaIB,QAAQ,SAAR,EAAC,EAAd,C;MAAP,OXmEqB,WWnEa,IAAM,CXmEjC,GAAqB,W  
AArB,GAA+B,I;K;IWhE1C,8C;MAGbI,WAAW,KAAAX,C;MAC4B,kBAArB,QAAQ,SAAR,EAAC,KAAAd,C;MAA  
P,OX+CqB,WW/CgB,IAAM,CX+CpC,GAAqB,WAArB,GAA+B,I;K;IW5C1C,gC;MAWI,IAAY,CAAR,8BAAW,  
CAAf,C;QACI,OAAO,YAAM,SAAN,C;OAEX,MAAM,gCAAYB,SAAM,SAAN,4BAAzB,C;K;IAGV,yC;MAkB  
W,Q;MANP,IAAI,EAU,CAAV,sBAAa,EAAb,CAAJ,C;QACI,MAAM,gCAAYB,oBAAiB,KAAjB,4CAAzB,C;O  
AEV,IAAI,YAAO,CAAP,IAAY,aAAQ,KAAxB,C;QACI,MAAM,gCAAYB,WAAQ,SAAR,mDAaWd,KAAjF,C;  
OAEH,IAAI,YAAO,EAAX,C;QACH,mBAAM,SAAN,C;;QAEA,0BAAM,SAAN,IAAa,EAAb,C;;MAHJ,W;K;IA  
uFJ,8B;MAWsC,+B;K;0EAETC,4B;MAM8D,OAAK,oBAAL,SAAK,CAAL,GAAkB,K;K;IAEHf,gD;MAQoC,0B;  
QAAA,aAAsB,K;MACtD,IAAI,cAAQ,KAAZ,C;QAAmB,OAAO,I;MAC1B,IAAI,CAAC,UAAAL,C;QAAiB,OAA  
O,K;MAEXB,gBAAqB,cAAL,SAAK,C;MACrB,iBAaUB,cAAN,KAAAM,C;MAEHb,yBAAa,U;MAAb,U;QAA2B,  
OFRMyB,oBEqMzB,SFRMyB,CAAY,cAfrB,YAAY,CAAZ,CEoNhB,KFRMyB,oBEqMI,UFRMJ,CAAY,cAfrB,YA  
AY,CAAZ,C;OEOID,W;K;IAGJ,gC;MAGyC,QAAQ,cAAA,sCAAK,cAAL,EAAoB,sCAAK,cAAzB,CAAR,6B;  
K;IkL3OzC,6C;MAc6B,4B;QAAA,eAAuB,G;MACHd,wCAAsB,EAAtB,EAA0B,YAA1B,C;K;IAEJ,mE;MAKwC  
,yB;QAAA,YAAoB,E;MAAI,4B;QAAA,eAAuB,G;MhMGNf,IAAI,CmBwR+C,CAAC,Q6K1R5C,Y7K0R4C,CnB  
xRpD,C;QACI,cgMHiC,wC;QhMijC,MAAM,gCAAYB,OAAQ,WAAjC,C;OgMHV,cAAY,gB;MAEC,yBAAS,mB  
AAS,YAAA,SAAU,OAAV,EAAMB,OAAM,KAAzB,CAAT,I;MAAT,wBAAiD,kBAaKB,SAaIB,C;MA0E9D,gB  
AAgB,iBA1ET,OA0ES,C;M1Lg7CT,kBAAoB,gB;MAoSd,gB;MADb,YAAY,C;MACC,00L9xDN,O1L8xDM,W;  
kBAAb,OAAa,cAAb,C;QAAa,sB;QA1RsB,U;QAAA,cA0RT,oBAAMb,cAAnB,EAAMb,sBAAnB,U;Q0L/sDIB,k  
B;;YAHA,CAAC,YAAS,CAAT,IAAc,qBAaf,KAA4C,Q1LktDG,I0LItDH,C;UAC5C,a;;UAEA,4B;UA9E+B,uB;;  
Y9KgHzB,kC;YAAA,wBZ6qDyC,IY7qDzC,C;YAAA,qB;YAAA,oB;YAAA,oB;YAAAd,gE;cACI,I8KjHkD,CAAI,  
aAAH,U9KiHrC,YZ4qDqC,IY5qDrC,YAAK,OAAL,E8KjHqC,CAAG,C9KiHtD,C;gBACI,sBAAO,O;gBAAP,wB  
;;YAGR,sBAAO,E;;U8KrHH,iD;UAGI,gCAA2B,EAA3B,C;YAHJ,2BAGqC,I;iBACjC,IAAK,a1LyxD0C,I0LzxD  
1C,gBAAyB,uBAAzB,CAAL,C;YAJJ,2B1L6xDmD,IOjmDsB,WmLxLI,0BAAuC,mBAAvC,InLwLJ,C;;YmL5Lz  
E,2BAKY,I;;UAyER,iE7LJD,yB6LIC,4B1L+sD+C,I;;QA1RpB,8B;UAA6C,6B;;M0LpgDhF,OAIkF,S1Lo7CE,W0  
Lp7CF,EAAO,mBAAc,kBAAd,CAAP,EAA0C,IAA1C,CACA,W;K;IAvET,+B;MAeyC,gCAAc,EAAd,C;K;IAEzC  
,6C;MAGgC,yB;QAAA,YAAoB,E;MAM3C,Q;MALL,cAAY,gB;M1LurBL,kBAAS,gB;MA2FA,U;MAAA,S0Lhx  
BM,O1LgxBN,W;MAAhB,OAAGB,gBAAhB,C;QAAgB,2B;QAAM,Ia3hB6B,CAAC,Qb2hBhB,Oa3hBgB,Cb2hB  
9B,C;UAAwB,WAAy,WAAI,OAaj,C;;M0L9wBrD,kB1L+wBE,W;MAmrBA,oBAAM,iBAAa,qCAAwB,EAAXB  
,CAAb,C;MAuEA,U;MAAA,+B;MAAb,OAAa,gBAAb,C;QAAa,wB;QACT,aAAY,uBAAC,IAAd,E;;M0L5gDhB,s  
BAAsB,CAGjB,oB1L0gDE,a0L1gDF,CAHiB,mBAGf,C;MAEP,yBAAS,mBAAS,YAAA,SAAU,OAAV,EAAMB,  
OAAM,KAAzB,CAAT,I;MAAT,wBAAiD,kBAaKB,SAaIB,C;MAmC9D,gBAAgB,iBAnCT,OAmCS,C;M1Lg7C  
T,oBAAoB,gB;MAoSd,kB;MADb,YAAY,C;MACC,S0LvvdN,O1LuvDM,W;MAAb,OAAa,gBAAb,C;QAAa,0B;  
QA1RsB,U;QAAA,cA0RT,oBAAMb,cAAnB,EAAMb,sBAAnB,U;Q0L/sDIB,kB;Q1Lq7C2B,c0Lx7C3B,CAAC,Y  
AAS,CAAT,IAAc,qBAaf,KAA4C,Q1LktDG,M0LItDH,C1Lw7CjB,G0Lv7C3B,I1Lu7C2B,G0Lr7C3B,oBAxCmG  
,Q1LuvDpD,M0LvvdD,kBAwCnG,Y7LJD,yB6LIC,4B1L+sD+C,MA1RpB,U;UAA6C,+B;;M0L79ChF,OA0CK,  
S1Lo7CE,a0Lp7CF,EAAO,mBAAc,kBAAd,CAAP,EAA0C,IAA1C,CACA,W;K;IAjCl,8C;MAAA,qB;QAEg,IAA  
G,QAAH,EAAG,CAAH,C;UAEQ,IAAA,EAAG,OAAH,GAAY,cAAO,OAAnB,C;YAHZ,OAGyC,c;;YAHZc,OAI  
oB,E;;UAJpB,OAoy,iBAAS,E;O;K;IAfjC,0C;MAKgC,sB;QAAA,SAaIB,M;MAC7C,OAYK,eAXA,OADL,uBA

CK,EAAI,4BAAJ,CAWA,EAAa,IAAb,C;K;IAET,gC;MAAwC,uB;;Q9KmDtB,gC;QAAA,gC;QAAA,mB;QAAA,kB;QAAA,kB;QAAd,0D;UACI,I8KpD+C,CAAI,aAAH,U9KoDIC,iCAAK,KAAL,E8KpDkC,CAAG,C9KoDnD,C;YACI,sBAAO,K;YAAP,wB;;QAGR,sBAAO,E;;;Mf3CA,4B;M6Lb6B,OAA8C,OAAM,EAAV,GAAC,gBAAd,GA A0B,E;K;IAGpF,wC;MAAkB,W;K;IAC9B,oD;MAAA,uB;QAAkB,wBAAS,I;O;K;IAFvC,mC;MACI,IAAA,M7K kMgD,YAAU,C6KIM1D,C;QAD4C,OACxB,wB;;QADwB,OAEPc,kC;K;mBAGZ,yB;M1L86CA,+D;MAoSA,wE ;M0LltDA,sF;QAKI,gBAAgB,2B;Q1Lg7CT,kBAAoB,gB;QAOsD,gB;QADb,YAAY,C;QACC,2B;QAAb,OAAa,c AAb,C;UAAa,sB;UA1RsB,U;UAAA,cA0RT,oBAAmB,cAAAnB,EAAmB,sBAAnB,U;U0L/sDIB,kB;U1Lq7C2B,c0 Lx7C3B,CAAC,YAAS,CAAT,IAAc,qBAAf,KAA4C,Q1LktDG,I0LltDH,C1Lw7CjB,G0Lv7C3B,I1Lu7C2B,G0Lr 7C3B,sC1L+sD+C,I0L/sD/C,a7LJD,yB6LIC,4B1L+sD+C,IA1RpB,U;YAA6C,6B;;Q0Lz7ChF,OAMK,S1Lo7CE, W0Lp7CF,EAAO,mBAAC,kBAAd,CAAP,EAA0C,IAA1C,CACA,W;O;KAbT,C;6EvEkSA,0B;MAGmE,OAAA,S AAK,gBAAO,GAAP,C;K;qFAExE,yB;MAAA,yD;MAAA,gC;QAO2B,gBAAhB,oB;QAAsB,atHrU7B,W;QsHqU A,OtHpUO,SsHoUqC,W;O;KAPhD,C;uFAUA,yB;MAAA,iE;MAAA,0C;QAQmC,gBAAXB,mBAAC,QAAAd,C;QA A8B,atHhVrC,W;QsHgVA,OtH/UO,SsH+U6C,W;O;KARxD,C;IAWA,oC;MAIiB,Q;MAAb,wBAAa,KAAb,gB;Q AAA,WAAA,KAAb,M;QACI,yBAAO,IAAP,C;;MACJ,OAAO,S;K;IAGX,oC;MAIiB,Q;MAAb,wBAAa,KAAb,gB ;QAAA,WAAA,KAAb,M;QACI,yBAAO,IAAP,C;;MACJ,OAAO,S;K;qFAGX,qB;MAG8D,gCAAO,EAAP,C;K;qF AE9D,4B;MAGkF,OAAA,yBAAO,KAAP,CALpB,gBAAO,EAAP,C;K;qFAO9D,4B;MAG4E,OAAA,yBAAO,KA AP,CAVd,gBAAO,EAAP,C;K;qFAY9D,4B;MAGyE,OAAA,yBAAO,KAAP,CAFX,gBAAO,EAAP,C;K;qFAiB9D ,4B;MAG8E,OAAA,yBAAO,KAAP,CAPhB,gBAAO,EAAP,C;K;qFAsB9D,4B;MAGyE,OAAA,yBAAO,KAAP, CAzBX,gBAAO,EAAP,C;K;qFA2B9D,4B;MAG4E,OAAA,yBAAO,KAAP,CA9Bd,gBAAO,EAAP,C;K;I9H/a9D, iC;MAK0C,iCAAqB,EAARb,C;K;IAE1C,0C;MAQmB,Q;MAAA,qBAAL,SAAK,EAAY,KAAZ,C;MAAL,iB;QA A2B,OAAO,I;OAA5C,UAAU,I;MACV,IAAI,MAAM,sCAAK,UAAW,IAAwB,MAAM,sCAAK,UAAvC,C;QAAk D,OAAO,I;MACzD,OAAW,OAAJ,GAAL,C;K;IAGf,kC;MAK4C,kCAAsB,EAATb,C;K;IAE5C,2C;MAQmB,Q;M AAA,qBAAL,SAAK,EAAY,KAAZ,C;MAAL,iB;QAA2B,OAAO,I;OAA5C,UAAU,I;MACV,IAAI,MAAM,uCAAM,UAAZ,IAAyB,MAAM,uCAAM,UAAzC,C;QAAoD,OAAO,I;MAC3D,OAAW,QAAJ,GAAL,C;K;IAGf,gC;MA KwC,gCAAOB,EAAPb,C;K;IAExC,yC;MAQI,WAAW,KAAX,C;MAEA,aAAa,SAAK,O;MACIB,IAAI,WAAU,C AAd,C;QAAiB,OAAO,I;MAExB,S;MACA,c;MACA,S;MAEA,gBAAgB,qBAAK,CAAL,C;MACHb,IAAI,YAAY, EAAb,C;QACI,IAAI,WAAU,CAAd,C;UAAiB,OAAO,I;QAExB,QAAQ,C;QAER,IAAI,cAAa,EAajB,C;UACI,a AAa,I;UACb,QAAQ,W;eACL,IAAI,cAAa,EAajB,C;UACH,aAAa,K;UACb,QAAQ,W;;UAER,OAAO,I;;QAEX,Q AAQ,C;QACR,aAAa,K;QACb,QAAQ,W;;MAIZ,uBAAuB,S;MAEvB,qBAAqB,gB;MACrB,aAAa,C;MACb,aAA U,KAAV,MAAsB,MAATb,M;QACI,YAAY,QAAQ,qBAAK,CAAL,CAAR,EAaiB,KAAjB,C;QAEZ,IAAI,QAAQ ,CAAZ,C;UAAe,OAAO,I;QACtB,IAAI,SAAS,cAAb,C;UACI,IAAI,mBAAkB,gBAATb,C;YACI,iBAaiB,QAAQ, KAAR,I;YAEjB,IAAI,SAAS,cAAb,C;cACI,OAAO,I;;YAGX,OAAO,I;;SAIf,6BAAU,KAAV,C;QAEA,IAAI,UAA S,QAAQ,KAAR,IAAT,CAAJ,C;UAA4B,OAAO,I;QAEnc,kBAAU,KAAV,I;;MAGJ,OAAW,UAAJ,GAAGB,MA AhB,GAA4B,CAAC,MAAD,I;K;IAGvC,iC;MAK0C,iCAAqB,EAARb,C;K;IAE1C,0C;MAQI,WAAW,KAAX,C; MAEA,aAAa,SAAK,O;MACIB,IAAI,WAAU,CAAd,C;QAAiB,OAAO,I;MAExB,S;MACA,c;MACA,S;MAEA,gB AAAGB,qBAAK,CAAL,C;MACHb,IAAI,YAAY,EAAb,C;QACI,IAAI,WAAU,CAAd,C;UAAiB,OAAO,I;QAExB, QAAQ,C;QAER,IAAI,cAAa,EAajB,C;UACI,aAAa,I;UACb,gC;eACG,IAAI,cAAa,EAajB,C;UACH,aAAa,K;UA Cb,6B;;UAEA,OAAO,I;;QAEX,QAAQ,C;QACR,aAAa,K;QACb,6B;;MAIJ,2C;MAEA,qBAAqB,gB;MACrB,e;M ACA,aAAU,KAAV,MAAsB,MAATb,M;QACI,YAAY,QAAQ,qBAAK,CAAL,CAAR,EAaiB,KAAjB,C;QAEZ,IA AI,QAAQ,CAAZ,C;UAAe,OAAO,I;QACtB,IAAI,uBAAS,cAAT,KAJ,C;UACI,IAAI,uBAAkB,gBAaiB,CAAJ, C;YACI,iBAaiB,8BAAQ,KAAR,E;YAEjB,IAAI,uBAAS,cAAT,KAJ,C;cACI,OAAO,I;;YAGX,OAAO,I;;SAIf,6 CAAU,KAAV,E;QAEA,IAAI,uBAAS,8BAAQ,KAAR,EAAT,KAJ,C;UAA4B,OAAO,I;QAEnc,6CAAU,KAAV, E;;MAGJ,OAAW,UAAJ,GAAGB,MAAhB,GAA6B,MAAD,a;K;IAIvC,kC;MAAyD,MAAM,0BAAsB,6BAA0B,K AA1B,MAATb,C;K;uEwBhL/D,yB;MAAA,oC;MAAA,uC;QAIL,iBAaiB,C;QACjB,eAAe,mBAAS,CAAT,I;QACf, iBAaiB,K;QAEjB,OAAO,cAAc,QAArB,C;UACI,YAAGB,CAAC,UAAL,GAaiB,UAAjB,GAaiC,Q;UAC7C,YA AY,UAAU,iCAAK,KAAL,EAAV,C;UAEZ,IAAI,CAAC,UAAL,C;YACI,IAAI,CAAC,KAAL,C;cACI,aAAa,I;;cA Eb,0BAAC,CAAd,I;;YAEJ,IAAI,CAAC,KAAL,C;cACI,K;;cAEA,sBAAY,CAAZ,I;;QAIz,OAAO,8BAAY,UAAZ ,EAAwB,WAAW,CAAX,IAAxB,C;O;KAZBX,C;yEA4BA,yB;MAAA,8B;MA5BA,oC;MA4BA,uC;QAIK,Q;QAA

sB,kBAAtB,2D;QA5BD,iBAAiB,C;QACjB,eAAe,qBAAS,CAAT,I;QACf,iBAAiB,K;QAEjB,OAAO,cAAc,QAAR B,C;UACI,YAAgB,CAAC,UAAL,GAAiB,UAAjB,GAAiC,Q;UAC7C,YAsBwB,SAtBZ,CAAU,mCAAK,KAAL,E AAV,C;UAEZ,IAAI,CAAC,UAAL,C;YACI,IAAI,CAAC,KAAL,C;cACI,aAAa,I;;cAEb,0BAAc,CAAd,I;;YAEJ,I AAI,CAAC,KAAL,C;cACI,K;;cAEA,sBAAY,CAAZ,I;;QAWZ,OAPO,gCAAY,UAAZ,EAAwB,WAAW,CAAX,I AAxB,CAOGC,W;O;KAJ3C,C;iFAMA,yB;MAAA,mD;MAAA,oC;MAAA,uC;QAIuB,UAAL,MAAK,EAAL,MA AK,EAAL,M;QAAK,mBAAL,SAAK,C;QAAL,mB;QAAA,kB;QAAA,kB;QAAd,0D;UACI,IAAI,CAAC,UAAU,i CAAK,KAAL,EAAV,CAAL,C;YACI,OAAO,8BAAY,KAAZ,EAAMb,gBAAnB,C;QAEf,OAAO,E;O;KARX,C;m FAWA,yB;MAAA,8B;MAXA,mD;MAAA,oC;MAWA,uC;QAIK,Q;QAASB,kBAAtB,2D;QAASB,oB;;UAXJ,kC; UAAA,qBAAL,WAAK,C;UAAL,qB;UAAA,oB;UAAA,oB;UAAd,0D;YACI,IAAI,CAUyB,SAVxB,CAAU,mCA AK,KAAL,EAAV,CAAL,C;cACI,mBAAO,gCAAY,KAAZ,EAAMb,kBAAnB,C;cAAP,qB;aAER,mBAAO,E;;;Q AOP,OAA4C,2B;O;KAJhD,C;6EAMA,yB;MAAA,mD;MAAA,+C;MAAA,oC;MAAA,uC;QAIkB,Q;QAAA,OAA a,SAAR,YAAL,SAAK,CAAQ,CAAb,W;QAAd,OAAc,cAAd,C;UAAc,uB;UACV,IAAI,CAAC,UAAU,iCAAK,K AAL,EAAV,CAAL,C;YACI,OAAO,8BAAY,CAAZ,EAAe,QAAQ,CAAR,IAAf,C;;QAEf,OAAO,E;O;KARX,C;+ EAWA,yB;MAAA,8B;MAXA,mD;MAAA,+C;MAAA,oC;MAWA,uC;QAIK,Q;QAASB,kBAAtB,2D;QAASB,kB;; UAXT,U;UAAA,SAAa,SAAR,YAAL,WAAK,CAAQ,CAAb,W;UAAd,OAAc,gBAAd,C;YAAc,yB;YACV,IAAI, CAUuB,SAVtB,CAAU,mCAAK,KAAL,EAAV,CAAL,C;cACI,iBAAO,gCAAY,CAAZ,EAAe,QAAQ,CAAR,IAA f,C;cAAP,mB;;UAER,iBAAO,E;;;QAOP,OAA0C,yB;O;KAJ9C,C;IAMA,kC;MAhEI,iBAAiB,C;MACjB,eAAe,m BAAS,CAAT,I;MACf,iBAAiB,K;MAEjB,OAAO,cAAc,QAAR,B,C;QACI,YAAgB,CAAC,UAAL,GAAiB,UAAjB, GAAiC,Q;QAC7C,YA6DgE,4BA7D1C,iCAAK,KAAL,EA6D0C,E;QA3DhE,IAAI,CAAC,UAAL,C;UACI,IAAI, CAAC,KAAL,C;YACI,aAAa,I;;YAEb,0BAAc,CAAd,I;;UAEJ,IAAI,CAAC,KAAL,C;YACI,K;;YAEA,sBAAY,C AAZ,I;;MAkDiD,OA9CtD,8BAAY,UAAZ,EAAwB,WAAW,CAAX,IAAxB,C;K;IAgDX,kC;MAzCK,Q;MAASB, kBAAtB,2D;MA5BD,iBAAiB,C;MACjB,eAAe,qBAAS,CAAT,I;MACf,iBAAiB,K;MAEjB,OAAO,cAAc,QAAR,B, C;QACI,YAAgB,CAAC,UAAL,GAAiB,UAAjB,GAAiC,Q;QAC7C,YAkEoD,4BAIE9B,mCAAK,KAAL,EAK8B ,E;QAHEpD,IAAI,CAAC,UAAL,C;UACI,IAAI,CAAC,KAAL,C;YACI,aAAa,I;;YAEb,0BAAc,CAAd,I;;UAEJ,IA AI,CAAC,KAAL,C;YACI,K;;YAEA,sBAAY,CAAZ,I;;MAuDqC,OAnD1C,gCAAY,UAAZ,EAAwB,WAAW,CA AX,IAAxB,CAOGC,W;K;IA8C3C,uC;MAGsE,oB;;QA3C/C,gC;QAAA,gC;QAAL,mB;QAAA,kB;QAAA,kB;QA Ad,0D;UACI,IAAI,CA0CsE,4BA1C3D,iCAAK,KAAL,EA0C2D,EA1C1E,C;YACI,mBAAO,8BAAY,KAAZ,EAAMb,gBAAnB,C;YAAP,qB;;QAER,mBAAO,E;;;MAuC2D,uB;K;IAEtE,uC;MAICK,Q;MAASB,kBAAtB,2D;MAAS B,oB;;QAXJ,kC;QAAA,wBAAL,WAAK,C;QAAL,qB;QAAA,oB;QAAA,oB;QAAd,0D;UACI,IAAI,CA+C0D,4B A/C/C,mCAAK,KAAL,EA+C+C,EA/C9D,C;YACI,mBAAO,gCAAY,KAAZ,EAAMb,kBAAnB,C;YAAP,qB;;QA ER,mBAAO,E;;;MA4C+C,OArCV,2B;K;IAuChD,qC;MAGoE,kB;;QApCID,Q;QAAA,OAAa,WAAR,yBAAQ,CA Ab,W;QAAd,OAAc,cAAd,C;UAAc,uB;UACV,IAAI,CAMcKE,4BAnCvD,iCAAK,KAAL,EAMCuD,EAnCtE,C;Y ACI,iBAAO,8BAAY,CAAZ,EAAe,QAAQ,CAAR,IAAf,C;YAAP,mB;;QAER,iBAAO,E;;;MAGCyD,qB;K;IAEpE, qC;MA3BK,Q;MAASB,kBAAtB,2D;MAASB,kB;;QAXT,U;QAAA,SAAa,WAAR,eAAL,WAAK,CAAQ,CAAb,W ;QAAd,OAAc,gBAAd,C;UAAc,yB;UACV,IAAI,CAwCsD,4BAxC3C,mCAAK,KAAL,EAwC2C,EAxC1D,C;YAC I,iBAAO,gCAAY,CAAZ,EAAe,QAAQ,CAAR,IAAf,C;YAAP,mB;;QAER,iBAAO,E;;;MAqC6C,OA9BV,yB;K;IA gC9C,2B;MA9FI,iBAAiB,C;MACjB,eAAe,mBAAS,CAAT,I;MACf,iBAAiB,K;MAEjB,OAAO,cAAc,QAAR,B,C; QACI,YAAgB,CAAC,UAAL,GAAiB,UAAjB,GAAiC,Q;QAC7C,mCAASB,iCAAK,KAAL,EAAtB,E;QAEA,IAA I,CAAC,UAAL,C;UACI,IAAI,CAAC,KAAL,C;YACI,aAAa,I;;YAEb,0BAAc,CAAd,I;;UAEJ,IAAI,CAAC,KAAL, C;YACI,K;;YAEA,sBAAY,CAAZ,I;;MAGf+B,OA5EpC,8BAAY,UAAZ,EAAwB,WAAW,CAAX,IAAxB,C;K;y EA8EX,yB;MAAA,8B;MAAA,qC;MAAA,4B;QAI2C,Q;QAAD,OAAuB,KAAtB,2DAASB,CAAO,W;O;KAJxE,C ;IAMA,gC;MAGoD,oB;;QA1E7B,gC;QAAA,gC;QAAL,mB;QAAA,kB;QAAA,kB;QAAd,0D;UACI,IAAI,wBAA W,iCAAK,KAAL,EAAX,EAJ,C;YACI,mBAAO,8BAAY,KAAZ,EAAMb,gBAAnB,C;YAAP,qB;;QAER,mBAA O,E;;;MASyC,uB;K;mFAEpD,yB;MAAA,8B;MAAA,+C;MAAA,4B;QAIgD,Q;QAAD,OAAuB,UAAAtB,2DAAS B,CAAY,W;O;KAJIF,C;IAMA,8B;MAGkD,kB;;QApEhC,Q;QAAA,OAAa,WAAR,yBAAQ,CAAb,W;QAAd,OA Ac,cAAd,C;UAAc,uB;UACV,IAAI,wBAAW,iCAAK,KAAL,EAAX,EAJ,C;YACI,iBAAO,8BAAY,CAAZ,EAA e,QAAQ,CAAR,IAAf,C;YAAP,mB;;QAER,iBAAO,E;;;MAGEuC,qB;K;+EAEID,yB;MAAA,8B;MAAA,2C;MAA A,4B;QAI8C,Q;QAAD,OAAuB,QAAtB,2DAASB,CAAU,W;O;KAJ9E,C;IAMA,8C;MAU8C,uB;QAAA,UAAgB,

E;MAO5C,Q;MANd,IAAI,SAAS,CAAb,C;QACI,MAAM,gCAAyB,oBAAiB,MAAjB,wBAAzB,C;MACV,IAAI,U  
AAU,SAAK,OAAAnB,C;QACI,OAAy,mBAAL,SAAK,EAAY,CAAZ,EAAe,SAAK,OAApB,C;MAEhB,SAAS,mB  
AAc,MAAd,C;MACK,gBAAS,SAAK,OAAAd,I;MAAd,aAAU,CAAV,iB;QACI,EAAG,gBAAO,OAApB,C;MACP,E  
AAG,gBAAO,SAAP,C;MACH,OAAO,E;K;IAGX,gD;MASwC,uB;QAAA,UAAgB,E;MACnD,Q;MAAD,OAAuB,  
SAAtB,6DAAsB,EAAS,MAAT,EAAiB,OAAjB,CAA0B,W;K;IAErD,4C;MAU4C,uB;QAAA,UAAgB,E;MAQ1C,  
Q;MAPd,IAAI,SAAS,CAAb,C;QACI,MAAM,gCAAyB,oBAAiB,MAAjB,wBAAzB,C;MACV,IAAI,UAAU,SAA  
K,OAAAnB,C;QACI,OAAy,mBAAL,SAAK,EAAY,CAAZ,EAAe,SAAK,OAApB,C;MAEhB,SAAS,mBAAc,MAA  
d,C;MACT,EAAG,gBAAO,SAAP,C;MACW,gBAAS,SAAK,OAAAd,I;MAAd,aAAU,CAAV,iB;QACI,EAAG,gBA  
AO,OAApB,C;MACP,OAAO,E;K;IAGX,8C;MASsC,uB;QAAA,UAAgB,E;MACjD,Q;MAAD,OAAuB,OAAtB,6D  
AAsB,EAAO,MAAP,EAAe,OAAf,CAAwB,W;K;2FAEnD,qB;MAWI,OAAO,qBAAgB,SAAK,OAAL,KAAe,C;K  
;+EAG1C,qB;MAMoD,4BAAU,C;K;sFAE9D,qB;MAMuD,0BAAS,C;K;mFAMhE,yB;MAAA,2C;MAAA,4B;QA  
MuD,QAAC,kB;O;KANxD,C;yFAQA,yB;MAAA,2C;MAAA,4B;QAWI,OAAO,qBAAqB,QAAL,SAAK,C;O;KA  
XhC,C;IAiB4D,+C;MAAA,kC;MAAS,uB;MACjE,eAAoB,C;K;gDAEpB,Y;MAA2C,gB;MAAA,iE;MAAJ,4C;K;+  
CAEvC,Y;MAAyC,sBAAQ,yB;K;IARrD,+B;MAG4D,4C;K;+EAQ5D,qB;MAE8C,uCAAQ,E;K;+EAETd,mC;M  
ASI,OA5DgD,qBAAU,CA4D1D,GAAe,cAAf,GAAMC,S;K;6EAEvC,yB;MAAA,2C;MAAA,0C;QASI,OAAI,kBA  
AJ,GAAe,cAAf,GAAMC,S;O;KATvC,C;IAeI,mC;MAAQ,uBAAG,mBAAS,CAAT,IAAH,C;K;IAMR,qC;MAAQ,  
OAAA,SAAK,OAAL,GAAc,CAAd,I;K;IAEZ,8C;MAIuB,Q;MAAA,0BAAS,CAAT,I;MAAnB,OAAgB,CAAT,8B  
ACgB,gBAAZ,qBAAK,KAAL,CAAY,CADhB,IAEoB,eAAhB,qBAAK,QAAQ,CAAR,IAAL,CAAgB,C;K;IAG/B,  
uC;MAGuD,ONpKyC,oBMoK/B,KAAM,MNpKyB,EMoKIB,KAAM,aAAN,GAAqB,CAArB,INpKkB,C;K;IMsK  
hG,yC;MAGqE,qCAAY,KAAM,MAAIB,EAAYB,KAAM,aAAN,GAAqB,CAArB,IAAzB,C;K;uFAErE,iC;MAS2E  
,2BAAY,KAAZ,EAAMB,GAAnB,C;K;mFAE3E,2C;MAOOD,wB;QAAA,WAAgB,gB;MAAkB,OAAA,8BAAY,U  
AAZ,EAAwB,QAAXB,CAAKC,W;K;IAE9H,uC;MAG6D,OAAA,8BAAY,KAAM,MAAIB,EAAYB,KAAM,aAAN  
,GAAqB,CAArB,IAAzB,CAAd,W;K;IAE9G,sE;MAImD,qC;QAAA,wBAAgC,S;MAC/E,YAAY,sBAAQ,SAAR,  
C;MACZ,OAAW,UAAS,EAAPB,GAAwB,qBAAxB,GN1M4F,oBM0M/B,CN1M+B,EM0M5B,KN1M4B,C;K;IM  
6MhG,wE;MAIqD,qC;QAAA,wBAAgC,S;MACjF,YAAY,sBAAQ,SAAR,C;MACZ,OAAW,UAAS,EAAPB,GAA  
wB,qBAAxB,GNnN4F,oBMmN/B,CNnN+B,EMmN5B,KNnN4B,C;K;IMsNhG,qE;MAIkD,qC;QAAA,wBAAgC,  
S;MAC9E,YAAY,sBAAQ,SAAR,C;MACZ,OAAW,UAAS,EAAPB,GAAwB,qBAAxB,GN5N4F,oBM4N/B,QAA  
Q,CAAR,IN5N+B,EM4NpB,gBN5NoB,C;K;IM+NhG,uE;MAIoD,qC;QAAA,wBAAgC,S;MACHF,YAAY,sBAAQ  
,SAAR,C;MACZ,OAAW,UAAS,EAAPB,GAAwB,qBAAxB,GNrO4F,oBMqO/B,QAAQ,SAAU,OAAIB,INrO+B,  
EMqOL,gBNrOK,C;K;IMwOhG,0E;MAIuD,qC;QAAA,wBAAgC,S;MACnF,YAAY,0BAAY,SAAZ,C;MACZ,OA  
AW,UAAS,EAAPB,GAAwB,qBAAxB,GN9O4F,oBM8O/B,CN9O+B,EM8O5B,KN9O4B,C;K;IMiPhG,4E;MAIy  
D,qC;QAAA,wBAAgC,S;MACrF,YAAY,0BAAY,SAAZ,C;MACZ,OAAW,UAAS,EAAPB,GAAwB,qBAAxB,G  
NvP4F,oBMuP/B,CNvP+B,EMuP5B,KNvP4B,C;K;IM0PhG,yE;MAIsD,qC;QAAA,wBAAgC,S;MACIF,YAAY,0  
BAAY,SAAZ,C;MACZ,OAAW,UAAS,EAAPB,GAAwB,qBAAxB,GNhQ4F,oBMgQ/B,QAAQ,CAAR,INhQ+B,E  
MgQpB,gBNhQoB,C;K;IMmQhG,2E;MAIwD,qC;QAAA,wBAAgC,S;MACpF,YAAY,0BAAY,SAAZ,C;MACZ,  
OAAW,UAAS,EAAPB,GAAwB,qBAAxB,GNzQ4F,oBMyQ/B,QAAQ,SAAU,OAAIB,INzQ+B,EMyQL,gBNzQK  
,C;K;IM4QhG,oE;MAOI,IAAI,WAAW,UAAf,C;QACI,MAAM,8BAA0B,gBAAa,QAAb,oCAAKD,UAAID,OAAI  
B,C;MACV,SAAS,sB;MACT,EAAG,qBAAy,SAAZ,EAakB,CAAIB,EAAqB,UAArB,C;MACH,EAAG,gBAAO,  
WAAP,C;MACH,EAAG,qBAAy,SAAZ,EAakB,QAAlB,EAA4B,gBAA5B,C;MACH,OAAO,E;K;yFAGX,yB;M  
AAA,8B;MAAA,qD;MAAA,+D;QAOK,Q;QAAD,OAAuB,aAAtB,2DAAsB,EAAa,UAAb,EAAYB,QAazB,EAA  
mC,WAAnc,CAAgD,W;O;KAP3E,C;IASA,uD;MAOI,+BAAa,KAAM,MAAnB,EAA0B,KAAM,aAAN,GAAqB,  
CAArB,IAA1B,EAakD,WAAID,C;K;yFAEJ,yB;MAAA,8B;MAAA,qD;MAAA,gD;QAOK,Q;QAAD,OAAuB,aA  
AtB,2DAAsB,EAAa,KAAb,EAAoB,WAApB,CAAiC,W;O;KAP5D,C;IASA,sD;MASI,IAAI,WAAW,UAAf,C;QA  
CI,MAAM,8BAA0B,gBAAa,QAAb,oCAAKD,UAAID,OAA1B,C;MAEV,IAAI,aAAY,UAAhB,C;QACI,OAAy,m  
BAAL,SAAK,EAAY,CAAZ,EAAe,gBAAf,C;MAEhB,SAAS,mBAAc,oBAAU,QAAV,GAAqB,UAArB,KAAAd,C;  
MACT,EAAG,qBAAy,SAAZ,EAakB,CAAIB,EAAqB,UAArB,C;MACH,EAAG,qBAAy,SAAZ,EAakB,QAAlB,  
EAA4B,gBAA5B,C;MACH,OAAO,E;K;uFAGX,yB;MAAA,8B;MAAA,mD;MAAA,kD;QASK,Q;QAAD,OAAuB  
,YAAAtB,2DAAsB,EAAY,UAAZ,EAAwB,QAAXB,CAAKC,W;O;KAT7D,C;IAWA,yC;MAKqE,8BAAY,KAAM,



MAAIB,EAAyB,KAAM,aAAN,GAAqB,CAArB,IAAzB,C;K;uFAErE,yB;MAAA,8B;MAAA,mD;MAAA,mC;QA  
OK,Q;QAAD,OAAuB,YAAtB,2DAAsB,EAAy,KAaZ,CAAmB,W;O;KAP9C,C;IASA,yC;MAKI,IAAI,wBAAW,  
MAAX,CAAJ,C;QACI,OAAO,8BAAY,MAAO,OAAhB,EAA2B,gBAA3B,C;OAEX,OAAO,8BAAY,CAAZ,EAA  
e,gBAaf,C;K;IAGX,2C;MAKI,IAAI,wBAAW,MAAX,CAAJ,C;QACI,ON3XyE,oBM2XxD,MAAO,ON3XiD,C;O  
M6X7E,OAAO,S;K;IAGX,yC;MAKI,IAAI,sBAAS,MAAT,CAAJ,C;QACI,OAAO,8BAAY,CAAZ,EAAe,mBAAS  
,MAAO,OAAhB,IAaf,C;OAEX,OAAO,8BAAY,CAAZ,EAAe,gBAaf,C;K;IAGX,2C;MAKI,IAAI,sBAAS,MAAT  
,CAAJ,C;QACI,ON9YwF,oBM8YvE,CN9YuE,EM8YpE,mBAAS,MAAO,OAAhB,IN9YoE,C;OMgZ5F,OAAO,S;  
K;IAGX,sD;MAMI,IAAK,qBAAU,MAAO,OAAp,GAAgB,MAAO,OAAvB,IAAV,CAAD,IAA6C,wBAAW,MAA  
X,CAA7C,IAAmE,sBAAS,MAAT,CAAvE,C;QACI,OAAO,8BAAY,MAAO,OAAhB,EAA2B,mBAAS,MAAO,O  
AAhB,IAA3B,C;OAEX,OAAO,8BAAY,CAAZ,EAAe,gBAaf,C;K;IAGX,wD;MAMI,IAAK,qBAAU,MAAO,OA  
AP,GAAgB,MAAO,OAAvB,IAAV,CAAD,IAA6C,wBAAW,MAAX,CAA7C,IAAmE,sBAAS,MAAT,CAAvE,C;  
QACI,ONTawF,oBMsavE,MAAO,ONtagE,EMsaxD,mBAAS,MAAO,OAAhB,INTawD,C;OMwa5F,OAAO,S;K;IA  
GX,mD;MAKmf,oCAAkB,SAAIB,EAA6B,SAA7B,C;K;IAEnF,mD;MAKuE,sCAAkB,SAAIB,EAA6B,SAA7B,C  
;K;IAEvE,iF;MAIsE,qC;QAAA,wBAAgC,S;MACIG,YAAy,sBAAQ,SAAR,C;MACL,Q;MAAA,IAAI,UAAS,EA  
Ab,C;QAAA,OAAiB,qB;;QA5JvB,U;QA4JM,OA5JgB,aAAtB,+DAAsB,EA4JyC,CA5JzC,EA4J4C,KA5J5C,EA4J  
mD,WA5JnD,CAAgD,W;;MA4JvE,W;K;IAGJ,mF;MAIwE,qC;QAAA,wBAAgC,S;MACpG,YAAy,sBAAQ,SAA  
R,C;MACL,Q;MAAA,IAAI,UAAS,EAAb,C;QAAA,OAAiB,qB;;QArKvB,U;QAqKM,OArKgB,aAAtB,+DAAsB,  
EAqKyC,CArKzC,EAqK4C,KArK5C,EAqKmD,WArKnD,CAAgD,W;;MAqKvE,W;K;IAGJ,gF;MAIqE,qC;QAA  
A,wBAAgC,S;MACjG,YAAy,sBAAQ,SAAR,C;MACL,Q;MAAA,IAAI,UAAS,EAAb,C;QAAA,OAAiB,qB;;QA  
A2B,iBAAa,QAAQ,CAAR,I;QAAb,eAAwB,gB;QA9K1E,U;QA8KM,OA9KgB,aAAtB,+DAAsB,EAAa,UAAb,E  
AAyB,QAAzB,EA8K4D,WA9K5D,CAAgD,W;;MA8KvE,W;K;IAGJ,kF;MAIuE,qC;QAAA,wBAAgC,S;MACnG,  
YAAy,sBAAQ,SAAR,C;MACL,Q;MAAA,IAAI,UAAS,EAAb,C;QAAA,OAAiB,qB;;QAA2B,iBAAa,QAAQ,SA  
AU,OAAIB,I;QAAb,eAAuC,gB;QAvLzF,U;QAUlM,OAuLgB,aAAtB,+DAAsB,EAAa,UAAb,EAAyB,QAAzB,E  
AuL2E,WAvL3E,CAAgD,W;;MAuLvE,W;K;IAGJ,oF;MAI2E,qC;QAAA,wBAAgC,S;MACvG,YAAy,0BAAy,S  
AAZ,C;MACL,Q;MAAA,IAAI,UAAS,EAAb,C;QAAA,OAAiB,qB;;QAA2B,iBAAa,QAAQ,SAAU,OAAIB,I;QA  
Ab,eAAuC,gB;QAhMzF,U;QAgMM,OAhmG,B,aAAtB,+DAAsB,EAAa,UAAb,EAAyB,QAAzB,EAgm2E,WAhM  
3E,CAAgD,W;;MAGMvE,W;K;IAGJ,sF;MAIyE,qC;QAAA,wBAAgC,S;MACrG,YAAy,0BAAy,SAAZ,C;MACL  
,Q;MAAA,IAAI,UAAS,EAAb,C;QAAA,OAAiB,qB;;QAA2B,iBAAa,QAAQ,CAAR,I;QAAb,eAAwB,gB;QAZM1  
E,U;QAYMM,OAzmG,B,aAAtB,+DAAsB,EAAa,UAAb,EAAyB,QAAzB,EAyM4D,WAZM5D,CAAgD,W;;MAYM  
vE,W;K;IAGJ,qF;MAI0E,qC;QAAA,wBAAgC,S;MACtG,YAAy,0BAAy,SAAZ,C;MACL,Q;MAAA,IAAI,UA  
AS,EAAb,C;QAAA,OAAiB,qB;;QAINvB,U;QAKNM,OAInG,B,aAAtB,+DAAsB,EAkNyC,CAInzC,EAkN4C,KAIN  
5C,EAkNmD,WAINnD,CAAgD,W;;MAkNvE,W;K;IAGJ,uF;MAI4E,qC;QAAA,wBAAgC,S;MACxG,YAAy,0B  
AAy,SAAZ,C;MACL,Q;MAAA,IAAI,UAAS,EAAb,C;QAAA,OAAiB,qB;;QA3NvB,U;QA2NM,OA3NgB,aAAtB  
,+DAAsB,EA2NyC,CA3NzC,EA2N4C,KA3N5C,EA2NmD,WA3NnD,CAAgD,W;;MA2NvE,W;K;+EAOJ,yC;MA  
QoF,OAAA,KAAM,iBAAQ,SAAR,EAAC,WAAd,C;K;+EAE1F,uC;MAOI,OAAA,KAAM,iBAAQ,SAAR,EAAC,S  
AAd,C;K;yFAEV,yC;MAMyF,OAAA,KAAM,sBAAa,SAAb,EAAMB,WAAhB,C;K;+FAE/F,yB;MAAA,oC;MAA  
A,gC;MAAA,uC;QAeW,Q;QAAA,IApe4C,mBAAS,CAoerD,C;uBAAkB,oBAAU,iCAAK,CAAL,EAAV,E;UAA  
A,YNljBoD,oBMkjBrB,CNljBqB,C;UMkjBtE,OLrjBwD,2BAAL,GAakB,K;;UKqjBrE,OAAyD,S;QAAhE,W;O;K  
AfJ,C;iGakBA,yB;MAAA,oC;MAAA,uC;QAeI,OatfmD,mBAAS,CAsf5D,GAAyB,UAAU,iCAAK,CAAL,EAA  
V,CAAmB,WAAhB,GNpkBoD,oBMokBV,CNpkBU,CMokB7E,GAA2E,S;O;Kaf/E,C;+EAmBA,4B;MAIsE,OA  
AA,KAAM,iBAAQ,SAAR,C;K;IAE5E,0F;MAKI,IAAK,cAAc,CAaf,IAAsB,aAAa,CAAnC,IAA0C,cAAa,SAAK,  
OAAAL,GAAC,MAAd,IAAb,CAA1C,IAAiF,eAAc,KAAM,OAAhB,GAAe,MAaf,IAAd,CAArF,C;QACI,OAAO,K;  
OAGX,iBAAC,CAAd,UAAhB,MAAtB,U;QACI,IAAI,CAA0B,SAAZB,qBAAK,aAAa,KAAb,IAAL,CAAyB,EAA  
O,iBAAM,cAAc,KAAd,IAAN,CAAP,EAAMC,UAAhC,CAA9B,C;UACI,OAAO,K;;MAEf,OAAO,I;K;IAGX,mD;  
MAG+C,0B;QAAA,aAAsB,K;MACjE,OAAA,SAAK,OAAAL,GAAC,CAAd,IAA2B,SAAR,qBAAK,CAAL,CAAQ,  
EAAO,IAAP,EAAa,UAAb,C;K;IAE/B,iD;MAG6C,0B;QAAA,aAAsB,K;MAC/D,OAAA,SAAK,OAAAL,GAAC,C  
AAd,IAAMC,SAAhB,qBAAK,2BAAL,CAAgB,EAAO,IAAP,EAAa,UAAb,C;K;IAEvC,qD;MAGyD,0B;QAAA,a  
AAsB,K;MAC3E,IAAI,CAAC,UAAD,IAAe,6BAaf,IAAiC,0BAArC,C;QACI,OAAy,WAAL,SAAK,EAAW,MA

AX,C;;QAEZ,OAAO,6BAakB,CAAIB,EAAqB,MAArB,EAA6B,CAA7B,EAAGC,MAAO,OAAvC,EAA+C,UAA/  
C,C;K;IAGf,iE;MAG0E,0B;QAAA,aAAsB,K;MAC5F,IAAI,CAAC,UAAD,IAAe,6BAaf,IAAiC,0BAArC,C;QAC  
I,OAAY,aAAL,SAAK,EAAW,MAAX,EAAmB,UAAAnB,C;;QAEZ,OAAO,6BAakB,UAAIB,EAA8B,MAA9B,EA  
AsC,CAAtC,EAAyC,MAAO,OAAhD,EAAwD,UAAxD,C;K;IAGf,mD;MAGuD,0B;QAAA,aAAsB,K;MACzE,IA  
AI,CAAC,UAAD,IAAe,6BAaf,IAAiC,0BAArC,C;QACI,OAAY,SAAL,SAAK,EAAS,MAAT,C;;QAEZ,OAAO,6  
BAakB,mBAAS,MAAO,OAAhB,IAAIB,EAA0C,MAA1C,EAAkD,CAAID,EAAqD,MAAO,OAA5D,EAAoE,UA  
ApE,C;K;IAMf,wD;MAQ8D,0B;QAAA,aAAsB,K;MACHf,qBfjnBO,MAAO,KeinBa,SAAK,OfjnBIB,EinB0B,K  
AAM,OfjnBhC,C;MemnBd,QAAQ,C;MACR,OAAO,IAAI,cAAJ,IAA8B,SAAR,qBAAK,CAAL,CAAQ,EAAO,iB  
AAM,CAAN,CAAP,EAA8B,UAA9B,CAArC,C;QACI,a;;MAEJ,IAAS,mBAAL,SAAK,EAAmB,IAAI,CAAJ,IAA  
nB,CAAL,IAAwC,mBAAN,KAAM,EAAmB,IAAI,CAAJ,IAAnB,CAA5C,C;QACI,a;OAEJ,OAAO,8BAAY,CAA  
Z,EAAe,CAAf,CAAkB,W;K;IAG7B,wD;MAQ8D,0B;QAAA,aAAsB,K;MACHf,iBAAiB,SAAK,O;MACtB,kBAA  
kB,KAAM,O;MACxB,qBfxoBO,MAAO,KewoBa,UfxoBb,EewoByB,WfxoBzB,C;Me0oBd,QAAQ,C;MACR,OA  
AO,IAAI,cAAJ,IAA+C,SAAzB,qBAAK,aAAa,CAAb,GAAiB,CAAjB,IAAL,CAAyB,EAAO,iBAAM,cAAc,CAA  
d,GAakB,CAAIB,IAAN,CAAP,EAAgD,UAAhD,CAAtD,C;QACI,a;;MAEJ,IAAS,mBAAL,SAAK,EAAmB,aAAa  
,CAAb,GAAiB,CAAjB,IAAnB,CAAL,IAAqD,mBAAN,KAAM,EAAmB,cAAc,CAAd,GAakB,CAAIB,IAAnB,C  
AAzD,C;QACI,a;OAEJ,OAAO,8BAAY,aAAa,CAAb,IAAZ,EAA4B,UAA5B,CAAwC,W;K;IAMnD,8D;MAQqD,  
0B;QAAA,aAakB,C;MAAG,0B;QAAA,aAAsB,K;MAMnE,UAAkB,M;MAL3C,IAAI,CAAC,UAAD,IAAe,KAA  
M,OAAN,KAAc,CAA7B,IAAkC,6BAAtC,C;QACI,WAAiB,SAAN,KAAM,C;QACjB,ONjtBwF,kB6G3ME,oBvG  
45BrE,IuG55BqE,C7G2MF,EMitB7D,UNjtB6D,C;OMotBnE,uBAAX,UAAW,EAAC,CAAd,C;MAAkB,oC;kBAA  
3C,gD;QACI,kBAakB,qBAAI,KAAJ,C;QACR,c;;UjCikXE,U;UAAhB,4BiCjkXQ,KjCikXR,kB;YAAgB,cAAhB,  
UiCjkXQ,KjCikXR,S;YAAAsB,IiCjkXC,SAAH,UjCikXgB,oBiCjkXhB,CAAG,0BjCikXD,C;cAAwB,aAAO,I;cAA  
P,e;;UAC9C,aAAO,K;;;QiClkXH,e;UACI,OAAO,K;;MAEf,OAAO,E;K;IAGX,kE;MASyD,0B;QAAA,aAakB,2B;  
MAAW,0B;QAAA,aAAsB,K;MACxG,IAAI,CAAC,UAAD,IAAe,KAAM,OAAN,KAAc,CAA7B,IAAkC,6BAAtC  
,C;QACI,WAAiB,SAAN,KAAM,C;QACjB,ONruB4F,sB6G3MM,oBvGg7BzE,IuGh7ByE,C7G2MN,EMquB7D,U  
NruB6D,C;mBMyuBhG,iBAAYB,eAAX,UAAW,EAAa,2BAAb,CAAzB,WAAwD,CAAxD,U;QACI,kBAakB,qB  
AAI,KAAJ,C;QACR,c;;UjCyiXE,Q;UAAhB,wBiCziXQ,KjCyiXR,gB;YAAgB,cAAhB,UiCziXQ,KjCyiXR,O;YA  
AsB,IiCziXC,SAAH,UjCyiXgB,oBiCziXhB,CAAG,0BjCyiXD,C;cAAwB,aAAO,I;cAAP,e;;UAC9C,aAAO,K;;;Qi  
C1iXH,e;UACI,OAAO,K;;MAGf,OAAO,E;K;IAIX,8E;MAA2G,oB;QAAA,OAAgB,K;MAOrG,UAKA,M;MAXI  
B,cAAkB,CAAC,IAAL,GACV,aAAW,gBAAX,UAAW,EAAC,CAAd,CAAX,EAAsC,eAAT,QAAS,EAAa,gBAAb  
,CAAtC,CADU,GAGV,SAAW,eAAX,UAAW,EAAa,2BAAb,CAAX,EAAmD,gBAAT,QAAS,EAAc,CAAd,CAA  
nD,C;MAEJ,IAAI,iCAakB,yBAAtB,C;QACkB,yB;QAAd,OAAc,cAAd,C;UAAc,uB;UACV,IAAU,cAAN,KAAM  
,EAAC,CAAd,EAAiB,SAAjB,EAAuB,KAAvB,EAA8B,KAAM,OAAPC,EAA4C,UAA5C,CAAV,C;YACI,OAAO,  
K;;QAGD,2B;QAAd,OAAc,gBAAd,C;UAAc,2B;UACV,IAAU,kBAAN,KAAM,EAAkB,CAAIB,EAAqB,SAArB,  
EAA2B,OAA3B,EAAkC,KAAM,OAAxC,EAAgD,UAAhD,CAAV,C;YACI,OAAO,O;;MAGnB,OAAO,E;K;IAG  
X,qE;MAUsB,UAMA,M;MAfIB,IAAI,CAAC,UAAD,IAAe,OAAQ,KAAR,KAAgB,CAAnC,C;QACI,aAAqB,UA  
AR,OAAQ,C;QACrB,YAAgB,CAAC,IAAL,GAAW,sBAAQ,MAAR,EAAgB,UAAhB,CAAX,GAA4C,0BAAY,M  
AAZ,EAAoB,UAApB,C;QACxD,OAAW,QAAQ,CAAZ,GAAe,IAAf,GAAYB,UAAAS,MAAT,C;OAGpC,cAAkB,  
CAAC,IAAL,GAAW,aAAW,gBAAX,UAAW,EAAC,CAAd,CAAX,EAA6B,gBAA7B,CAAX,GAAoD,SAAW,eA  
AX,UAAW,EAAa,2BAAb,CAAX,EAA0C,CAA1C,C;MAEIE,IAAI,6BAAJ,C;QACkB,yB;oBAAd,OAAc,cAAd,C  
;UAAc,yB;UACmB,sB;;Yb7sBrB,U;YAAA,Sa6sBa,Ob7sBb,W;YAAhB,OAAgB,gBAAhB,C;cAAgB,2B;cAAM,I  
a6sBgC,cb7sBIB,Oa6sBkB,EAAC,CAAd,sBb7sBIB,Oa6sBmD,OAAjC,ab7sBhC,C;gBAAwB,qBAAO,O;gBAAP,u  
B;;YAC9C,qBAAO,I;;;Ua4sBC,uC;UACA,IAAI,sBAAJ,C;YACI,OAAO,YAAS,cAAT,C;;;QAGD,2B;oBAAd,OA  
Ac,gBAAd,C;UAAc,2B;UACmB,wB;;YbntBrB,U;YAAA,SamtBa,ObntBb,W;YAAhB,OAAgB,gBAAhB,C;cAAg  
B,6B;cAAM,IamtBgC,kBbntBIB,SamtBkB,EAAkB,CAAIB,sBbntBIB,SamtBuD,OAARc,abntBhC,C;gBAAwB,uB  
AAO,S;gBAAP,uB;;YAC9C,uBAAO,I;;;UaktBC,2C;UACA,IAAI,wBAAJ,C;YACI,OAAO,YAAS,gBAAT,C;;;M  
AInB,OAAO,I;K;IAGX,iE;MAY+D,0B;QAAA,aAakB,C;MAAG,0B;QAAA,aAAsB,K;MACtG,4BAAU,OAAV,E  
AAmB,UAAAnB,EAA+B,UAA/B,EAAkD,KAAD,C;K;IAEJ,mE;MAYmE,0B;QAAA,aAakB,2B;MAAW,0B;QA  
AA,aAAsB,K;MACIH,4BAAU,OAAV,EAAmB,UAAAnB,EAA+B,UAA/B,EAAkD,IAAID,C;K;IAEJ,kE;MAWgE,

0B;QAAA,aAAkB,C;MAAG,0B;QAAA,aAAsB,K;MACvG,gB;MAAA,8CAAU,OAAV,EAAmB,UAAmB,EAA+B  
,UAA/B,EAakD,KAAID,mDAAmE,E;K;IAEvE,sE;MAYoE,0B;QAAA,aAAkB,2B;MAAW,0B;QAAA,aAAsB,K;  
MACnH,gB;MAAA,8CAAU,OAAV,EAAmB,UAAmB,EAA+B,UAA/B,EAakD,IAAID,mDAAkE,E;K;IAKtE,6D;  
MAM4C,0B;QAAA,aAAkB,C;MAAG,0B;QAAA,aAAsB,K;MACnF,OAAW,cAAc,gCAAZB,GACI,sBAAW,mB  
AAy,IAAZ,CAAX,EAA8B,UAA9B,EAA0C,UAA1C,CADJ,GNz2B4F,kB6G3ME,oBvGujC5E,IuGvjC4E,C7G2  
MF,EM42BpE,UN52BoE,C;K;IM+2BhG,+D;MAQgD,0B;QAAA,aAAkB,C;MAAG,0B;QAAA,aAAsB,K;MACvF  
,OAAW,cAAc,gCAAZB,GACI,sBAAQ,MAAR,EAAgB,UAAhB,EAA4B,gBAA5B,EAAoC,UAApC,CADJ,GNx3  
B4F,kBM23B1E,MN33B0E,EM23B1E,UN33BkE,C;K;IM83BhG,iE;MAQgD,0B;QAAA,aAAkB,2B;MAAW,0B;Q  
AAA,aAAsB,K;MAC/F,OAAW,cAAc,gCAAZB,GACI,0BAAe,mBAAy,IAAZ,CAAf,EAakC,UAAIC,EAA8C,U  
AA9C,CADJ,GNp4BgG,sB6G3MM,oBvGklChF,IuGllCgF,C7G2MN,EMu4BpE,UNv4BoE,C;K;IM04BpG,mE;M  
AQoD,0B;QAAA,aAAkB,2B;MAAW,0B;QAAA,aAAsB,K;MACnG,OAAW,cAAc,gCAAZB,GACI,sBAAQ,MAA  
R,EAAgB,UAAhB,EAA4B,CAA5B,EAA+B,UAA/B,EAakD,IAAID,CADJ,GNn5BgG,sBMs5B1E,MNt5B0E,EM  
s5B1E,UNt5BkE,C;K;IMy5BpG,mD;MAM+D,0B;QAAA,aAAsB,K;MACjF,OAAI,yBAAJ,GACI,sBAAQ,KAAR,  
UAA4B,UAA5B,KAA2C,CAD/C,GAGI,sBAAQ,KAAR,EAAe,CAAf,EAakB,gBAAIB,EAA0B,UAA1B,KAAyC,  
C;K;IAIjD,kD;MAMsD,0B;QAAA,aAAsB,K;MACxE,6BAAQ,IAAR,UAA2B,UAA3B,KAA0C,C;K;kFAE9C,4B;  
MAI0E,OAAA,KAAM,yBAAgB,SAAhB,C;K;IAM3C,yE;MACjC,oB;MACA,8B;MACA,oB;MACA,kC;K;IAG8  
C,sF;MAAA,gE;MAC1C,iBAAqB,E;MACrB,yBAAwC,WAAx,yCAAW,EAAS,CAAT,EAAY,oCAAM,OAAIB,  
C;MACxC,uBAA2B,sB;MAC3B,gBAA0B,I;MAC1B,eAAmB,C;K;0EAEnB,Y;MACI,IAAI,uBAAkB,CAAtB,C;Q  
ACI,iBAAy,C;QACZ,gBAAW,I;QAEX,IAAI,4CAAQ,CAAR,IAAa,uDAAa,yCAA1B,IAAmC,uBAAkB,yCAA  
M,OAA/D,C;UACI,gBAAW,qCAAyB,iBAAN,yCAAM,CAAzB,C;UACX,uBAAkB,E;UAEIB,YAAkB,iDAAN,y  
CAAM,EAAa,oBAAb,C;UACIB,IAAI,SAAS,IAAb,C;YACI,gBAAW,qCAAyB,iBAAN,yCAAM,CAAzB,C;YAC  
X,uBAAkB,E;YAEIB,IAAK,QAAiB,KAAjB,aAAL,EAAY,SAAU,KAAV,a;YACZ,gBAAW,gCAAwB,KAAxB,C  
;YACX,yBAAoB,QAAQ,MAAR,I;YACpB,uBAAkB,0BAAwB,WAAU,CAAd,GAAiB,CAAjB,GAAwB,CAA5C,  
K;QAG1B,iBAAy,C;K;oEAIpB,Y;MAKiB,Q;MAJb,IAAI,mBAAa,EAAjB,C;QACI,iB;MACJ,IAAI,mBAAa,C  
AAjB,C;QACI,MAAM,6B;MACV,aAAa,mE;MAEb,gBAAW,I;MACX,iBAAy,E;MACZ,OAAO,M;K;uEAGX,Y;  
MACI,IAAI,mBAAa,EAAjB,C;QACI,iB;MACJ,OAAO,mBAAa,C;K;IDA9C5B,Y;MAA8C,+D;K;IAGeU,0E;M  
AAA,0C;QhB1mCjD,SgB2mCH,sBAAW,kBAAX,EAAuB,YAAvB,EAakD,kBAAID,C;QAAA,OAAwE,KAAK,  
CAAT,GAAY,IAAZ,GAAsB,OAAM,CAAN,C;O;K;IAdIG,iF;MAUkE,0B;QAAA,aAAkB,C;MAAG,0B;QAAA,a  
AAsB,K;MAAO,qB;QAAA,QAAa,C;MAC7H,wBAAwB,KAAxB,C;MAEA,OAAO,4BAAwB,SAAXB,EAA8B,U  
AA9B,EAA0C,KAA1C,EAAiD,gDAAjD,C;K;IAwBiD,gF;MAAA,0C;QAAkB,Q;QAAA,oCAAU,sBAAV,EAA0  
B,YAA1B,EAAqD,kBAArD,EAAwE,KAAxE,aAAsF,GAAG,UAAH,EAAe,WAAO,OAAtB,CAAtF,O;O;K;IAIB9  
E,mF;MAC0E,0B;QAAA,aAAkB,C;MAAG,0B;QAAA,aAAsB,K;MAAO,qB;QAAA,QAAa,C;MACrI,wBAAwB,  
KAAxB,C;MACA,qBAAgC,OAAx,UAAW,C;MAEhC,OAAO,4BAAwB,SAAXB,EAA8B,UAA9B,EAA0C,KAA  
1C,EAAiD,sDAAjD,C;K;IAIX,wC;MnBltCI,IAAI,EmBmtCI,SAAS,CnBntCb,CAAJ,C;QACI,cmBktCkB,8C;QnBj  
tCIB,MAAM,gCAAyB,OAAQ,WAAjC,C;Q;ImBkuCgE,sD;MAAA,qB;QAAE,yCAAU,EAAV,C;O;K;IAZhF,mE;  
MAWmE,0B;QAAA,aAAsB,K;MAAO,qB;QAAA,QAAa,C;MACzG,OAAe,OAAtE,+BAakB,UAAIB,UAA2C,  
UAA3C,EAA+D,KAA/D,CAAsE,EAAI,iCAAJ,C;K;IAE1E,yD;MAWyD,0B;QAAA,aAAsB,K;MAAO,qB;QAAA,  
QAAa,C;MAC/F,IAAI,UAAW,OAAx,KAAmB,CAAvB,C;QACI,gBAAgB,WAAW,CAAX,C;QACHB,IAAI,EAA  
C,SAh/BuC,YAAU,CAg/BID,CAAJ,C;UACI,OAAO,mBAAM,SAAN,EAAiB,UAAjB,EAA6B,KAA7B,C;UAI2E,  
kBAAb,cAAtE,+BAakB,UAAIB,UAA2C,UAA3C,EAA+D,KAA/D,CAAsE,C;Mb80tE,kBAAM,iBAAa,qCAAw  
B,EAAxB,CAAb,C;MAuEA,Q;MAAA,6B;MAAb,OAAa,cAAb,C;QAAa,sB;QACT,WAAy,WatGf,uBbsTIE,Iat  
kE,CbsThF,C;MatThB,ObuTO,W;K;Ia5SmE,wD;MAAA,qB;QAAE,yCAAU,EAAV,C;O;K;IARhF,qE;MAOIe,0  
B;QAAA,aAAsB,K;MAAO,qB;QAAA,QAAa,C;MACvG,OAAe,OAAtE,6BAAkB,UAAIB,UAA2C,UAA3C,EA  
A+D,KAA/D,CAAsE,EAAI,mCAAJ,C;K;IAE1E,2D;MAOuD,0B;QAAA,aAAsB,K;MAAO,qB;QAAA,QAAa,C;  
MAC7F,IAAI,UAAW,OAAx,KAAmB,CAAvB,C;QACI,OAAO,mBAAoB,oBAAd,WAAW,CAAX,CAAc,CAAp  
B,EAAgC,UAAhC,EAA4C,KAA5C,C;OAG+E,kBAAb,cAAtE,6BAAkB,UAAIB,UAA2C,UAA3C,EAA+D,KAA/  
D,CAAsE,C;MbqNtE,kBAAM,iBAAa,qCAAwB,EAAxB,CAAb,C;MAuEA,Q;MAAA,6B;MAAb,OAAa,cAAb,C;  
QAAa,sB;QACT,WAAy,Wa7RgF,uBb6RIE,Ia7RkE,Cb6RhF,C;Ma7RhB,Ob8RO,W;K;Ia3RX,0D;MASI,wBAAw

B,KAAxB,C;MAEA,oBAAoB,C;MACpB,gBAAgB,sBAAQ,SAAR,EAAmB,aAAnB,EAakC,UAAIC,C;MACHb,I  
AAI,cAAa,EAAb,IAAmB,UAAAS,CAAhC,C;QACI,OAAO,OAAO,SAAK,WAAZ,C;OAGX,gBAAgB,QAAQ,C;M  
ACxB,aAAa,iBAAsB,SAAJ,GAAqB,eAAN,KAAM,EAAa,EAAb,CAArB,GAA2C,EAA7D,C;QAET,MAAO,WA  
36B6E,8BA26B/D,aA36B+D,EA26BhD,SA36BgD,CAAKC,WA26B/G,C;QACP,gBAAgB,YAAAY,SAAU,OAAtB,  
I;QAEhB,IAAI,aAAa,MAAO,KAAP,MAAe,QAAQ,CAAR,IAAf,CAAjB,C;UAA2C,K;QAC3C,YAAAY,sBAAQ,S  
AAR,EAAmB,aAAnB,EAakC,UAAIC,C;MACP,sBAAa,EAAb,C;MAET,MAAO,WAl7BiF,8BAk7BnE,aAl7Bm  
E,EAk7BpD,gBAI7BoD,CAAKC,Wak7BnH,C;MACP,OAAO,M;K;2EAGX,mC;MAOmD,qB;QAAA,QAAa,C;M  
AAmB,OAAA,KAAM,eAAM,SAAN,EAAY,KAAZ,C;K;+FAEzF,mC;MAU6D,qB;QAAA,QAAa,C;MAAUb,OA  
AA,KAAM,yBAAgB,SAAhB,EAAsB,KAAtB,C;K;IAEvG,iC;MAK2D,mCAAkB,MAAhB,EAAwB,IAAxB,EAAs  
B,IAA9B,E;K;IAE3D,OB;MAKgD,OAAe,UAAf,uBA Ae,C;K;IAqB/D,uD;MAQsB,Q;MAPIB,IAAI,iCAAKB,yBA  
AtB,C;QACI,OAAAY,SAAL,SAAK,EAAO,KAAP,EAA2B,IAA3B,C;OAGhB,IAAI,cAAS,KAAb,C;QAAoB,OAA  
O,I;MAC3B,IAAI,qBAAgB,aAhB,IAAiC,SAAK,OAAL,KAAe,KAAM,OAA1D,C;QAAkE,OAAO,K;MAEvD,u  
B;MAAIb,aAAU,CAAV,gB;QACI,IAAI,CAAS,SAAR,qBAAK,CAAL,CAAQ,EAAO,iBAAM,CAAN,CAAP,EA  
A8B,IAA9B,CAAb,C;UACI,OAAO,K;MAIf,OAAO,I;K;IAGX,6C;MAQsB,Q;MAPIB,IAAI,iCAAKB,yBAAtB,C;  
QACI,OAAO,kBAAQ,KAAR,C;OAGX,IAAI,cAAS,KAAb,C;QAAoB,OAAO,I;MAC3B,IAAI,qBAAgB,aAhB,I  
AAiC,SAAK,OAAL,KAAe,KAAM,OAA1D,C;QAAkE,OAAO,K;MAEvD,uB;MAAIb,aAAU,CAAV,gB;QACI,I  
AAI,qBAAK,CAAL,MAAW,iBAAM,CAAN,CAAf,C;UACI,OAAO,K;MAIf,OAAO,I;K;IAGX,oC;MAU+C,QA  
AM,SAAN,C;aAC3C,M;UAD2C,OACjC,I;aACV,O;UAF2C,OAehC,K;gBACH,MAAM,gCAAyB,mDAAGD,SA  
AzE,C;K;IAGIB,0C;MAUsD,QAAM,SAAN,C;aACID,M;UADkD,OACxC,I;aACV,O;UAFkD,OAeVc,K;gBAFu  
C,OAG1C,I;K;I8Kr8CZ,sB;MAAA,0B;MAII,aAC+B,e;MAC/B,cACgC,e;MACHc,WAC6B,e;MAC7B,YAC8B,e;  
MAC9B,eACiC,e;MACjC,YAC8B,gB;MAC9B,aAC+B,gB;MAC/B,YAC8B,gB;MAC9B,aAC+B,gB;MAC/B,eAC  
iC,gB;MACjC,iBACmC,gB;MACnC,qBAEuC,gB;MACvC,sBAEWc,gB;MACxC,kBACoC,gB;MACpC,cACgC,g  
B;MACHc,iBACmC,gB;MACnC,iBACmC,gB;MACnC,iBACmC,gB;MACnC,YAC8B,gB;MAC9B,aAC+B,iB;M  
AC/B,aAC+B,iB;MAC/B,uBACyC,iB;MACzC,wBAC0C,iB;MAC1C,sBACwC,iB;MACxC,uBACyC,iB;MACzC,  
wBAC0C,iB;MAC1C,sBACwC,iB;MACxC,cACgC,iB;MACHc,oBACsC,iB;MAcTc,cACgC,iB;MACHc,gBACKC  
,iB;MACIC,aAC+B,iB;MAC/B,mBACqC,iB;MACrC,YAC8B,iB;MAC9B,UAC4B,iB;MAC5B,mBACqC,iB;MAC  
rC,gBACKC,iB;MACIC,mBACqC,iB;MACrC,sBACwC,iB;MAExC,sBAGwC,gB;MAExC,uBAGyC,gB;K;;;IA7F7  
C,kC;MAAA,iC;QAAA,gB;OAAA,0B;K;,,,,,2FCuE0C,Y;MAAQ,oCAAa,IAAb,C;K;IAiBpB,yC;MAAqB,kB;K;  
mIAC3C,Y;MACmD,OAAA,UAAM,YAAN,aAAkB,CAAIB,C;K;mIACnD,Y;MACmD,OAAA,UAAM,YAAN,a  
AAkB,CAAIB,C;K;mIACnD,Y;MACmD,OAAA,UAAM,YAAN,aAAkB,CAAIB,C;K;mIACnD,Y;MACmD,OAAA  
A,UAAM,YAAN,aAAkB,CAAIB,C;K;mIACnD,Y;MACmD,OAAA,UAAM,YAAN,aAAkB,CAAIB,C;K;mIACn  
D,Y;MACmD,OAAA,UAAM,YAAN,aAAkB,CAAIB,C;K;mIACnD,Y;MACmD,OAAA,UAAM,YAAN,aAAkB,C  
AAIB,C;K;mIACnD,Y;MACmD,OAAA,UAAM,YAAN,aAAkB,CAAIB,C;K;mIACnD,Y;MACmD,OAAA,UA  
AM,YAAN,aAAkB,CAAIB,C;K;qIACnD,Y;MACmD,OAAA,UAAM,YAAN,aAAkB,EAAlB,C;K;gDAEnD,Y;MA  
MoC,OAAA,UAAM,YAAY,iBAAQ,CAAR,EAAW,UAAM,YAAY,KAA7B,C;K;;;6EhEjH9D,yB;MAAA,iD;MA  
AA,4B;QAI4C,kBAAM,SAAN,C;O;KAJ5C,C;+EAMA,yB;MAAA,gD;MAAA,oC;QAI+D,kBAAM,SAAN,EAAY  
,MAAZ,C;O;KAJ/D,C;+EAMA,yB;MAAA,oC;MAAA,qC;QAIqE,sBAAM,SAAN,EAAY,OAAZ,C;O;KAJrE,C;Ii  
Y4B,4B;MAmBxB,gC;MAAnB6C,0B;MAW7B,UAEA,MAFA,EAGA,M;MALZ,IiJc8D,IjIc9D,C;QACI,IAAI,kB  
AAJ,C;UACQ,mB;UAAJ,IAAI,sEAAsB,SAAtB,EAAJ,C;YAAqC,MAAM,sBAAiB,YAAF,+CAAf,C;UAEvC,qB;  
UAAJ,IAAI,0EAAuB,UAAvB,EAAJ,C;YAAuC,MAAM,sBAAiB,YAAF,gDAAf,C;UACzC,qB;UAAJ,IAAI,kEA  
A+B,mBAA/B,CAAJ,C;YAAwD,MAAM,sBAAiB,YAAF,mCAAf,C;Q;mFAZID,Y;MAAQ,kCAAa,CAAb,C;K;+  
FACU,Y;MAAQ,OAAA,eAAS,QAAT,GAAqB,C;K;qCACvE,Y;MAA0B,QADwB,eAAS,QAAT,GAAqB,CAC7C  
,MAAqB,C;K;sCAC/C,Y;MAA2B,QAFuB,eAAS,QAAT,GAAqB,CAE5C,MAAqB,C;K;yFACxB,Y;MAAQ,OAA  
l,kBAAJ,mF;K;IAAhC,8B;MAAA,kC;MACI,YAC4B,gB;MAE5B,gBACgC,iBAAiB,UAAjB,C;MACHc,4BAAsC,  
uC;K;mDAEtC,yC;MAGI,2BAAoB,KAAPB,EAA2B,UAA3B,EA AuC,UAAvC,C;K;iJAM8B,yB;MAAA,6C;MAA  
A,iD;MAAA,4B;QAAQ,sD;O;KAAR,C;iJAIC,yB;MAAA,6C;MAAA,iD;MAAA,4B;QAAQ,sD;O;KAAR,C;iJAU  
E,yB;MAAA,6C;MAAA,iD;MAAA,4B;QAAQ,sD;O;KAAR,C;mJAKF,yB;MAAA,6C;MAAA,iD;MAAA,4B;QA  
AQ,uD;O;KAAR,C;mJAIC,yB;MAAA,6C;MAAA,iD;MAAA,4B;QAAQ,uD;O;KAAR,C;mJAUE,yB;MAAA,6C;

MAAA,iD;MAAA,4B;QAAQ,uD;O;KAAR,C;mJAKH,yB;MAAA,6C;MAAA,iD;MAAA,4B;QAAQ,uD;O;KAAR ,C;mJAIC,yB;MAAA,6C;MAAA,iD;MAAA,4B;QAAQ,uD;O;KAAR,C;mJAUE,yB;MAAA,6C;MAAA,iD;MAA A,4B;QAAQ,uD;O;KAAR,C;yIAKR,yB;MAAA,6C;MAAA,iD;MAAA,4B;QAAQ,kD;O;KAAR,C;yIAIC,yB;MA AAA,6C;MAAA,iD;MAAA,4B;QAAQ,kD;O;KAAR,C;yIAUE,yB;MAAA,6C;MAAA,iD;MAAA,4B;QAAQ,kD;O; KAAR,C;yIAKH,yB;MAAA,6C;MAAA,iD;MAAA,4B;QAAQ,kD;O;KAAR,C;yIAIC,yB;MAAA,6C;MAAA,iD; MAAA,4B;QAAQ,kD;O;KAAR,C;yIAUE,yB;MAAA,6C;MAAA,iD;MAAA,4B;QAAQ,kD;O;KAAR,C;qIAKL,y B;MAAA,6C;MAAA,iD;MAAA,4B;QAAQ,gD;O;KAAR,C;qIAIC,yB;MAAA,6C;MAAA,iD;MAAA,4B;QAAQ,g D;O;KAAR,C;qIAUE,yB;MAAA,6C;MAAA,iD;MAAA,4B;QAAQ,gD;O;KAAR,C;mIAKJ,yB;MAAA,6C;MAA A,iD;MAAA,4B;QAAQ,+C;O;KAAR,C;mIAIC,yB;MAAA,6C;MAAA,iD;MAAA,4B;QAAQ,+C;O;KAAR,C;mIA UE,yB;MAAA,6C;MAAA,iD;MAAA,4B;QAAQ,+C;O;KAAR,C;uDAK9B,iB;MAK+C,OAAM,WAAN,KAAM,y C;K;uDAErD,iB;MAKgD,OAAM,aAN,KAAM,yC;K;uDAEtD,iB;MASKD,OAAM,aAN,KAAM,yC;K;wDAGx D,iB;MAKgD,OAAM,WAAN,KAAM,0C;K;wDAEtD,iB;MAKiD,OAAM,aAN,KAAM,0C;K;wDAEvD,iB;MA SmD,OAAM,aAN,KAAM,0C;K;wDAGzD,iB;MAKgD,OAAM,WAAN,KAAM,0C;K;wDAEtD,iB;MAKiD,OA AM,aAN,KAAM,0C;K;wDAEvD,iB;MASmD,OAAM,aAN,KAAM,0C;K;mDAGzD,iB;MAK2C,OAAM,WA AN,KAAM,qC;K;mDAEjD,iB;MAK4C,OAAM,aAN,KAAM,qC;K;mDAEID,iB;MAS8C,OAAM,aAN,KAAM, qC;K;mDAGpD,iB;MAK2C,OAAM,WAAN,KAAM,qC;K;mDAEjD,iB;MAK4C,OAAM,aAN,KAAM,qC;K;mD AEID,iB;MAS8C,OAAM,aAN,KAAM,qC;K;iDAGpD,iB;MAKyC,OAAM,WAAN,KAAM,mC;K;iDAE/C,iB;M AK0C,OAAM,aAN,KAAM,mC;K;iDAEHd,iB;MAS4C,OAAM,aAN,KAAM,mC;K;gDAGID,iB;MAKwC,OA AM,WAAN,KAAM,kC;K;gDAE9C,iB;MAKyC,OAAM,aAN,KAAM,kC;K;gDAE/C,iB;MAS2C,OAAM,aAN, KAAM,kC;K;iDAEjD,iB;;QAY4C,OACxC,cAAc,KAAd,EAAiC,KAAjC,C;;QACF,+C;UACE,MAAM,6BAAYB,s CAAMC,KAAAnC,OAAzB,EAASe,CAAtE,C;;UAHkC,O;;K;0DAM5C,iB;;QAMqD,OACjD,cAAc,KAAd,EAAiC,I AAjC,C;;QACF,+C;UACE,MAAM,6BAAYB,0CAAuC,KAAvC,OAAzB,EAA0E,CAA1E,C;;UAH2C,O;;K;uDAM rD,iB;;QAWmD,OAC/C,cAAc,KAAd,EAAiC,KAAjC,C;;QACF,+C;UAFiD,OAG/C,I;;UAH+C,O;;K;gEAMnD,iB ;;QAK4D,OACxD,cAAc,KAAd,EAAiC,IAAjC,C;;QACF,+C;UAF0D,OAGxD,I;;UAHwD,O;;K;;IA/XhE,0C;MA AA,yC;QAAA,wB;OAAA,kC;K;oCAwYA,Y;MAC6C,kBAAY,YAAD,aAX,EazZK,eAAS,QAAT,GAAqB,CAY Z1B,C;K;qCAE7C,iB;MAiBW,Q;MATH,IAAA,IAAK,aAAL,C;QACI,IAAI,KAAM,WAAN,IAAqB,IAAK,WAA L,KAAkB,KAAM,WAAxB,gBAAoC,CAA7D,C;UACI,OAAO,I;;UAEP,MAAM,gCAAyB,2EAAzB,C;WAEd,IA AA,KAAM,aAN,C;QAAsB,OAAO,K;MAI7B,KA7a0C,eAAS,QAAT,GAAqB,CA6a/D,OAA0B,KA7agB,WAA S,QAAT,GAAqB,CA6a/D,E;QACI,aAAa,IAAK,QAAL,KAAa,KAAM,QAAnB,C;QAET,uB;UACI,iCAA0B,MAA1 B,C;;UAEA,kCAA2B,MAA3B,C;aAGZ,IAAA,IAAK,eAAL,C;QACI,mCAAqB,IAAK,QAA1B,EAAiC,KAAM,Q AAvC,C;;QAEA,mCAAqB,KAAM,QAA3B,EAAkC,IAAK,QAAvC,C;MABR,W;K;gDAiBJ,kC;MAGW,Q;MAFP, kBAAB,C;AAC,cAAc,UAAAd,C;MACIB,mBAAMB,eAAa,WAAb,C;MACZ,IAAI,8EAAc,mBAATC,CAAJ,C;QACH,yB AAyB,oBAAa,cAAc,WAAAd,CAAb,C;QACzB,uBAAGB,cAAc,YAAAd,MAA8B,kBAA9B,CAAhB,C;;QAEA,wBA A8B,WAAb,YAAa,yBAAsB,UAAAtB,CAA9B,C;;MAJJ,W;K;sCAQJ,iB;MAMuD,wBAAS,KAAD,aAAR,C;K;uCA EvD,iB;MAQe,UAUJ,M;MAXP,IAAI,iBAAJ,C;QAEQ,cAAS,CAAT,C;UAAc,MAAM,gCAAyB,mEAAzB,C;aAC pB,YAAQ,CAAR,C;UAAa,W;;UACL,OAAC,IAAD,a;QAHZ,W;OAMJ,IAAI,UAAS,CAAb,C;QAAgB,OAAO,qC ;MAEvB,YAAy,Y;MACZ,aAAa,mCAAQ,KAAR,E;MACN,IAAI,kBAAJ,C;QACH,IAAI,yEAAJ,C;UAEI,yBAAG B,MAAhB,C;;UAEA,IAAI,sCAAS,KAAT,IAAkB,KAAIB,CAAJ,C;YACI,mCAA0B,MAA1B,C;;YAEA,aAAa,cA Ac,KAAd,C;YACb,eAAe,eAAQ,cAAc,MAAd,CAAR,C;YACf,mBAAMB,oCAAS,KAAT,E;YACnB,kBAAB,iB AAe,cAAc,sCAAW,KAAX,EAAd,CAAf,C;YACIB,IAAI,4CAAe,KAAf,IAAwB,MAAxB,KAAkC,gBAAgB,YAA hB,gBAAgC,CAAtE,C;cACI,0BAA6B,WAAZ,WAAy,EAAS,8BAAa,UAAb,CAAT,CAA7B,C;;cAEA,SAAI,YA AM,WAAN,KAAM,CAAN,EAAMB,WAAN,KAAM,CAAnB,IAA0B,CAA9B,GAAiC,yCAAjC,GAA+C,qD;;;;;Q AK3D,IAAI,sCAAS,KAAT,IAAkB,KAAIB,CAAJ,C;UACI,0BAAwB,WAAP,MAAO,EAAS,8BAAa,UAAb,CAA T,CAAxB,C;;UAEA,SAAI,YAAM,WAAN,KAAM,CAAN,EAAMB,WAAN,KAAM,CAAnB,IAA0B,CAA9B,GA AiC,yCAAjC,GAA+C,qD;;;MAvBvD,a;K;uCA4BJ,iB;MASI,eAAqB,WAAN,KAAM,C;MACrB,IAAa,QAAT,KA AuB,KAA3B,C;QACI,OAAO,mBAAM,QAAN,C;OAGX,WAAW,kB;MACX,aAAa,sBAAS,IAAT,IAAiB,K;MA C9B,OAAc,aAAP,MAAO,EAAX,C;K;qCAGIB,iB;MAQe,Q;MADX,IAAI,UAAS,CAAb,C;QAEQ,sB;UA AgB,gD;aAChB,sB;UAAgB,4D;;UACR,MAAM,gCAAyB,4DAAzB,C;QAHIB,W;OAMJ,IAAI,kBAAJ,C;QACI,O

AAO,gBAAGB,qCAAQ,KAAR,EAhB,C;;QAEP,IAAI,iBAAJ,C;UACI,OAAO,mBAAa,WAAN,KAAM,CAAb,C;  
;QAEX,aAAa,qCAAQ,KAAR,E;QAEb,IAAI,kEAAgC,mBAAhC,CAAJ,C;UACI,UAAU,cAAc,sBAAS,oCAAS,K  
AAT,EAAT,CAAd,0BAA0C,KAA1C,E;UACV,OAAO,gBAAGB,cAAc,MAAd,MAAwB,GAAxB,CAAhB,C;SAE  
X,OAAO,iBAAiB,MAAjB,C;;K;qCAIf,iB;MAOI,eAAqB,WAAN,KAAM,C;MACrB,IAAa,QAAT,KAAuB,KAav  
B,IAAgC,aAAY,CAAhD,C;QACI,OAAO,iBAAI,QA AJ,C;OAGX,WAAW,kB;MACX,aAAa,sBAAS,IAAT,IAAiB  
,K;MAC9B,OAAc,aAAP,MAAO,EA AW,IAAX,C;K;oCAGlB,iB;MAEI,kBAaKB,SAAM,IAAK,cAAX,EA AWB,K  
AAM,cAA9B,C;MACIB,OAAO,IAAK,kBAAS,WAAT,CAAL,GAA6B,KAAM,kBAAS,WAAT,C;K;oCAG9C,Y;  
MACmC,oCAAW,C;K;oCAE9C,Y;MACmC,oCAAW,C;K;oCAE9C,Y;MACmC,+BAAY,yCAAS,WAARb,KA Ai  
C,wBAAY,qDAAa,WAAzB,C;K;kCAEpE,Y;MACiC,QAAC,iB;K;yFAGC,Y;MAAQ,OAAI,iBAAJ,GAAMb,IAA  
D,aAAlB,GAA6B,I;K;yCAExE,iB;MACI,kBAaKB,IAAK,WAAL,KAaKB,KAAM,WAAxB,C;MACIB,IAAI,yBA  
Ac,CAAd,IAAMb,CAAA,WAA Y,QA AZ,GAAwB,CAAXB,MAA6B,CAApD,C;QACI,OAAO,IAAK,WAAS,iBA  
AU,KAAM,WAAhB,C;MAEzB,QAAQ,CA1lBsC,eAAS,QAAT,GAAqB,CA0lB3D,KAAyB,KA1lBa,WAAS,QAA  
T,GAAqB,CA0lB3D,K;MACR,OAAW,iBAAJ,GAaKB,CAAC,CAAD,IAAIB,GAA0B,C;K;uHAMrC,kB;MAeI,O  
AAO,OAAO,gBAAP,EA AoB,mBAAPb,EA AoC,qBAAPc,EAAsD,qBAAtD,EA AwE,yBA AxE,C;K;uHAGX,kB;  
MAcI,OAAO,OAAO,iBAAP,EA AqB,qBAArB,EA AuC,qBAAvC,EA AyD,yBA AzD,C;K;uHAGX,kB;MAaI,OAA  
O,OAAO,mBAAP,EA AuB,qBA AvB,EA AyC,yBA AzC,C;K;uHAGX,kB;MAYI,OAAO,OAAO,mBAAP,EA AuB,y  
BA AvB,C;K;0FAKP,Y;MAAQ,OAAI,iBAAJ,GAaKB,CAAIB,GAA0B,6CAAe,EA Af,EA AMb,Q;K;4FAIrD,Y;M  
AAQ,OAAI,iBAAJ,GAaKB,CAAIB,GAA0B,+CAAiB,EA AjB,EA AqB,Q;K;4FAIvD,Y;MAAQ,OAAI,iBAAJ,GA  
AkB,CAAIB,GAA0B,+CAAiB,EA AjB,EA AqB,Q;K;gGAIvD,Y;MACI,sB;QADI,OACY,C;WACHb,wB;QAFI,OA  
EY,cAAc,wCAAQ,IAAR,EA Ad,CAA6B,Q;;QAFzC,OAGK,wCAAQ,UAAR,EA AuB,Q;K;0CAMx C,gB;MAQiB,  
UAAN,M;MAAM,sB;MACT,iBAAA,yCAAS,WAAT,E;QAA4B,SAAP,wCAAO,kB;WAC5B,iBAAA,qDAAa,W  
AAb,E;QAAGC,SAAP,wCAAO,kB;;QAG5B,6BAAoB,YAAM,WAA1B,EAAsC,kBAAtC,EAAMd,IAAnD,C;;MA  
LR,a;K;wCAUJ,gB;MAUiB,UAAN,M;MAAM,sB;MACT,iBAAA,yCAAS,WAAT,E;;WACA,iBAAA,qDAAa,W  
AAb,E;;;QACQ,+BAAoB,YA ApB,EA A2B,kBAA3B,EA AwC,IAAx C,C;MAHZ,a;K;uCAOJ,gB;MAUI,OAAa,WA  
Ab,oBAAO,IAAP,CAAA,4BAAyD,Q;K;kFAKhD,Y;MAAQ,6D;K;mFAKP,Y;MAAQ,8D;K;qFAKN,Y;MAAQ,gE  
;K;qFAKR,Y;MAAQ,gE;K;0FAKH,Y;MAAQ,qE;K;0FAKR,Y;MAAQ,qE;K;yFAKT,Y;MAAQ,oE;K;uFASrC,Y;  
MAAQ,2D;K;wFAQR,Y;MAAQ,4D;K;0FAQR,Y;MAAQ,8D;K;0FAQR,Y;MAAQ,8D;K;+FAQR,Y;MACI,OAA  
W,uBAAGB,eA ApB,GAAGC,YAAhC,GAA2C,4D;K;+FAAtD,Y;MAAQ,mE;K;8FA YR,Y;MAEW,Q;MADP,YAA  
Y,Y;MAER,uB;QA Ae,Y;WACf,8C;;WACA,+C;;;QACQ,qBAAc,KAAd,C;MAJZ,W;K;2CAUR,Y;MASuC,8B;K;  
4CAEvC,Y;MASwC,+B;K;kCAExC,Y;MAuBwC,Q;MAAA,sB;MACpC,qB;QAD8B,OACxB,I;WACN,iBAAA,y  
CAAS,WAAT,E;QAF8B,OAET,U;WACrB,iBAAA,qDAAa,WAAb,E;QAH8B,OAGL,W;;QAErB,iBAAiB,iB;Q6  
HzhBF,gBAAhB,sB;Q7H2hBK,e;UAAgB,yBAAO,EAAP,C;QACF,YAAAd,kB;QA9RD,WAAO,iB;QAAP,YAAoB,  
oB;QAAPb,cAAoC,sB;QAAPc,cAAsD,sB;QAAtD,kBAAwE,0B;QAsS/D,0B;QAPJ,cAAc,iB;QACd,eAAe,UAAS  
,C;QACxB,iBAAiB,YAAW,C;QAC5B,iBAAiB,YAAW,CAAX,IAAgB,gBA Ae,C;QACHD,iBAAiB,C;QACjB,IA  
AI,OAAJ,C;UACI,yBAAO,IAAP,CAAA,gBAAO,GAAP,C;UACb,+B;SAEJ,IAAI,aAAa,YAAY,cAAc,UAA1B,CA  
Ab,CAAJ,C;UACI,IAAI,6DAAe,CAAnB,C;YAAsB,yBAAO,EAAP,C;UACtB,yBAAO,KAAP,CAAc,gBAAO,GA  
AP,C;SAEIB,IAAI,eAAe,eAAe,YAAY,OAA3B,CAAf,CAAJ,C;UACI,IAAI,6DAAe,CAAnB,C;YAAsB,yBAAO,E  
AAP,C;UACtB,yBAAO,OAAP,CAAgB,gBAAO,GAAP,C;SAEpB,IAAI,UAAJ,C;UACI,IAAI,6DAAe,CAAnB,C;  
YAAsB,yBAAO,EAAP,C;UAEIB,gBAAW,CAAX,IAAgB,OAAhB,IAA2B,QAA3B,IAAuC,UAAvC,C;YACI,mC  
AAiB,OAAjB,EAA0B,WAA1B,EA AuC,CAAvC,EAA0C,GAA1C,EAA2D,KAA3D,C;eACJ,mBA Ae,OAAf,C;YA  
CI,mCAAiB,cAAc,OAAd,IAAjB,EAA0C,cAAc,OAAXD,EAAMe,CAAnE,EAAsE,IAAtE,EA AwF,KAAXF,C;eAC  
J,mBA Ae,IAAf,C;YACI,mCAAiB,cAAc,IAAd,IAAjB,EAAsC,cAAc,IAApD,EAA2D,CAA3D,EAA8D,IAA9D,EA  
AgF,KA AhF,C;;YAEA,yBAAO,WAAP,CA AoB,gBAAO,IAAP,C;SAGhC,IAAI,cAAc,aAAa,CAA/B,C;UAAKc,y  
BAAO,CAAP,EA AU,EA AV,CA Ae,gBAAO,EAAP,C;QAvC/B,OOx1B3B,SsHoUqC,W;;K;4C7HikB5C,yE;MACI  
,yBAAO,KAAP,C;MACA,IAAI,eAAc,CAAIB,C;QACI,yBAAO,EAAP,C;QACA,iBAAuC,WAAtB,UAAW,WAA  
W,EAAS,cAAT,EA AyB,EA AzB,C;QACR,sB;;UsB5zBzB,Q;UAAA,OAAQ,WAAR,etB4zBc,UsB5zBd,CAAQ,C  
AAR,W;UAAAd,OA Ac,cAAd,C;YAAc,uB;YACV,ItB2zBiD,UsB3zBnC,YtB2zBU,UsB3zBV,YAAK,KAAL,EtB2z  
BmC,MAAM,EsB3zBvD,C;cACI,qBAAO,K;cAAP,uB;;UAGR,qBAAO,E;;;QtBuzBC,oBAAoB,qBA AuC,CAAvC

,I;QAEhB,KAAC,SAAD,IAAc,gBAAGB,CAA9B,C;UAAmC,8BAAY,UAAZ,EAAwB,CAAxB,EAA2B,aAA3B,C;  
;UAC3B,8BAAY,UAAZ,EAAwB,CAAxB,EAA2B,CAAC,CAAC,gBAAGB,CAAhB,IAAD,IAAsB,CAAtB,IAAD,  
IAA4B,CAA5B,IAA3B,C;OAGhB,yBAAO,IAAP,C;K;0CAGJ,0B;MAGBwC,wB;QAAA,WAAgB,C;MIn9BxD,IA  
AI,EJo9BQ,YAAY,CIP9BpB,CAAJ,C;QACI,cJm9ByB,oD;QII9BzB,MAAM,gCAAYB,OAAQ,WAAjC,C;OJm9B  
N,aAAa,sBAAS,IAAT,C;MACb,IAAW,WAAP,MAAO,CAAX,C;QAAyB,OAAO,MAAO,W;MACvC,OAAO,sB  
AAsB,MAAtB,EAAuC,eAAT,QAAS,EAAa,EAAb,CAAvC,IAAgE,UAAAL,IAAK,C;K;qCAI3E,Y;M6HvmBuB,gB  
AAhB,sB;M7HqnBH,IAAI,iBAAJ,C;QAaKB,yBAAO,EAAP,C;MACIB,yBAAO,IAAP,C;MAC4B,YAAAd,kB;MA  
xWP,YAAO,kB;MAAP,cAAqB,sB;MAArB,cAAuC,sB;MAAvC,kBAAYD,0B;MAYW5D,cACY,K;MACZ,IAAI,i  
BAAJ,C;QAEI,wB;OAEJ,eAAe,oB;MACf,iBAAiB,YAAW,CAAX,IAAgB,gBAAe,C;MACHd,iBAAiB,YAAW,C  
AAX,KAAiB,cAAc,QAA/B,C;MACjB,IAAI,QAAJ,C;QACI,yBAAO,OAAp,CAAc,gBAAO,EAAP,C;OAEIB,IAA  
I,UAAJ,C;QACI,yBAAO,OAAp,CAAgB,gBAAO,EAAP,C;OAEpB,IAAI,eAAe,CAAC,QAAD,IAAa,CAAC,UAA  
7B,CAAJ,C;QACI,mCAAiB,OAAjB,EAA0B,WAA1B,EAAuC,CAAvC,EAA0C,GAA1C,EAA2D,IAA3D,C;OAp  
BuB,OOx7B5B,SsHoUqC,W;K;:::;kC7H5YhD,Y;MAAA,c;MAuBiD,2D;MAvBjD,a;K;gCAAA,iB;MAAA,2IAuBi  
D,gDAvBjD,G;K;IA8hCA,qC;MAIW,Q;MAAA,IAAI,6DAAJ,C;QACH,uBAAGB,4BAAiC,oBAAL,SAAK,CAAj  
C,EAA2C,IAA3C,yCAAhB,C;:QAES,oBAAT,8BAAS,EAAW,IAAX,C;MAHb,W;K;IAMJ,uC;MAII,kBAaKB,4B  
AA4B,SAA5B,0CAAiE,IAAjE,C;MACIB,IAAa,WAAD,aAAR,yDAAsB,WAAtB,CAAJ,C;QACI,OAAO,gBAAG  
B,4BAA4B,SAA5B,EAaK,IAAIC,yCAAhB,C;:QAEp,aAAa,sBAAoB,SAAPB,EAA0B,IAA1B,0C;QACb,OAAO  
,iBAAwB,WAAP,MAAO,yBAAsB,UAAtB,CAAxB,C;:K;IAIf,uC;MAaW,Q;MAHP,gBAAGB,oBAAoB,SAAPB,E  
AA0B,IAA1B,yC;MIviChB,IAAI,CJwiCl,CAAW,QAAV,SAAU,CIXiCnB,C;QACI,cJuiC0B,+B;QItiC1B,MAAM,  
gCAAYB,OAAQ,WAAjC,C;OJuiCV,YAAsB,YAAV,SAAU,C;MACf,IAAI,sEAAqB,SAArB,CAAJ,C;QACH,uBA  
AgB,KAAhB,C;:QAEA,aAAwE,YAA3D,oBAAoB,SAAPB,EAA0B,IAA1B,0CAA2D,C;QACxE,kCAA2B,MAA3  
B,C;:MAJJ,W;K;IAgBuB,oC;MAAQ,oE;K;IAOP,sC;MAAQ,sE;K;IAWN,sC;MAAQ,sE;K;IAQV,qC;MAAQ,qE;K  
;IAOP,uC;MAAQ,uE;K;IAWN,uC;MAAQ,uE;K;IAQX,qC;MAAQ,qE;K;IAOP,uC;MAAQ,uE;K;IAWN,uC;MAA  
Q,uE;K;IAQhB,gC;MAAQ,gE;K;IAOP,kC;MAAQ,ke;K;IAWN,kC;MAAQ,ke;K;IAQX,gC;MAAQ,gE;K;IAOP,k  
C;MAAQ,ke;K;IAWN,kC;MAAQ,ke;K;IAQb,8B;MAAQ,8D;K;IAOP,gC;MAAQ,gE;K;IAWN,gC;MAAQ,gE;K;I  
AQZ,6B;MAAQ,6D;K;IAOP,+B;MAAQ,+D;K;IAWN,+B;MAAQ,+D;K;yEAG/B,+B;MAIqE,8BAAW,SAAX,C;  
K;2EAERe,+B;MAUwE,8BAAW,SAAX,C;K;IAIxE,yC;MACI,aAAa,KAAM,O;MACnB,IAAI,WAAU,CAAd,C;Q  
AAiB,MAAM,gCAAYB,qBAAZB,C;MACvB,YAAY,C;MACZ,aAAa,gCAAS,K;MACtB,qBAaQB,U;MACrB,QA  
AM,iBAAM,KAAN,CAAN,C;aACI,E;aAAA,E;UAAy,qB;UAAZ,K;:MAEJ,cAAc,QAAQ,C;MACtB,iBAAiB,WA  
AiB,aAN,KAAM,EAAW,EAAX,C;MAE9B,cAAU,KAAY,C;QACI,MAAM,gCAAYB,eAAzB,C;WACV,qBAA  
M,KAAN,MAAGB,EAAhB,C;QACI,IAAI,mCAAW,MAAf,C;UAAuB,MAAM,+B;QAC7B,sBAAsB,K;QACtB,sB  
AAsB,K;QACtB,eAA8B,I;QAC9B,OAAO,QAAQ,MAAF,C;UACI,IAAI,iBAAM,KAAN,MAAGB,EAAPB,C;YAC  
I,IAAI,mBAAMB,mCAAW,MAAIC,C;CAA0C,MAAM,+B;YACHd,kBAaKB,I;YACIB,Q;WAEkB,iBAAe,K;UA+  
EjD,QAHgC,U;UAIhC,Y;YAAO,eAhFqB,KAgFjB,O;YAAJ,S;cAAc,SAAU,YAhFH,KAgFG,YAAK,CAAL,E;cA  
AV,OAhFqC,CAAM,kBAAK,EAAL,CAAN,qCAAKB,2C;:;YAgFnC,a;:UAhF7B,gBAAGB,KiBvIcG,E,WjBmqClF,  
UiBnqCkF,EjBwqCrF,CiBxqCqF,C;UjBwlChF,IAAI,SuBrhCgC,YAAU,CvBqhC9C,C;YAAyB,MAAM,+B;UAC/  
B,gBAAS,SAAU,OAAuB,I;UACqB,cAAU,K;UsBzrCpC,U;UAAA,IAAI,WAAS,CAAT,IAAc,WAAS,iBtByrCP,K  
sBzrCO,CAA3B,C;YAAA,StByrCoB,KsBzrCkB,YAAI,OAAJ,C;:YtByrCO,MAAM,gCAAYB,qCAAzB,C;:UAA9  
C,qB;UACA,qB;UACA,WAAW,sBAAsB,QAAtB,EAAgC,eAAhC,C;UACX,IAAI,YAAY,IAAZ,IAAoB,yBAAy,I  
AAZ,MAAxB,C;YAA0C,MAAM,gCAAYB,yCAAzB,C;UACHd,WAAW,I;UACX,eAAyB,WAAV,SAAU,EAQ,  
EAAR,C;UACzB,IAAI,+CAAGC,WAAW,CAA/C,C;YACI,YAAY,SiBjmCgE,WjBimC5C,CiBjmC4C,EjBimCzC,  
QiBjmCyC,C;YjBkmC5E,4BAA2C,aAAjC,0BAA0B,KAA1B,CAAiC,EAAW,IAAX,CAA3C,C;YACA,4BAAmD,  
aAAX,SAA9B,SiBtmCmD,WjBsmC/B,QiBtmC+B,CjBsmCrB,CAAW,EAAW,IAAX,CAAnD,C;:YAEA,4BAA+C  
,aAArC,0BAA0B,SAA1B,CAAqC,EAAW,IAAX,CAA/C,C;:aAIZ,c;QACI,MAAM,+B;:QACV,IAAM,cAAN,KA  
AM,EAAC,KAAd,EAAqB,cAArB,EAAqC,CAArC,EQ/xCH,MAAO,KR+xCmD,SAAS,KAAT,IQ/xCnD,ER+xCm  
E,cAAe,OQ/xCIF,CR+xCJ,EAA4G,IAA5G,CAAN,C;UACI,SAAS,gCAAS,S;:UAIIB,iBAA8B,I;UAC9B,iBAAiB,  
K;UACjB,kBAaKB,CAAC,O;UACnB,IAAI,WAAW,iBAAM,KAAN,MAAGB,EAA3B,IAAwC,QAAN,KAAM,C  
AAN,KAAGB,EAAtD,C;YACI,cAAc,I;YACd,IAAI,oCAAW,uBAAX,EAAW,MAAX,CAAJ,C;cAAyB,MAAM,g

CAAyB,eAAzB,C;WAEnC,OAAO,QAAQ,MAAf,C;YACI,IAAI,cAAc,WAAIB,C;cA8CZ,UA7CwC,K;cA8CxC,Y ;gBAAO,mBA9CiB,KA8Cb,O;gBAAJ,W;kBAAC,SA9C4B,UA8CIB,YA9CP,KA8CO,YAAK,GAAL,EA9CkB,M AAM,E;;;gBA8Cd,iB;;cA9CzB,QA+CT,G;aA7CK,aAAa,I;YACS,mBAAe,K;YA0CjD,UAHgC,Y;YAIhC,Y;cAA O,mBA3CqB,KA2CjB,O;cAAJ,W;gBAAC,WAAU,YA3CH,KA2CG,YAAK,GAAL,E;gBAAV,SA3CqC,CAAM,k BAAK,EAAL,CAAN,uCAAkB,oBAAM,E;;;cA2CzC,iB;;YA3C7B,kBAAgB,KiB5nCgE,WjBmqCIF,YiBnqCkF,Ej BwqCrF,GiBxqCqF,C;YjB6nChF,IAAI,WuB1jCgC,YAAU,CvB0jC9C,C;cAAyB,MAAM,+B;YAC/B,gBAAS,WA AU,OAAAnB,I;YACqB,mBAAe,K;YAuChD,UAHgC,Y;YAIhC,Y;cAAO,mBAxCoB,KAwChB,O;cAAJ,W;gBAAC, WAAU,YAxCJ,KAwCI,YAAK,GAAL,E;gBAAV,SAxCoC,CAAM,kBAAK,GAAL,CAAN,mC;;;cAwChB,iB;;YA xC7B,eAAe,KiB/nCiE,WjBmqCIF,YiBnqCkF,EjBwqCrF,GiBxqCqF,C;YjBgoChF,gBAAS,QAAS,OAAIB,I;YAC A,aAAW,wBAAwB,QAAXB,C;YACX,IAAI,cAAY,IAAZ,IAAoB,2BAAy,MAAZ,MAAxB,C;cAA0C,MAAM,gC AAYB,yCAAzB,C;YACHD,aAAW,M;YACX,iBAAYB,WAAV,WAAU,EAAQ,EAAR,C;YACzB,IAAI,aAAW,CA Af,C;cACI,cAAY,WiBtoCgE,WjBsoC5C,CiBtoC4C,EjBsoCzC,UiBtoCyC,C;cjBuoC5E,4BAAyB,aAAT,OAAO, OAM,CAAS,EAAW,MAAX,CAAzB,C;cACA,4BAAMd,aAAX,SA9B,WiB3oCmD,WjB2oC/B,UiB3oC+B,CjB 2oCrB,CAAW,EAAW,MAAX,CAANd,C;cACA,IAAI,QAAQ,MAAZ,C;gBAAoB,MAAM,gCAAYB,mCAAzB,C;; cAE1B,4BAA6B,aAAT,OAAV,WAAU,CAAS,EAAW,MAAX,CAA7B,C;;;;MAKhB,OAAW,UAAJ,GAAiB,MA AD,aAAhB,GAA6B,M;K;IAIxC,0C;MACI,aAAa,KAAM,O;MACnB,iBAAiB,C;MACjB,IAAI,SAAS,CAAT,IAA c,YAAY,IAAZ,mBAAM,CAAN,EAAB,C;QAAoC,+B;OACHC,YAAC,SAAS,UAAT,IAAD,IAAwB,E;MAAxB,S ;QAA4D,gBAA7B,yBAAkB,iBAAN,KAAM,CAAB,C;QAA6B,c;;UU4ThD,U;UADhB,IAAI,wCAAsB,mBAA1B ,C;YAAqC,aAAO,I;YAAP,e;WACrB,6B;UAAhB,OAAgB,gBAAhB,C;YAAgB,2B;YAAM,IAAI,CV5T4C,CAAa, kBAAK,EAAL,CAAb,oCU4TjC,OV5TiC,EU4ThD,C;cAAyB,aAAO,K;cAAP,e;;UAC/C,aAAO,I;;;QV7TyD,iB;O AAhE,S;QAEI,OAAW,iBAAM,CAAN,MAAY,EAAhB,sD;OAGX,OAAiB,WAAN,KAAM,EAAW,GAAX,CAAV ,GAAyC,OAAR,QAAN,KAAM,EAAC,CAAL,CAAQ,CAAzC,GAA6D,OAAO,KAAM,C;K;IAKxE,0D;MAII,QA HgC,U;MAIhC,OAAO,IAAI,gBAAJ,IAJqC,SAIvB,CAAU,iCAAk,CAAL,EAAV,CAArB,C;QAAyC,a;;MAJzC,O iBnqC4F,oBjBmqCIF,UiBnqCkF,EjBwqCrF,CiBxqCqF,C;K;IjBqqChG,qD;MACI,QAAQ,U;MACR,OAAO,IAAI, gBAAJ,IAAc,UAAU,iCAAk,CAAL,EAAV,CAArB,C;QAAyC,a;;MACzC,OAAO,C;K;;;IAMBX,8B;MAA+C,q CAAQ,OAAR,E;K;IAC/C,+B;MAAgD,2CAAS,OAAT,E;K;IAEhD,sC;MAAiD,oBAAS,sBAAGB,CAAhB,CAAT, C;K;IACjD,wC;MAAMd,oBAAU,uBAAiB,CAAjB,CAAD,yBAAuB,CAAvB,EAAT,C;K;IACnD,oD;MAAoE,oB AAU,sBAAGB,CAAhB,CAAD,yBAAsB,iBAATB,EAAT,C;K;IACpE,0C;MACI,IAAI,sEAAqB,SAArB,CAAJ,C;Q AAA,OACI,gBAAGB,KAAhB,C;;QADJ,OAGI,iBAAiB,cAAc,KAAAd,CAAjB,C;;K;IAGR,4C;MACI,IAAI,kEAAg C,mBAAhC,CAAJ,C;QAAA,OACI,gBAAGB,cAAc,MAAd,CAAhB,C;;QADJ,OAGI,iBAAwB,WAAP,MAAO,yB AAsB,UAAATB,CAAxB,C;;K;IuMI3CR,8B;MAEGD,QAAM,SAAN,M;aAC5C,a;UAD4C,OACHB,I;aAC5B,c;UAF4 C,OAef,I;aAC7B,c;UAH4C,OAGf,I;aAC7B,S;UAJ4C,OAIpB,G;aACxB,S;UAL4C,OAKpB,G;aACxB,O;UAN4C, OAMtB,G;aACtB,M;UAP4C,OAovB,G;gBnMuEwB,MAAM,6BAA8B,CmMtEnE,mBAAGB,SnMsEmD,YAA9B, C;;K;ImMnEvD,4C;MACwE,QAAM,SAAN,C;aACpE,I;UADoE,6C;aAEpE,I;UAFoE,8C;aAGpE,I;UAHoE,8C;aA IpE,G;UAJoE,yC;aAKpE,G;UALoE,yC;aAMPe,G;UANoE,uC;aOpE,G;UAPoE,sC;gBAQ5D,MAAM,gCAAYB, uCAAoC,SA7D,C;;K;IAGIB,yD;MAGQ,KAAC,eAAD,C;QAEQ,IADE,OACF,Q;UAHZ,sC;;UAIoB,MAAM,gC AAYB,4EAAqD,OAARd,CAAzB,C;;QAIIB,QAAM,OAAO,C;eACI,E;YATZ,uC;eAUY,E;YAVZ,yC;eAWY,E;YA XZ,yC;kBAYoB,MAAM,gCAAYB,yDAaKc,OAAIC,CAAzB,C;;;K;IC5F9B,4B;K;;;MC4BI,kC;;IAXA,gC;MAAA ,oC;MAM0B,2BAAC,iC;K;8CACpC,Y;MAAKc,OAAA,iCAAoB,W;K;6CADhC,Y;MAAA,yC;K;;;IAN1B,4C;MA AA,2C;QAAA,0B;OAAA,oC;K;IAWA,gC;MAAA,oC;K;;;IAAA,4C;MAAA,2C;QAAA,0B;OAAA,oC;K;;IAKJ,o B;K;qCAcI,oB;MAK8D,4BAAiB,IAAjB,EAAuB,QAavB,C;K;sCAE9D,oB;MAK+D,wBAAM,QAAD,aAAL,C;K ;sCAG/D,Y;MAMqC,QAAC,iBAAa,a;K;yCAEnD,Y;MAMwC,OAAA,iBAAa,a;K;;4EAIzD,yB;MAAA,4C;MAA A,mC;QAQuE,MAAM,WAAM,0BAAN,C;O;KAR7E,C;mFAUA,yB;MAAA,4C;MAAA,mC;QAQsE,MAAM,WA AM,0BAAN,C;O;KAR5E,C;IAY8B,4C;MAAiD,mB;MAAhD,gB;MAAoB,4B;K;4CAC/C,Y;MAAsC,OAAA,SA A K,aAAL,cAAoB,eAApB,C;K;6CAEtC,oB;MAAKd,4BAAiB,SAAjB,EAAuB,4BAAa,QAAb,CAAvB,C;K;;IChGV ,sC;MAAC,gB;K;IAOf,4E;MAA8G,mB;MAA7G,4B;MAA6B,8B;MAAGD,sB;K;+DACpG,Y;MAAsC,OAAgC,aA A/B,iBAAW,OAAX,UAAoB,gBAAPB,CAA+B,EAAW,iBAAW,KAATB,CAAhC,cAA8D,aAA9D,C;K;gEACtC,o B;MAAKd,+CAAa,gBAAb,EAawB,iBAAxB,EAAoC,0BAAS,QAAT,CAAPC,C;K;;+CAGtD,Y;MAAmC,+CAAa



,WAAb,EAAqB,IAArB,EAA2B,gCAAS,KAApC,C;K;;IAUO,wC;MAAC,gB;K;IAOf,gF;MAAkH,mB;MAAjH,4B ;MAA+B,8B;MAAKd,sB;K;mEAC1G,Y;MAAsC,OAAgC,AAAB/iBAAW,OAAAX,GAAoB,gBAAW,EAAW,iBA AW,KAAtB,CAAhC,cAA8D,AA9D,C;K;oEACtC,oB;MAAkD,mDAAe,gBAAf,EAA0B,iBAA1B,EAA5C,0BAA S,QAAT,CAAtC,C;K;;iDAGtD,Y;MAAmC,mDAAe,WAAf,EAAuB,IAAvB,EAA6B,gCAAS,KAAtC,C;K;;IAGvC ,0B;MAGB8B,yE;MAC1B,mB;K;oCAEA,Y;MAA4B,qB;K;iDAE5B,oB;MAWc,Q;MADV,gBAAgB,QAAS,gBAA O,SAAP,C;MACf,IAAI,gDAA+B,4CAAnC,C;QAEN,iBAAiB,mBAAU,SAAV,C;QACjB,IAAI,mBAAy,SAAZ,g BAAyB,CAAzB,IAA8B,mBAAy,UAAZ,eAAyB,CAA3D,C;UAA8D,gBAAS,QAAT,C;QAC9D,iB;;QAEA,YAA Y,QAAS,kBAAS,SAAT,C;QAErB,mBAAiB,4BAAU,K;QAC3B,IAAI,sDAA+B,kDAAAnC,C;UAAgE,gBAAS,QA AT,C;QACrD,8BAAX,YAAW,C;;MAVf,qB;K;0CACj,oB;MACI,MAAM,6BAASB,iDAA+C,cAA/C,qCAA0E,QA AIE,MAAtB,C;K;;qFC7Fd,yB;MAAA,yC;MAAA,wB;QA2BI,WAAW,8B;QAhB6B,KAiBxC,E;QAJBA,OakBO,I AAK,a;O;KA7BhB,C;uFAeA,4B;MAYI,WAAW,mB;MACX,O;MACA,OAAO,IAAK,a;K;IAYe,qC;MAAC,kB;M AAc,wB;K;;sCAR9C,Y;MAQgC,iB;K;sCARhC,Y;MAQ8C,oB;K;wCAR9C,2B;MAAA,sBAQgC,qCARhC,EAQ8 C,8CAR9C,C;K;oCAA,Y;MAAA,OAQgC,iDARhC,IAQ8C,8CAR9C,O;K;oCAA,Y;MAAA,c;MAQgC,sD;MA Ac,yD;MAR9C,a;K;kCAA,iB;MAAA,4IAQgC,sCARhC,IAQ8C,4CAR9C,I;K;iGAUA,yB;MAAA,yC;MAGBA,8 C;MAhBA,wB;QA6BI,WAAW,8B;QACX,aAjB8C,KAiBjC,E;QAJBb,OakBO,oBAAW,MAAX,EAAMB,IAAK,a AAXB,C;O;KA/BX,C;mGAgBA,yB;MAAA,8C;MAAA,mC;QAaI,WAAW,mB;QACX,aAAa,O;QACb,OAAO,oB AAW,MAAX,EAAMB,IAAK,aAAXB,C;O;KafX,C;IxJZA,2E;MASI,sC;MAAA,4C;K;IATJ,mGAWY,Y;MAAQ,2 B;KAXpB,E;IAAA,4DAaQ,kB;MACI,wBAAW,MAAX,C;K;IadZ,wF;IyJewC,sC;MACpC,0B;K;;IAGJ,kC;MAUI ,OAA2C,CAA3C,2BAA6B,uBAA7B,EAAoC,KAApC,CAA2C,e;K;IAE/C,8B;K;kDAuBI,4B;MASI,MAAM,qCA A8B,8CAA9B,C;K;;IAa4B,8C;MAGtC,6B;MAEmD,UAMX,M;MAPxC,kBACmD,mE;MAEnD,eAC0B,K;MAE1 B,cACwC,kE;MAExC,gBACmC,gB;K;iGAG/B,Y;MAAQ,0C;K;0DAEZ,kB;MACI,cAAY,I;MACZ,gBAAC,M;K;I AGsE,iG;MAAA,uB;QAExE,Q;QAAZ,qCAAY,8D;QACZ,sCAAa,a;QAFb,OAGA,yB;O;K;2DAJJ,+B;MAAKD,O AAsC,wDAAtC,c;K;IAOyE,uH;MAAA,uB;QAEyG,Q;QAaf,iBAae,8F;QACf,eAAK,2B;QAA6B,mC;QrMjGtB,g BAAT,Q;QqMsG0D,kB;QAJzD,sBAASB,SAAK,W;QAC3B,IAAI,eAAa,eAAjB,C;UAEI,iC;UACA,mBAAy,oCA AwB,eAAXB,EAAyC,kEAAzC,C;;UAGZ,mBAAy,kE;;QAEhB,oBAAa,e;QAZjB,OAcA,yB;O;K;6DAfJ,0C;MAA qF,OAA5C,qEAAtC,c;K;IAqBzB,mI;MAAA,qB;QACxD,yCAAgB,uB;QAGhB,qCAAY,Y;QACZ,uCAAc,E;QACI B,W;O;K;iEATA,iC;MAGwB,wCAAA,mCAAb,EAAoC,kFAApC,C;K;mDAQxB,Y;MAMuB,UADC,MACD,EAI H,MAJG,EAaK,M;MAjBxB,OAAO,IAAP,C;QAEI,aAAa,IAAK,S;QACF,SAAL,IAAK,O;QAAL,mB;UACyB,gB AArB,0D;U1JxBhB,U;UADP,yB;U0JyBe,O1JxBR,sF;S0JuBC,WAAW,M;QAGX,IAAI,mDAAoB,MAApB,QA AJ ,C;;YAlIB,SAAT,exJxJV,CwJwJuD,IxJxJvD,EwJwJ6D,YxJxJ7D,EwJwJoE,IxJxJpE,EAA8C,KAA9C,C;;YwJyJQ ,gC;cACE,IzJzJhB,oBDgDQ,WAAO,c0JyG0B,C1JzG1B,CAAP,CChDR,C;cyJ0JgB,Q;;cALI,O;;UAAR,c;UAQA,I AAI,MAAM,yBAAV,C;YACI,IzJvKhB,oBDgDQ,W0JuHoB,0E1JvHpB,CChDR,C;;UyJ0KY,gBAAC,gB;UACd,I AAK,oBAAW,MAAX,C;;K;;0EC1MrB,4B;MAoKI,QAhKK,SAGKG,GAhKoB,KAgKpB,I;MACR,IAAI,CAjKC, SAiKD,GAjKwB,KAiKxB,IAAiB,CAAjB,IAAsB,eAjKE,KAiKF,MAjKrB,SAiKL,C;QAA6C,a;OAJK7C,OakKO, C;K;kEAhKX,yB;MAAA,0B;MAAA,mC;QA2KI,QAnKK,SAmKG,GAnKe,K;QAAvB,OAAgC,OAoKzB,KApKg B,KAoKX,GAAW,CAAC,CAAC,IAPKF,KAoKC,KAAmB,KAAK,CAAC,CAAD,IAAL,CAAnB,CAAD,KAAkC, EAAID,KApKyB,C;O;KARpC,C;4EAUA,4B;MAoJI,QAhJK,SAGJG,GAhJoB,KAgJpB,I;MACR,IAAI,CAjJC,SAi JD,GAjJwB,KAiJxB,IAAiB,CAAjB,IAAsB,eAjJE,KAiJF,MAjJrB,SAiJL,C;QAA6C,a;OAJ7C,OakJO,C;K;kEAhJ X,yB;MAAA,4B;MAAA,mC;QA2JI,QAnJK,SAmJG,GAnJe,K;QAAvB,OAAgC,QAoJzB,KApJgB,KAOJX,GAA W,CAAC,CAAC,IAPJF,KAoJC,KAAmB,KAAK,CAAC,CAAD,IAAL,CAAnB,CAAD,KAAkC,EAAID,KApJyB, C;O;KARpC,C;4EAUA,4B;MAoII,QAhIK,SAGIG,GAhIc,KAgId,I;MACR,IAAI,CAjIC,SAiID,GAjIkB,KAiIB,IA AiB,CAAjB,IAAsB,eAjIJ,KaiII,MAjIrB,SAiIL,C;QAA6C,a;OAJ7C,OakIO,C;K;kEAhIX,4B;MA2II,QAnIK,SA mIG,GAnIS,K;MAAjB,OAoIO,KApIU,KAoIL,GAAW,CAAC,CAAC,IAPIR,KAoIO,KAAmB,KAAK,CAAC,CA AD,IAAL,CAAnB,CAAD,KAAkC,EAAID,K;K;4EAIIX,yB;MAqMA,0B;MarMA,mC;QAikB,kBAAT,oBAAL,S AAK,C;QAqML,QAAQ,gBArMe,KaqMf,C;QACR,IAAI,gBatMmB,KAsMnB,eAAiB,CAAjB,IAAsB,mBatMH, KAsMG,GAAa,WAAb,CAA1B,C;UAA6C,W;SatM7C,OAuMO,C;O;KA3MX,C;kEAMA,4B;MAGNI,QAxMK,o BAAL,SAAK,CAwMG,QAxMU,KAwMV,C;MAxMR,OAyMO,MAzMW,KAyMN,KAAa,MAzMP,KAyMO,CA AD,KAAmB,KAAm,CAAD,aAAL,CAAnB,CAAD,YAAkC,EAAIC,CAAX,CAAL,C;K;4EAvmX,4B;MAoGI,QA

hGK,SAGGG,GAhGoB,KAgGpB,I;MACR,IAAI,CAjGC,SAiGD,GAjGwB,KAiGxB,IAAiB,CAAjB,IAAsB,eAjGE  
,KaiGF,MAjGrB,SAiGL,C;QAA6C,a;OAJG7C,OAKGO,C;K;kEhGX,yB;MAAA,0B;MAAA,mC;QA2GI,QAnG  
K,SAmGG,GAnGe,K;QAAvB,OAAgC,OAoGzB,KApGgB,KAoGX,GAAW,CAAC,CAAC,IAPGF,KAoGC,KAA  
mB,KAAK,CAAC,CAAD,IAAL,CAAnB,CAAD,KAAkC,EAAID,KApGyB,C;O;KARpC,C;4EAUA,4B;MAoFI,Q  
AhFK,SAGFG,GAhFoB,KAgFpB,I;MACR,IAAI,CAjFC,SAiFD,GAjFwB,KAiFxB,IAAiB,CAAjB,IAAsB,eAjFE,  
KaiFF,MAjFrB,SAiFL,C;QAA6C,a;OAJF7C,OAKFO,C;K;kEhFX,yB;MAAA,4B;MAAA,mC;QA2FI,QAnFK,S  
AmFG,GAnFe,K;QAAvB,OAAgC,QAofzB,KApFgB,KAoFX,GAAW,CAAC,CAAC,IAPFF,KAoFC,KAAmB,KA  
AK,CAAC,CAAD,IAAL,CAAnB,CAAD,KAAkC,EAAID,KApFyB,C;O;KARpC,C;4EAUA,4B;MAoEI,QAhEK,S  
AgEG,GAhEc,KAgEd,I;MACR,IAAI,CAjEC,SAiED,GAjEkB,KAiEIB,IAAiB,CAAjB,IAAsB,eAjEJ,KAiEI,MAjE  
rB,SAiEL,C;QAA6C,a;OAJE7C,OAKEO,C;K;kEhEX,4B;MA2EI,QAnEK,SAmEG,GAnES,K;MAAJB,OAoEO,K  
ApEU,KAoEL,GAAW,CAAC,CAAC,IAPER,KAoEO,KAAmB,KAAK,CAAC,CAAD,IAAL,CAAnB,CAAD,KAA  
kC,EAAID,K;K;4EAIEX,yB;MAqIA,0B;MARIA,mC;QAIkB,kBAAT,oBAAL,SAAK,C;QAqIL,QAAQ,gBarIe,KA  
qIf,C;QACR,IAAI,gBatImB,KAsInB,eAAiB,CAAjB,IAAsB,mBAIh,KAsIG,GAAa,WAAb,CAA1B,C;UAA6C,  
W;SAI7C,OAuIO,C;O;KA3IX,C;kEAMA,4B;MAGJI,QAxIK,oBAAL,SAAK,CAwIG,QAxIU,KAwIV,C;MAXIR,  
OAYIO,MAZIW,KAYIN,KAAa,MAZIP,KAYIO,CAAD,KAAmB,KAAM,CAAD,aAAL,CAAnB,CAAD,YAAkC,E  
AAIC,CAAX,CAAL,C;K;2EAvIX,4B;MAoCI,QAhCA,SAGCQ,GAhCY,KAGCZ,I;MACR,IAAI,CAjCJ,SAiCI,GA  
jCgB,KAiChB,IAAiB,CAAjB,IAAsB,eAjCN,KAiCM,MAjC1B,SAiCA,C;QAA6C,a;OAJC7C,OAKCO,C;K;iEhC  
X,yB;MAAA,0B;MAAA,mC;QA2CI,QAnCA,SAmCQ,GAnCO,K;QAaf,OAAwB,OAoCjB,KApCQ,KAoCH,GA  
AW,CAAC,CAAC,IAPCV,KAoCS,KAAmB,KAAK,CAAC,CAAD,IAAL,CAAnB,CAAD,KAAkC,EAAID,KApCi  
B,C;O;KAR5B,C;4EAUA,4B;MAoBI,QAhBA,SAGBQ,GAhBY,KAGBZ,I;MACR,IAAI,CAjBJ,SAiBI,GAjBgB,K  
AiBhB,IAAiB,CAAjB,IAAsB,eAjBN,KAiBM,MAjB1B,SAiBA,C;QAA6C,a;OAJB7C,OAKBO,C;K;mEhBX,yB;  
MAAA,4B;MAAA,mC;QA2BI,QAnBA,SAmBQ,GAnBO,K;QAaf,OAAwB,QAoBjB,KApBQ,KAoBH,GAAW,C  
AAC,CAAC,IAPBV,KAoBS,KAAmB,KAAK,CAAC,CAAD,IAAL,CAAnB,CAAD,KAAkC,EAAID,KApBiB,C;O  
;KAR5B,C;4EAUA,4B;MAII,QAAQ,YAAO,KAAP,I;MACR,IAAI,aAAS,KAAT,IAAiB,CAAjB,IAAsB,eAAI,KA  
AJ,MAAa,SAAvC,C;QAA6C,a;OAC7C,OAAO,C;K;mEAGX,4B;MAQI,QAAQ,YAAO,K;MACf,OAAO,KAAK,  
QAAW,CAAC,CAAC,IAAM,KAAP,KAAmB,KAAK,CAAC,CAAD,IAAL,CAAnB,CAAD,KAAkC,EAAID,K;K;  
4EAGX,yB;MAGEA,0B;MAhEA,mC;QAIkB,kBAAT,oBAAL,SAAK,C;QAgEL,QAAQ,gBAhEe,KAgEf,C;QACR  
,IAAI,gBAjEmB,KAiEnB,eAAiB,CAAjB,IAAsB,mBAjEH,KAiEG,GAAa,WAAb,CAA1B,C;UAA6C,W;SAjE7C,  
OAKEO,C;O;KAtEX,C;kEAMA,4B;MA2EI,QAnEK,oBAAL,SAAK,CAmEG,QAnEU,KAmEV,C;MAnER,OAoE  
O,MApEW,KAoEN,KAAa,MApEP,KAoEO,CAAD,KAAmB,KAAM,CAAD,aAAL,CAAnB,CAAD,YAAkC,EAA  
IC,CAAX,CAAL,C;K;6EAIEX,yB;MAGDA,0B;MAhDA,mC;QAIS,cAAe,oBAAN,KAAM,C;QAgDpB,QAhDA,S  
AgDQ,KAAO,OAAP,C;QACR,IAjDA,SAiDI,KAAS,OAAT,eAAiB,CAAjB,IAAsB,mBAAI,OAAJ,GAjD1B,SAiD  
0B,CAA1B,C;UAA6C,W;SAjD7C,OAKDO,C;O;KAtDX,C;mEAMA,yB;MAAA,0B;MAAA,mC;QAQS,cAAU,oB  
AAN,KAAM,C;QAmDf,QAnDA,SAmDQ,QAAO,OAAP,C;QAnDR,OAAYB,OAoDIB,MAAK,YAAa,MAAM,OA  
AN,CAAD,KAAmB,KAAM,CAAD,aAAL,CAAnB,CAAD,YAAkC,EAAIC,CAAX,CAAL,CAPdkB,S;O;KAR7B,  
C;6EAUA,yB;MAGCA,0B;MAhCA,mC;QAIS,cAAe,oBAAN,KAAM,C;QAgCpB,QAhCA,SAGCQ,KAAO,OAAP,  
C;QACR,IAjCA,SAiCI,KAAS,OAAT,eAAiB,CAAjB,IAAsB,mBAAI,OAAJ,GAjC1B,SAiC0B,CAA1B,C;UAA6C  
,W;SAjC7C,OAKCO,C;O;KAtCX,C;mEAMA,yB;MAAA,4B;MAAA,mC;QAQS,cAAU,oBAAN,KAAM,C;QAmC  
f,QAnCA,SAmCQ,QAAO,OAAP,C;QAnCR,OAAYB,QAoCIB,MAAK,YAAa,MAAM,OAAN,CAAD,KAAmB,K  
AAM,CAAD,aAAL,CAAnB,CAAD,YAAkC,EAAIC,CAAX,CAAL,CAPckB,S;O;KAR7B,C;6EAUA,yB;MAGBA  
,0B;MAhBA,mC;QAIS,cAAe,oBAAN,KAAM,C;QAgBpB,QAhBA,SAGBQ,KAAO,OAAP,C;QACR,IAjBA,SAiB  
I,KAAS,OAAT,eAAiB,CAAjB,IAAsB,mBAAI,OAAJ,GAjB1B,SAiB0B,CAA1B,C;UAA6C,W;SAjB7C,OAKBO,  
C;O;KAtBX,C;mEAMA,4B;MAQS,cAAU,oBAAN,KAAM,C;MAMbf,QAnBA,SAmBQ,QAAO,OAAP,C;MAnB  
R,OAoBO,MAAK,YAAa,MAAM,OAAN,CAAD,KAAmB,KAAM,CAAD,aAAL,CAAnB,CAAD,YAAkC,EAAIC  
,CAAX,CAAL,CAPbkB,Q;K;6EAE7B,yB;MAAA,0B;MAAA,mC;QAI,QAAQ,cAAO,KAAP,C;QACR,IAAI,cA  
AS,KAAT,eAAiB,CAAjB,IAAsB,mBAAI,KAJ,GAAa,SAAb,CAA1B,C;UAA6C,W;SAC7C,OAAO,C;O;KANX,  
C;mEASA,4B;MAQI,QAAQ,iBAAO,KAAP,C;MACR,OAAO,MAAK,UAAa,MAAM,KAAN,CAAD,KAAmB,K  
AAM,CAAD,aAAL,CAAnB,CAAD,YAAkC,EAAIC,CAAX,CAAL,C;K;kEAGX,yB;MpGiqB2C,iB;MoGjqB3C,m

C;QAUI,QAAQ,YAAO,K;QACJ,iBAAS,G;QAAT,S;UAAsB,OpGspBc,MAAiC,MoGtpB/C,CpGspB+C,CoGtpB/C,KpGspBc,MAAiC,MoGtpBrC,KpGspBqC,C;SoGtpBhF,OAAO,OAAGD,IAAI,KAApD,GAA+D,C;O;KAX1E,C;mEAcA,yB;MpG0I6C,iB;MoG1I7C,mC;QAKCI,QAxBK,SAwBG,GAXBY,K;QAYBT,iBAAK,G;QAAL,S;UAAY,OpGuG0B,MAAW,MoGvGrC,CpGuGqC,CoGvGrC,KpGuG0B,MAAW,MoGhIxC,KpGgIwC,C;SoGhI5D,OAYBO,OAAcS,IAzBzB,KAYBb,GAAqD,C;O;KAnChE,C;mEAYA,yB;MpG8H6C,iB;MoG9H7C,mC;QAsBI,QAZA,SAyQ,GAZO,K;QAaJ,iBAAK,G;QAAL,S;UAAY,OpGuG0B,MAAW,MoGvGrC,CpGuGqC,CoGvGrC,KpGuG0B,MAAW,MoGpH7C,KpGoH6C,C;SoGpH5D,OAAO,OAAcS,IAb9B,KAAr,GAAqD,C;O;KAvBhE,C;mEAYA,yB;MpGkH6C,iB;MoGIH7C,mC;QAUI,QAAQ,YAAO,K;QACJ,iBAAK,G;QAAL,S;UAAY,OpGuG0B,MAAW,MoGvGrC,CpGuGqC,CoGvGrC,KpGuG0B,MAAW,MoGvG3B,KpGuG2B,C;SoGvG5D,OAAO,OAAcS,IAAI,KAA1C,GAAqD,C;O;KAXhE,C;4ECnTA,yB;MAAA,8B;MAAA,4B;QAOyC,Q;QAAA,gFAAoB,C;O;KAP7D,C;ICM0B,4C;MA+CtB,qC;MA/CuB,kB;MAAgB,kB;MAAgB,kB;MAMvD,iBAAsB,iBAAU,UAAV,EAAiB,UAAjB,EAAwB,UAAxB,C;K;0CAEtB,+B;M3MWA,IAAI,E2MViB,CAAT,sBAAY,GAAZ,KAA4C,CAAT,sBAAY,GAA/C,MAA+E,CAAT,sBAAY,GAAIF,C3MUR,CAAJ,C;QACI,c2MVI,2E;Q3MWJ,MAAM,gCAAyB,OAAQ,WAAjC,C;O2MTN,OAAO,CAAA,KAAM,IAAI,EAAV,KAAgB,KAAM,IAAI,CAA1B,IAA+B,KAA/B,I;K;uCAGX,Y;MAGkC,OAAE,UAAF,oBAAS,UAAT,SAAGB,U;K;qCAEID,iB;MAEwB,gB;MADpB,IAAI,SAAS,KAAb,C;QAAoB,OAAO,I;MACP,iE;MAAD,mB;QAA6B,OAAO,K;OAAvD,mBAAmB,M;MACnB,OAAO,IAAK,UAAAL,KAAgB,YAAa,U;K;uCAGxC,Y;MAA+B,qB;K;8CAE/B,iB;MAAoD,wBAAU,KAAM,UAAhB,I;K;gDAEpD,wB;MAKI,OAAA,IAAK,MAAL,GAAa,KAAb,KAAuB,IAAK,MAAL,KAAc,KAAd,IACf,IAAK,MAAL,IAAc,KADtB,C;K;gDAGJ,+B;MAKI,OAAA,IAAK,MAAL,GAAa,KAAb,KAAuB,IAAK,MAAL,KAAc,KAAd,KACd,IAAK,MAAL,GAAa,KAAb,KAAcS,IAAK,MAAL,KAAc,KAAd,IACf,IAAK,MAAL,IAAc,KADrB,CADc,CAAvB,C;K;IAIJ,mC;MAAA,uC;MACI,2BAIuC,G;MAEvC,eAIoC,uCAA0B,M;K;IAXIE,+C;MAAA,8C;QAAA,6B;OAAA,uC;K;IA9CA,iD;MAAA,uD;MAG6C,0BAAK,KAAL,EAAy,KAAZ,EAAmB,CAAnB,C;MAH7C,Y;K;IA6DJ,qC;MAAA,yC;K;8CAEI,Y;MAC2B,yBAAC,CAAd,EAAiB,CAAjB,EAAoB,CAApB,C;K;IAH/B,iD;MAAA,gD;QAAA,+B;OAAA,yC;K;4FCxDI,yB;MAAA,2D;MAAA,4B;QAAQ,MAAM,6BAAoB,6BAApB,C;O;KAAAd,C;ICSJ,uB;MAG2C,+BAAoB,KAApB,C;K;4EAE3C,wC;MAO4F,sB;K;IAE5F,6C;MAAA,e;MAAA,iB;MAAA,uB;K;IAAA,2C;MAAA,8C;O;MAKI,wF;MAKA,sF;MAMA,wE;K;IAXA,yD;MAAA,iC;MAAA,iD;K;IAKA,wD;MAAA,iC;MAAA,gD;K;IAMA,iD;MAAA,iC;MAAA,yC;K;IAhBJ,uC;MAAA,iJ;K;IAAA,4C;MAAA,a;aAAA,c;UAAA,sD;aAAA,a;UAAA,qD;aAAA,M;UAAA,8C;gBAAA,gE;K;IAYBA,+B;MAAA,mC;K;IAAA,2C;MAAA,0C;QAAA,yB;OAAA,mC;K;IAGoC,qC;MACHC,qBAAsC,W;MACTC,gBAA2B,iC;K;uFAGvB,Y;MAMW,Q;MALP,IAAI,kBAAW,iCAAf,C;QACI,gBAAS,mC;QACT,qBAAC,I;OAGIB,OAAO,gF;K;6CAGf,Y;MAAwC,yBAAW,iC;K;wCAEnD,Y;MAAkC,OAAI,oBAAJ,GAA2B,SAAN,UAAM,CAA3B,GAA2C,iC;K;8CAE7E,Y;MAAkC,+BAAoB,UAApB,C;K;IAGG,oC;MAAC,4B;K;wEAAA,Y;MAAA,2B;K;kDAEtC,Y;MAAwC,W;K;6CAExC,Y;MAAkC,OAAM,SAAN,UAAM,C;K;oFC2C5C,yB;MAAA,gD;MAAA,4B;QAM6C,OAAmB,aAAIB,YAAy,GAAM,C;O;KANhE,C;oGAQA,yB;MxG7FA,iB;MwG6FA,4B;QAMqD,OxG7FM,MAAO,OwG6FZ,YAAy,GxG7FA,CwG6Fb,GAA6C,EAA7C,I;O;KANrD,C;SQAQA,yB;MAAA,kE;MAAA,4B;QAMsD,OAAmB,sBAAIB,YAAW,GAAO,C;O;KANzE,C;8FAQA,yB;MAAA,0D;MAAA,0B;MAAA,4B;QAOmD,OAAuC,OAApB,kBAAIB,YAAy,GAAM,CAAoB,C;O;KAP1F,C;4FASA,yB;MAAA,wD;MAAA,0B;MAAA,4B;QAOkD,OAA2B,OAAmB,iBAAR,SAAQ,CAAmB,C;O;KAP7E,C;IAUA,2C;MAaI,OAA+E,OAA9E,SAAQ,KAAI,WAAa,CAAjB,CAAR,GAAkD,CAAIB,YAAy,GAAM,MAAK,CAAL,IAAU,WAAa,CAAvB,CAA4B,C;K;IAEnF,4C;MAaI,OAA+E,OAA9E,SAAQ,IAAI,CAAJ,IAAS,WAAa,CAAtB,CAAR,GAAwD,CAAIB,YAAy,GAAM,OAAK,WAAa,CAAIB,CAAsB,C;K;oFAEnF,yB;MAAA,gD;MAAA,4B;QAM8C,OAAqB,aAApB,YAAy,KAAQ,C;O;KANnE,C;oGAQA,yB;MxGtKA,iB;MwGsKA,4B;QAOI,OxGvKuD,MAAO,OwGuK7D,YAAy,KxGvKiD,CwGuK9D,GAA+C,EAA/C,I;O;KAPJ,C;SgASA,yB;MAAA,kE;MAAA,4B;QAMuD,OAAqB,sBAApB,YAAW,KAAS,C;O;KAN5E,C;8FAQA,yB;MAAA,0D;MAAA,4B;MAAA,4B;QAOqD,OAAyC,QAApB,kBAApB,YAAy,KAAQ,CAAoB,C;O;KAP9F,C;4FASA,yB;MAAA,wD;MAAA,4B;MAAA,4B;QAOoD,OAA2B,QAAmB,iBAAR,SAAQ,CAAmB,C;O;KAP/E,C;IAUA,2C;MAaI,OAAoF,QAAAnF,SAAQ,KAAI,WAAa,EAAjB,CAAR,GAAqD,CAApB,YAAy,KAAQ,MAAK,EAAI,IAAW,WAAa,EAAxB,CAA8B,C;K;IAExF,4C;MAaI,OAAoF,QAAAnF,SAAQ,IAAI,EAAJ,IAAU,WAAa,EAAvB,CAAR,GAA4D,CAApB,YAAy,KAAQ,OAAK,WAAa,EAAIB,CAAuB,C;K;0E9MIRxF,yB;MAAA,kF;MAbA,wB;QAUbI,IAAI,CAbI,KAA

R,C;UACI,cAda,qB;UAeb,MAAM,8BAAyB,OAAQ,WAAjC,C;U;KAZd,C;0EAaA,yB;MAAA,kF;MAAA,qC;Q  
AUI,IAAI,CAAC,KAAL,C;UACI,cAAc,a;UACd,MAAM,8BAAyB,OAAQ,WAAjC,C;U;KAZd,C;sFAgBA,yB;M  
AWA,kF;MAXA,wB;QAQW,yB;QAeP,IAfsB,KAelB,QAAl,C;UACI,cAhB2B,0B;UAIb3B,MAAM,8BAAyB,OA  
AQ,WAAjC,C;;UAEN,wBAnBkB,K;;QAAtB,4B;O;KARJ,C;wFAWA,yB;MAAA,kF;MAAA,qC;QAYI,IAAI,aAA  
J,C;UACI,cAAc,a;UACd,MAAM,8BAAyB,OAAQ,WAAjC,C;;UAEN,OAAO,K;;O;KAhBf,C;oEAoBA,yB;MAaA  
,4E;MAbA,wB;QAUbI,IAAI,CabE,KAAa,N,C;UACI,cAdW,e;UAeX,MAAM,2BAAsB,OAAQ,WAA9B,C;U;KAZB  
d,C;sEAaA,yB;MAAA,4E;MAAA,qC;QAUI,IAAI,CAAC,KAAL,C;UACI,cAAc,a;UACd,MAAM,2BAAsB,OAA  
Q,WAA9B,C;U;KAZd,C;kFAgBA,yB;MAcA,4E;MAdA,wB;QAWW,uB;QAeP,IAfoB,KAehB,QAAl,C;UACI,cA  
hByB,0B;UAIbZB,MAAM,2BAAsB,OAAQ,WAA9B,C;;UAEN,sBAnBgB,K;;QAAPB,0B;O;KAXJ,C;oFAcA,yB;  
MAAA,4E;MAAA,qC;QAYI,IAAI,aAAJ,C;UACI,cAAc,a;UACd,MAAM,2BAAsB,OAAQ,WAA9B,C;;UAEN,O  
AAO,K;;O;KAhBf,C;oEAqBA,yB;MAAA,4E;MAAA,0B;QAMiD,MAAM,2BAAsB,OAAQ,WAA9B,C;O;KANv  
D,C;I8CnHiC,uB;MA2D7B,8B;MA1DA,kB;K;mfAS8B,Y;MAAQ,iD;K;mfAMR,Y;MAAQ,gD;K;wFAItC,yB;M  
AAA,gB;MAAA,8B;MAAA,mB;QAWgB,Q;QADR,mB;UADJ,OACiB,I;;UADjB,OAEY,2E;O;KAXhB,C;uCACa  
,Y;MAQQ,kBADE,UACF,kB;QADJ,OACKB,UAAM,U;;QADxB,OAEY,I;K;gCAGhB,Y;MAOQ,kBADE,UACF,k  
B;QADJ,OACKB,UAAM,W;;QADxB,OAEY,sBAAU,UAAV,O;K;IAKhB,4B;MAAA,gC;K;wHAKI,yB;MAAA,i  
C;MAAA,wB;QAOI,uBAAO,KAAP,C;O;KAPJ,C;wHASA,yB;MAAA,kD;MAAA,iC;MAAA,4B;QAOI,uBAAO,c  
AAc,SAAd,CAAP,C;O;KAPJ,C;;IAJ,wC;MAAA,uC;QAAA,sB;OAAA,gC;K;IAwBsB,mC;MACIB,0B;K;sCAG  
A,iB;MAA4C,+CAAOB,uBAAa,KAAM,UAAAnB,C;K;wCACH,E,Y;MAA+B,OAAU,SAAV,cAAU,C;K;wCACzC,  
Y;MAAkC,oBAAU,cAAV,M;K;;gCA/F1C,Y;MAAA,c;MAOI,sD;MAPJ,a;K;8BAAA,iB;MAAA,2IAOI,sCAPJ,  
G;K;IAmGA,kC;MAOI,OAAO,mBAAQ,SAAR,C;K;IAEX,mC;MAQI,IAAI,8CAAJ,C;QAA6B,MAAM,eAAM,U;  
K;gFAG7C,yB;MAAA,4B;MAAA,qB;MAxCQ,kD;MAwCR,wB;QAOW,Q;;UACI,OAIDH,WakDW,OAIDX,C;;  
UAmDN,gC;YACS,OA3CH,WAAO,cA2CI,CA3CJ,CAAP,C;;YA wCD,O;;QAAP,W;O;KAPJ,C;kFAcA,yB;MAA  
A,4B;MAAA,qB;MatDQ,kD;MA sDR,mC;QAOW,Q;;UACI,OAHEH,WAgEW,gBAhEX,C;;UAIEN,gC;YACS,OA  
zDH,WAAO,cAyDI,CAzDJ,CAAP,C;;YAsDD,O;;QAAP,W;O;KAPJ,C;8EAgBA,yB;MAAA,oD;MAAA,gB;MAA  
A,8B;MAAA,4B;QAUW,Q;QADP,yB;QACA,OAAO,gF;O;KAVX,C;+EAaA,yB;MAAA,gB;MAAA,8B;MAAA,u  
C;QAegB,UADL,M;QAAM,gBAAGB,2B;QACzB,sB;UAAQ,yF;;UACA,mBAAU,SAAV,C;QAFZ,a;O;KADJ,C;k  
FAoBA,yB;MAAA,gB;MAAA,8B;MAAA,0C;QAUW,Q;QADP,IAAI,mBAAJ,C;UAAe,OAAO,Y;QACTb,OAAO,  
gF;O;KAVX,C;qEAaA,yB;MAAA,gB;MAAA,8B;MAAA,kD;QAIb0B,UAdf,M;QAAM,gBAAGB,2B;QACzB,sB;  
UAAQ,mBAAU,gFAAV,C;;UACA,mBAAU,SAAV,C;QAFZ,a;O;KAhBJ,C;mEAwBA,yB;MAAA,4B;MAAA,gB;  
MAAA,8B;MAAA,uC;YAe8C,I;YADnC,M;QACH,wB;UAAa,gB;UAAO,SA7JhB,WA6JwB,UAAU,gFAAV,CA7  
JxB,C;;UA8JI,oBAAO,eAAP,C;QAFZ,a;O;KADJ,C;gFAoBA,yB;MAAA,gB;MAAA,8B;MAAA,iC;MA1GA,qB;  
MatDQ,kD;MAgKR,uC;QAWW,Q;QACH,wB;UA/GG,U;;YA+GkC,U;YA9G9B,SAhEH,gBA8KuB,UAAU,sFA  
AV,CA9KvB,C;;YAIEN,gC;cACS,SAzDH,gBAAO,cAyDI,CAzDJ,CAAP,C;;cAsDD,O;;UA+GU,a;;UACL,uBAA  
O,eAAP,C;QAFZ,W;O;KAXJ,C;wEAiBA,yB;MAAA,4B;MAAA,uC;QAcW,Q;QAAM,gBAAGB,2B;QACzB,sB;U  
AAQ,gB;;UACO,OAnMX,WAmMmB,UAAU,SAAV,CAnMnB,C;;QAI MR,W;O;KADJ,C;wFAoBA,yB;MA/IA,4  
B;MAAA,qB;MatDQ,kD;MAqMR,uC;QAWW,Q;QAAM,gBAAGB,2B;QACzB,sB;UAAQ,gB;;UApJL,U;;YACI,  
SAhEH,WAoNkB,oBApNIB,C;;YAIEN,gC;cACS,SAzDH,WAAO,cAyDI,CAzDJ,CAAP,C;;cAsDD,O;;UAqJK,a;;  
QAFZ,W;O;KAXJ,C;4EAmBA,6B;MAUI,Q;MAAA,iD;QAAyB,Y;OACzB,OAAO,S;K;4EAGX,yB;MAAA,gB;M  
AAA,8B;MAAA,oC;QAU0B,Q;QAAtB,IAAI,mBAAJ,C;UAAe,OAAO,gFAAP,C;SACf,OAAO,S;O;KAXX,C;I3C  
tTgC,sC;MAAC,uB;QAAA,UAAkB,kC;mBAA4C,O;;K;;0DAE/F,yB;MAAA,2D;MAAA,mB;QAKoC,MAAM,8B;  
O;KAL1C,C;oEAOA,yB;MAAA,2D;MAAA,yB;QAMkD,MAAM,6BAAoB,sCAAmC,MAAvD,C;O;KANxD,C;g  
EAUA,iB;MAUI,OAAO,O;K;KEAGX,4B;MAUI,OAAO,gB;K;oEAGX,2B;MAUI,OAAgB,MAAT,QAAS,C;K;oE  
AGpB,4B;MAUI,gB;MACA,OAAO,S;K;KEAGX,4B;MAWI,MAAM,SAAN,C;MACA,OAAO,S;K;KEAGX,4B;M  
AUI,OAAO,MAAM,SAAN,C;K;sEAGX,gC;MAWI,OAAW,UAAU,SAAV,CAAJ,GAAqB,SAArB,GAA+B,I;K;8  
EAG1C,gC;MAWI,OAAW,CAAC,UAAU,SAAV,CAAL,GAA sB,SAAtB,GAAgC,I;K;wEAG3C,yB;MAWI,iBAA  
c,CAAd,UAA sB,KAAtB,U;QACI,OAAO,KAAP,C;;K;wE4MjJR,iB;MAIkF,Y;K;ICY9C,6B;MACHc,kB;MACA,o  
B;K;8BAGA,Y;MAGyC,aAG,UAAH,UAAW,WAAX,M;K;;gCAvB7C,Y;MAGBI,iB;K;gCAhBJ,Y;MAiBI,kB;K;  
kCAjBJ,yB;MAAA,gBAGBI,qCAhBJ,EAiBI,wCAjBJ,C;K;8BAAA,Y;MAAA,c;MAGBI,sD;MACA,uD;MAjBJ,a;

K;4BAAA,iB;MAAA,4IAgBI,sCAhBJ,IAiBI,wCAjBJ,I;K;IA0BA,6B;MAMoD,gBAAK,SAAL,EAAW,IAAX,C;K;IAEpD,8B;MAI8C,iBAAO,eAAP,EAAC,gBAAd,E;K;IAiBD,sC;MACzC,kB;MACA,oB;MACA,kB;K;gCAGA,Y;MAGyC,aAAG,UAAH,UAAW,WAAX,UAAoB,UAApB,M;K;;kCAxB7C,Y;MAGBI,iB;K;kCAhBJ,Y;MAiBI,kB;K;kCAjBJ,Y;MAkBI,iB;K;oCAIBJ,gC;MAAA,kBAgBI,qCAhBJ,EAIiBI,wCAjBJ,EakBI,qCAIBJ,C;K;gCAAA,Y;MAAA,c;MAGBI,sD;MACA,uD;MACA,sD;MAIBJ,a;K;8BAAA,iB;MAAA,4IAgBI,sCAhBJ,IAiBI,wCAjBJ,IAKB I,sCAIBJ,I;K;IA2BA,8B;MAImD,iBAAO,eAAP,EAAC,gBAAd,EAAAsB,eAAtB,E;K;I5NIE1B,qB;MAErB,6B;MAF wD,gB;K;IAExD,2B;MAAA,+B;MACI,iBAGoC,UAAM,CAAN,C;MAEpC,iBAGoC,UAAM,MAAN,C;MAEpC,k BAGmC,C;MAEnC,iBAGkC,C;K;;IANbtC,uC;MAAA,sC;QAAA,qB;OAAA,+B;K;kGAsBA,iB;MAOmE,OAAa, 0BA2O1C,SAAL,GAAiB,GA3O8B,EAAU,KA2OpD,KAAL,GAAiB,GA3O8B,C;K;sGAehF,iB;MAM2D,OAAa,0 BAmOIC,SAAL,GAAiB,GAnOsB,EAAU,KEoO5C,KAAL,GAAiB,KFpOsB,C;K;sGAExE,yB;MA0PA,6B;MC3P A,8C;MDCA,wB;QAMyD,OCAS,YAAiB,CD6PhD,cAAU,SAAL,GAAiB,GAAtB,CC7PgD,MAAjB,EDAe,KCAc, KAA7B,C;O;KDNIE,C;sGAQA,yB;MA4PA,WAS6D,wB;MAT7D,+B;MiB7PA,gD;MjBCA,wB;QAM0D,OiBAS, aAAkB,CjB+PhD,eAAW,oBAAL,SAAK,CAAL,UAAN,CiB/PgD,MAAIB,EjBAGB,KiBAc,KAA9B,C;O;KjBNnE, C;4FAQA,yB;MA0OA,6B;MA1OA,wB;QAEsD,OCMD,cAAU,CD2O5B,cAAU,SAAL,GAAiB,GAAtB,CC3O4B, MAAK,GAAW,CD2O5C,cAjPsC,KAiP5B,KAAL,GAAiB,GAAtB,CC3O4C,MAAX,IAAf,C;O;KDRrD,C;4FAGA ,yB;MAuOA,6B;MAvOA,wB;QAEuD,OCGF,cAAU,CD2O5B,cAAU,SAAL,GAAiB,GAAtB,CC3O4B,MAAK,G AAW,CC4O5C,cF/OuC,KE+O7B,KAAL,GAAiB,KAAtB,CD5O4C,MAAX,IAAf,C;O;KDLrD,C;4FAGA,yB;MAo OA,6B;MApOA,wB;QAEqD,OCAA,cAAU,CD2O5B,cAAU,SAAL,GAAiB,GAAtB,CC3O4B,MAAK,GDAI,KCA O,KAAZ,IAAf,C;O;KDFrD,C;4FAGA,yB;MA2OA,WAS6D,wB;MAT7D,+B;MA3OA,wB;QAEuD,OiBAA,eAA W,CjBkP7B,eAAW,oBAAL,SAAK,CAAL,UAAN,CiBIP6B,MAAK,KjBAI,KiBAO,KAAZ,CAAhB,C;O;KjBFvD, C;8FAIA,yB;MA6NA,6B;MA7NA,wB;QAEuD,OCMD,cAAU,CD8N7B,cAAU,SAAL,GAAiB,GAAtB,CC9N6B, MAAK,GAAZ,CD8N9C,cApOwC,KAO09B,KAAL,GAAiB,GAAtB,CC9N8C,MAAZ,IAAf,C;O;KDRtD,C;8FAG A,yB;MA0NA,6B;MA1NA,wB;QAEwD,OCGF,cAAU,CD8N7B,cAAU,SAAL,GAAiB,GAAtB,CC9N6B,MAAK, GAAZ,CC+N9C,cFIOyC,KEkO/B,KAAL,GAAiB,KAAtB,CD/N8C,MAAZ,IAAf,C;O;KDLtD,C;8FAGA,yB;MAu NA,6B;MAvNA,wB;QAEsD,OCAA,cAAU,CD8N7B,cAAU,SAAL,GAAiB,GAAtB,CC9N6B,MAAK,GDAK,KC AO,KAAZ,IAAf,C;O;KDFtD,C;8FAGA,yB;MA8NA,WAS6D,wB;MAT7D,+B;MA9NA,wB;QAEwD,OiBAA,eA AW,CjBqO9B,eAAW,oBAAL,SAAK,CAAL,UAAN,CiBrO8B,MAAK,UjBAK,KiBAO,KAAZ,CAAhB,C;O;KjBF xD,C;8FAIA,yB;MAGNA,6B;MAhNA,wB;QAEuD,OCMD,cAAe,YAAL,CDiN7B,cAAU,SAAL,GAAiB,GAAtB, CCjN6B,MAAK,EAAZ,CDiN9C,cAvNwC,KAuN9B,KAAL,GAAiB,GAAtB,CCjN8C,MAAZ,CAAf,C;O;KDRtD, C;8FAGA,yB;MA6MA,6B;MA7MA,wB;QAEwD,OCGF,cAAe,YAAL,CDiN7B,cAAU,SAAL,GAAiB,GAAtB,CC jN6B,MAAK,EAAZ,CCkN9C,cFrNyC,KEqN/B,KAAL,GAAiB,KAAtB,CDiN8C,MAAZ,CAAf,C;O;KDLtD,C;8F AGA,yB;MA0MA,6B;MA1MA,wB;QAEsD,OCAA,cAAe,YAAL,CDiN7B,cAAU,SAAL,GAAiB,GAAtB,CCjN6B ,MAAK,EDAK,KCAO,KAAZ,CAAf,C;O;KDFtD,C;8FAGA,yB;MAiNA,WAS6D,wB;MAT7D,+B;MAjNA,wB;Q AEwD,OiBAA,eAAW,CjBwN9B,eAAW,oBAAL,SAAK,CAAL,UAAN,CiBxN8B,MAAK,UjBAK,KiBAO,KAAZ ,CAAhB,C;O;KjBFxD,C;0FAIA,yB;MAmMA,6B;MC7LA,4C;MDNA,wB;QAEqD,OCMD,WDoMjB,cAAU,SAAL,GAAiB,GAAtB,CCpMiB,EDoMjB,cA1MoC,KA0M1B,KAAL,GAAiB,GAAtB,CCpMiB,C;O;KDRpD,C;0FAG A,yB;MAGMA,6B;MC7LA,4C;MDHA,wB;QAEsD,OCGF,WDoMjB,cAAU,SAAL,GAAiB,GAAtB,CCpMiB,ECq MjB,cFxMqC,KEwM3B,KAAL,GAAiB,KAAtB,CDrMiB,C;O;KDLpD,C;0FAGA,yB;MA6LA,6B;MC7LA,4C;M DAA,wB;QAEoD,OCAA,WDoMjB,cAAU,SAAL,GAAiB,GAAtB,CCpMiB,EDAkB,KCAIB,C;O;KDFpD,C;0FA GA,yB;MAoMA,WAS6D,wB;MAT7D,+B;MiBpMA,8C;MjBAA,wB;QAEsD,OiBAA,YjB2MjB,eAAW,oBAAL,S AAK,CAAL,UAAN,CiB3MiB,EjBAmB,KiBAnB,C;O;KjBFtD,C;0FAIA,yB;MA5LA,6B;MCxKA,kD;MDdA,wB; QAMqD,OCcD,cD2KjB,cAAU,SAAL,GAAiB,GAAtB,CC3KiB,ED2KjB,cAzLoC,KAYL1B,KAAL,GAAiB,GAAt B,CC3KiB,C;O;KDPBpD,C;0FAOA,yB;MA+KA,6B;MCxKA,kD;MDPA,wB;QAMsD,OCOF,cD2KjB,cAAU,SA AL,GAAiB,GAAtB,CC3KiB,EC4KjB,cFnLqC,KEmL3B,KAAL,GAAiB,KAAtB,CD5KiB,C;O;KDbpD,C;0FAOA, yB;MAwKA,6B;MCxKA,kD;MDAA,wB;QAMoD,OCAA,cD2KjB,cAAU,SAAL,GAAiB,GAAtB,CC3KiB,EDAK B,KCAIB,C;O;KDNpD,C;0FAOA,yB;MA2KA,WAS6D,wB;MAT7D,+B;MiB3KA,oD;MjBAA,wB;QAMsD,OiB AA,ejB8KjB,eAAW,oBAAL,SAAK,CAAL,UAAN,CiB9KiB,EjBAmB,KiBAnB,C;O;KjBNtD,C;oGAQA,yB;MAY JA,6B;MC7LA,4C;MDoCA,wB;QAMiD,OCxCG,WDoMjB,cAAU,SAAL,GAAiB,GAAtB,CCpMiB,EDoMjB,cA5

JqC,KA4J3B,KAAL,GAAiB,GAAtB,CCpMiB,C;O;KdkCpD,C;oGAOA,yB;MAkJA,6B;MC7LA,4C;MD2CA,wB; QAMkD,OC/CE,WDoMjB,cAAU,SAAL,GAAiB,GAAtB,CCpMiB,ECqMjB,cFtJsC,KEsJ5B,KAAL,GAAiB,KAA tB,CDrMiB,C;O;KDyCpD,C;oGAOA,yB;MA2IA,6B;MC7LA,4C;MDkDA,wB;QAMgD,OCtDI,WDoMjB,cAAU, SAAL,GAAiB,GAAtB,CCpMiB,EDsDmB,KCtDnB,C;O;KDgDpD,C;oGAOA,yB;MA8IA,WAS6D,wB;MAT7D,+ B;MiBpMA,8C;MjBsDA,wB;QAMkD,OiB1DI,YjB2MjB,eAAW,oBAAL,SAAK,CAAL,UAAN,CiB3MiB,EjB0D oB,KiB1DpB,C;O;KjBoDtD,C;0FAQA,yB;MA4HA,6B;MCxKA,kD;MDuOJ,0B;MAAA,+B;MA3LI,wB;QAQ6C, OA8LR,eAAW,OC5OI,cD2KjB,cAAU,SAAL,GAAiB,GAAtB,CC3KiB,ED2KjB,cA7H4B,KA6HIB,KAAL,GAAi B,GAAtB,CC3KiB,CAkLf,KD0DW,CAAX,C;O;KAtMrC,C;0FASA,yB;MAMHA,6B;MCxKA,kD;MCwOJ,4B;M AAA,iC;MFnLI,wB;QAQ+C,OEslR,gBAAy,QD7OC,cD2KjB,cAAU,SAAL,GAAiB,GAAtB,CC3KiB,EC4KjB,c FrH8B,KEqHpB,KAAL,GAAiB,KAAtB,CD5KiB,CA4Lb,KCiDY,CAAZ,C;O;KF9LvC,C;0FASA,yB;MA0GA,6B ;MCxKA,kD;MD8DA,wB;QAQ2C,OCheS,cD2KjB,cAAU,SAAL,GAAiB,GAAtB,CC3KiB,EDgES,KChET,C;O; KDwDpD,C;0FASA,yB;MA2GA,WAS6D,wB;MAT7D,+B;MiB3KA,oD;MjBgEA,wB;QAQ6C,OiBIES,ejB8KjB,e AAW,oBAAL,SAAK,CAAL,UAAN,CiB9KiB,EjBkeEU,KiBIEV,C;O;KjB0DtD,C;0EAUA,yB;MAAA,0B;MAAA, +B;MAAA,mB;QAM0C,sBAAW,OAAL,SAAK,KAAX,C;O;KAN1C,C;0EAQA,yB;MAAA,0B;MAAA,+B;MAA A,mB;QAM0C,sBAAW,OAAL,SAAK,KAAX,C;O;KAN1C,C;kGAQA,yB;MAAA,8C;MAuEA,6B;MAvEA,wB; QAE8D,0BA8E3B,cAAU,SAAL,GAAiB,GAAtB,CA9E2B,EA8E3B,cA9EoD,KA8E1C,KAAL,GAAiB,GAAtB,C A9E2B,C;O;KAF9D,C;0FAIA,yB;MAAA,+B;M4LxOJ,0B;M5LwOI,wB;QAE8D,sB4LvOgC,O5LuO1B,IAAK,K 4LvOX,G5LuOoB,KAAM,K4LvOM,C5LuOhC,C;O;KAFnD,C;wFAGA,yB;MAAA,+B;M4LTOJ,0B;M5LsOI,wB; QAEkD,sB4LrO+B,O5LqOzB,IAAK,K4LrOX,G5LqOmB,KAAM,K4LrOM,C5LqO/B,C;O;KAFID,C;0FAGA,yB; MAAA,+B;M4LpOJ,0B;M5LoOI,wB;QAE8D,sB4LnOgC,O5LmO1B,IAAK,K4LnOX,G5LmOoB,KAAM,K4Ln OM,C5LmOhC,C;O;KAFnD,C;0EAGA,yB;MAAA,+B;M4LlOJ,0B;M5LkOI,mB;QAEiC,sB4LjOqB,OAAP,C5Li OR,S4LjOe,C5LiOrB,C;O;KAFjC,C;gFAIA,Y;MASmC,gB;K;kFACnC,yB;M4LlOJ,4B;M5L0OI,mB;QASqC,O4 LhPiD,Q5LgP5C,S4LhPY,G5LgPE,G4LhP8B,C;O;K5LuOtF,C;8EAUA,Y;MASiC,OAAL,SAAL,GAAiB,G;K;gF ACID,yB;MAAA,WASqD,wB;MATrD,mB;QASmC,OAAL,oBAAL,SAAK,CAAL,U;O;KATnC,C;kFAWA,Y;M AEqC,W;K;oFACrC,yB;MAAA,iC;M4L5QJ,4B;M5L4QI,mB;QASuC,uB4LIR+C,Q5LkRnC,S4LIRG,G5LkRW,G 4LIRqB,C5LkR/C,C;O;KATvC,C;gFAUA,yB;MAAA,6B;MAAA,mB;QASmC,qBAAU,SAAL,GAAiB,GAAtB,C; O;KATnC,C;kFAUA,yB;MAAA,WAS6D,wB;MAT7D,+B;MAAA,mB;QASqC,sBAAW,oBAAL,SAAK,CAAL,U AAN,C;O;KATrC,C;kFAWA,Y;MAMqC,OApDC,SAAL,GAAiB,G;K;oFAqDID,Y;MAMuC,OA3DD,SAAL,GA AiB,G;K;+BA6DID,Y;MAAyC,OAAQ,CA7DX,SAAL,GAAiB,GA6DD,Y;K;+BA1UrD,Y;MAAA,c;MAG4D,q D;MAH5D,a;K;6BAAA,iB;MAAA,2IAG4D,oCAH5D,G;K;wEA8UA,yB;MAAA,+B;MAAA,4B;QAU0C,sBAAM ,SAAN,C;O;KAV1C,C;0EAWA,yB;MAAA,0B;MAAA,+B;MAAA,4B;QAW2C,sBAAW,OAAL,SAAK,CAAX,C; O;KAX3C,C;0EAYA,yB;MAAA,0B;MAAA,+B;MAAA,4B;QAWyC,sBAAW,OAAL,SAAK,CAAX,C;O;KAXzC ,C;0EAYA,yB;MAAA,0B;MAAA,+B;MAAA,4B;QAW0C,sBAAW,OAAL,SAAK,SAAX,C;O;KAX1C,C;Igc9W A,6B;MACqB,sB;K;uCAKjB,iB;MAM6C,OhCyUP,UgCzUO,aAAQ,KAAR,ChCyUP,C;K;uCGvUtC,wB;MAOI, aAAQ,KAAR,IAAiB,KhCiOc,K;K;kFgC7NL,Y;MAAQ,OAAA,YAAQ,O;K;oCAE9C,Y;MAC8E,+BAAS,YAAT, C;K;IAGxD,oC;MAAiC,wB;MAAhC,oB;MACnB,eAAoB,C;K;4CACpB,Y;MAAyB,sBAAQ,YAAM,O;K;8CACv C,Y;MAAyD,Q;MAA9B,IAAI,eAAQ,YAAM,OAAIB,C;QAAA,OhCmTO,UgCnTiB,aAAM,mBAAN,EAAM,2B AAN,OhCmTjB,C;;QgCnT+C,MAAM,2BAAuB,YAAM,WAA7B,C;K;;0CAG3F,mB;MAIS,Q;MAAL,IAAI,eAA C,0EAAD,QAAJ,C;QAAiC,OAAO,K;MAExC,OAAe,WAAR,YAAQ,EAAS,OhC2MO,KgC3MhB,C;K;+CAGnB, oB;MACY,Q;MAA2B,gBAA3B,gE;MAA2B,c;;Qd0nDvB,U;QADhB,IAAI,wCAAsB,mBAA1B,C;UAAqC,aAAO, I;UAAP,e;SACrB,6B;QAAhB,OAAGB,gBAAhB,C;UAAGB,2B;Uc1nD6B,2Bd0nDR,Oc1nDQ,Q;UAAA,W;YAAu B,oBAAR,YAAQ,Ed0nD/B,OIBn7CF,KgCvMiC,C;Wd0nD9C,IAAI,OAAJ,C;YAAyB,aAAO,K;YAAP,e;;QAC/C, aAAO,I;;Mc3nDH,iB;K;mCAGJ,Y;MAAkC,OAAA,IAAK,QAAQ,OAAb,KAAqB,C;K;;IA/CvD,sC;MAAA,oD; MACgC,uBAAK,cAAU,IAAV,CAAL,C;MADhC,Y;K;;oCAPJ,Y;MAAA,OAKqB,qDALrB,M;K;oCAAA,Y;MA AA,c;MAKqB,wD;MALrB,a;K;kCAAA,iB;MAAA,2IAKqB,0CALrB,G;K;gFAyDA,yB;MAAA,yC;MAWsC,yC; QAAA,wB;UAAW,OAAA,aAAK,KAAL,ChCsLV,K;S;O;MgCjMvC,6B;QAWI,OAAO,oBAAW,+BAAU,IAAV, GAAgB,uBAAhB,CAAX,C;O;KAXX,C;kFACa,oB;MAGqE,e;K;I/BtE7C,oB;MAEpB,4B;MAFuD,gB;K;IAEvD,0 B;MAAA,8B;MACI,iBAGmC,SAAK,CAAL,C;MAEnC,iBAGmC,SAAK,EAAL,C;MAEnC,kBAGmC,C;MAEnC,

iBAGkC,E;K;;;IA nBtC,sC;MAAA,qC;QAAA,oB;OAAA,8B;K;oGAsBA,yB;MD2QA,6B;MC3PA,8C;MAhBA,wB ;QAM0D,OAiBQ,YAAY,IAAK,KAAjB,EAA6B,CD6P5D,cC9QsC,KD8Q5B,KAAL,GAAiB,GAAtB,CC7P4D,M AA7B,C;O;KAvBIE,C;oGAQA,yB;MCoQA,6B;MD5PA,8C;MARA,wB;QAM2D,OASO,YAAY,IAAK,KAAjB,E AA6B,CC8P5D,cDvQuC,KCuQ7B,KAAL,GAAiB,KAAtB,CD9P4D,MAA7B,C;O;KAFIE,C;gGAQA,yB;MAAA,8 C;MAAA,wB;QAOKE,mBAAY,IAAK,KAAjB,EAAuB,KAAM,KAA7B,C;O;KAPIE,C;oGASA,yB;MAgRA,kBAS6D,sB;MAT7D,+B;MgBjRA,gD;MhBCA,wB;QAM0D,OgBAS,aAAkB,ChBmRhD,eAAW,oBAAL,SAAK,CAA L,iBAAN,CgBnRgD,MAAIB,EhBAgB,KgBAc,KAA9B,C;O;KhBNnE,C;0FAQA,yB;MD0OA,6B;MC1OA,wB;Q AEsD,OAMD,cAAK,IAAK,KAAK,GAAW,CD2O5C,cCjP6B,KDiPnB,KAAL,GAAiB,GAAtB,CC3O4C,MAAX,I Aaf,C;O;KARrD,C;0FAGA,yB;MCwOA,6B;MDxOA,wB;QAEuD,OAGF,cAAK,IAAK,KAAK,GAAW,CC4O5C, cD/O8B,KC+OpB,KAAL,GAAiB,KAAtB,CD5O4C,MAAX,IAaf,C;O;KALrD,C;0FAGA,yB;MAAA,6B;MAAA, wB;QAEqD,qBAAK,IAAK,KAAK,GAAK,KAAM,KAAX,IAaf,C;O;KAFrD,C;0FAGA,yB;MA+PA,kBAS6D,sB; MAT7D,+B;MA/PA,wB;QAEuD,OgBAA,eAAW,ChBsQ7B,eAAW,oBAAL,SAAK,CAAL,iBAAN,CgBtQ6B,MA AK,KhBAL,KgBAO,KAAX,CAAhB,C;O;KhBFvD,C;4FAIA,yB;MD6NA,6B;MC7NA,wB;QAEuD,OAMD,cAAK ,IAAK,KAAK,GAAY,CD8N9C,cCpO+B,KDoOrB,KAAL,GAAiB,GAAtB,CC9N8C,MAAZ,IAaf,C;O;KARtD,C; 4FAGA,yB;MC2NA,6B;MD3NA,wB;QAEwD,OAGF,cAAK,IAAK,KAAK,GAAY,CC+N9C,cDIogC,KCkOtB,K AAL,GAAiB,KAAtB,CD/N8C,MAAZ,IAaf,C;O;KALtD,C;4FAGA,yB;MAAA,6B;MAAA,wB;QAEsD,qBAAK,I AAK,KAAK,GAAM,KAAM,KAAX,IAaf,C;O;KAFtD,C;4FAGA,yB;MAkPA,kBAS6D,sB;MAT7D,+B;MAIPA, wB;QAEwD,OgBAA,eAAW,ChByP9B,eAAW,oBAAL,SAAK,CAAL,iBAAN,CgBzP8B,MAAK,UhBAK,KgBAO ,KAAZ,CAAhB,C;O;KhBFxD,C;4FAIA,yB;MDgNA,6B;MChNA,wB;QAEuD,OAMD,cAAe,YAAV,IAAK,KAA K,EAAY,CDiN9C,cCvN+B,KDuNrB,KAAL,GAAiB,GAAtB,CCjN8C,MAAZ,CAaf,C;O;KARtD,C;4FAGA,yB; MC8MA,6B;MD9MA,wB;QAEwD,OAGF,cAAe,YAAV,IAAK,KAAK,EAAY,CCKn9C,cDrNgC,KCqNtB,KAAL ,GAAiB,KAAtB,CDiN8C,MAAZ,CAaf,C;O;KALtD,C;4FAGA,yB;MAAA,6B;MAAA,wB;QAEsD,qBAAE,YAA V,IAAK,KAAK,EAAM,KAAM,KAAX,CAaf,C;O;KAFtD,C;4FAGA,yB;MAqOA,kBAS6D,sB;MAT7D,+B;MAr OA,wB;QAEwD,OgBAA,eAAW,ChB4O9B,eAAW,oBAAL,SAAK,CAAL,iBAAN,CgB5O8B,MAAK,UhBAK,Kg BAO,KAAZ,CAAhB,C;O;KhBFxD,C;wFAIA,yB;MDmMA,6B;MC7LA,4C;MANA,wB;QAEqD,OAMD,WAAW, IAAX,EDoMjB,cC1M2B,KD0MjB,KAAL,GAAiB,GAAtB,CCpMiB,C;O;KARpD,C;wFAGA,yB;MCiMA,6B;MD 9LA,4C;MAHA,wB;QAEsD,OAGF,WAAW,IAAX,ECqMjB,cDxM4B,KCwMIB,KAAL,GAAiB,KAAtB,CDrMiB ,C;O;KALpD,C;wFAGA,yB;MAAA,4C;MAAA,wB;QAEoD,kBAAW,IAAX,EAaiB,KAAjB,C;O;KAFpD,C;wFA GA,yB;MAwNA,kBAS6D,sB;MAT7D,+B;MgBxNA,8C;MhBAA,wB;QAEsD,OgBAA,YhB+NjB,eAAW,oBAAL, SAAK,CAAL,iBAAN,CgB/NiB,EhBAmB,KgBAnB,C;O;KhBFtD,C;wFAIA,yB;MDsLA,6B;MCxKA,kD;MAAd, wB;QAMqD,OAcD,cAAc,IAAd,ED2KjB,cCzL2B,KDyLjB,KAAL,GAAiB,GAAtB,CC3KiB,C;O;KApBpD,C;wF AOA,yB;MCgLA,6B;MDzKA,kD;MAPA,wB;QAMsD,OAOF,cAAc,IAAd,EC4KjB,cDnL4B,KCmLiB,KAAL,GA AaiB,KAAtB,CD5KiB,C;O;KAbpD,C;wFAOA,yB;MAAA,kD;MAAA,wB;QAMoD,qBAAc,IAAd,EAAoB,KAApB ,C;O;KANpD,C;wFAOA,yB;MA+LA,kBAS6D,sB;MAT7D,+B;MgB/LA,oD;MhBAA,wB;QAMsD,OgBAA,ehBk MjB,eAAW,oBAAL,SAAK,CAAL,iBAAN,CgBIMiB,EhBAmB,KgBAnB,C;O;KhBNtD,C;KGAQA,yB;MDyJA,6 B;MC7LA,4C;MAoCA,wB;QAMiD,OAxCg,WAAW,IAAX,EDoMjB,cC5J4B,KD4JIB,KAAL,GAAiB,GAAtB,C CpMiB,C;O;KAKpD,C;kGAOA,yB;MCmJA,6B;MD9LA,4C;MA2CA,wB;QAMkD,OA/CE,WAAW,IAAX,ECq MjB,cDtJ6B,KCsJnB,KAAL,GAAiB,KAAtB,CDrMiB,C;O;KAyCpD,C;kGAOA,yB;MAIDA,4C;MAkDA,wB;QA MgD,OAtDI,WAAW,IAAX,EAsDA,KAtDA,C;O;KAGpD,C;kGAOA,yB;MAkKA,kBAS6D,sB;MAT7D,+B;Mg BxNA,8C;MhBsDA,wB;QAMkD,OgB1DI,YhB+NjB,eAAW,oBAAL,SAAK,CAAL,iBAAN,CgB/NiB,EhB0DoB, KgB1DpB,C;O;KhBoDtD,C;wFAQA,yB;MD4HA,6B;MCxKA,kD;MDuOJ,0B;MAAA,+B;MC3LI,wB;QAQ6C,O D8LR,eAAW,OC5OI,cAAc,IAAd,ED2KjB,cC7HmB,KD6HT,KAAL,GAAiB,GAAtB,CC3KiB,CAkLf,KD0DW,C AAX,C;O;KCTMrC,C;wFASA,yB;MCoHA,6B;MDzKA,kD;MCwOJ,4B;MAAA,iC;MDnLI,wB;QAQ+C,OCsLR,g BAAY,QD7OC,cAAc,IAAd,EC4KjB,cDrHqB,KCqHX,KAAL,GAAiB,KAAtB,CD5KiB,CA4Lb,KCiDY,CAAZ,C; O;KD9LvC,C;wFASA,yB;MA9DA,kD;MA8DA,wB;QAQ2C,OAhES,cAAc,IAAd,EAGEL,KAhEK,C;O;KAwDpD ,C;wFASA,yB;MA+HA,kBAS6D,sB;MAT7D,+B;MgB/LA,oD;MhBgEA,wB;QAQ6C,OgBIES,ehBkMjB,eAAW,o BAAL,SAAK,CAAL,iBAAN,CgBIMiB,EhBkEU,KgBIEV,C;O;KhB0DtD,C;wEAUA,yB;MAAA,6B;MAAA,mB; QAMyC,qBAAK,SAAK,QAAY,C;O;KANzC,C;wEAQA,yB;MAAA,6B;MAAA,mB;QAMyC,qBAAK,SAAK,QA

AV,C;O;KANzC,C;gGAQA,yB;MAAA,8C;MAAA,wB;QAE6D,0BAAU,IAAV,EAAGB,KAAhB,C;O;KAF7D,C;  
wFAIA,yB;MAAA,6B;MAAA,2B;QAOmD,qBAAK,aAAS,QAAAd,C;O;KAPnD,C;wFASA,yB;MAAA,6B;MAAA,  
2B;QAOmD,qBAAK,cAAU,QAAf,C;O;KAPnD,C;wFASA,yB;MAAA,6B;MAAA,wB;QAEiD,qBAAK,IAAK,KA  
AL,GAAc,KAAM,KAAzB,C;O;KAFjD,C;sFAGA,yB;MAAA,6B;MAAA,wB;QAEgD,qBAAK,IAAK,KAAL,GA  
Aa,KAAM,KAAxB,C;O;KAFhD,C;wFAGA,yB;MAAA,6B;MAAA,wB;QAEiD,qBAAK,IAAK,KAAL,GAAc,KA  
AM,KAAzB,C;O;KAFjD,C;wEAGA,yB;MAAA,6B;MAAA,mB;QAEgC,qBAAU,CAAL,SAAL,C;O;KAFhC,C;8  
EAIA,yB;MAAA,0B;MAAA,mB;QAUmC,OAAK,OAAL,SAAK,C;O;KAVxC,C;gFAWA,yB;MAAA,4B;MAAA,  
mB;QAUqC,OAAK,QAAL,SAAK,C;O;KAV1C,C;4EAWA,Y;MASiC,gB;K;8EACjC,yB;MAAA,kBASqD,sB;MA  
TrD,mB;QASmC,OAAK,oBAAL,SAAK,CAAL,iB;O;KATnC,C;gFAWA,yB;MDwDJ,0B;MAAA,+B;MCxDI,mB;  
QASqC,OD0DA,eAAW,OC1DX,SD0DW,CAAX,C;O;KCnErC,C;kFAUA,yB;MC+CJ,4B;MAAA,iC;MD/CI,mB;  
QASuC,OCiDA,gBAAY,QDjDZ,SCiDY,CAAZ,C;O;KD1DvC,C;8EAUA,Y;MAEmC,W;K;gFACnC,yB;MAAA,k  
BAS6D,sB;MAT7D,+B;MAAA,mB;QASqC,sBAAW,oBAAL,SAAK,CAAL,iBAAN,C;O;KATrC,C;gFAWA,yB;  
MASA,gD;MATA,mB;QAQqC,OAQe,aAAa,SAAb,C;O;KAFvC,C;kFASA,yB;MAAA,gD;MAAA,mB;QAMuC,o  
BAAa,SAAb,C;O;KANvC,C;8BAQA,Y;MAAYC,OArDD,oBAAL,SAAK,CAAL,iBAQDe,W;K;;;;8BAhWtD,Y;M  
AAA,c;MAG2D,qD;MAH3D,a;K;4BAAA,iB;MAAA,2IAG2D,oCAH3D,G;K;sEAoWA,yB;MAAA,6B;MAAA,4B  
;QAWwC,qBAAU,SAAV,C;O;KAXxC,C;wEAYA,yB;MAAA,6B;MAAA,4B;QAWyC,qBAAU,SAAV,C;O;KAX  
zC,C;wEAYA,yB;MAAA,6B;MAAA,4B;QAUuC,qBAAK,SAAL,C;O;KAVvC,C;wEAWA,yB;MAAA,6B;MAAA  
,4B;QAWwC,qBAAK,SAAK,QAAY,C;O;KAXxC,C;uEAaA,yB;MAAA,gD;MAAA,4B;QASyC,oBAAKB,SAAlB,  
C;O;KATzC,C;wEAUA,yB;MAAA,gD;MAAA,4B;QAS0C,oBAAa,SAAb,C;O;KAT1C,C;Igc3ZA,4B;MACqB,sB  
;K;sCAKjB,iB;MAM4C,OhCuXT,SgCvXS,aAAQ,KAAR,ChCuXT,C;K;sCgCrXnC,wB;MAOI,aAAQ,KAAR,IAA  
iB,KhCyQY,K;K;iFgCrQH,Y;MAAQ,OAAA,YAAQ,O;K;mCAE9C,Y;MAC6E,8BAAS,YAAT,C;K;IAGvD,mC;  
MAAgC,uB;MAA/B,oB;MACnB,eAAoB,C;K;2CACpB,Y;MAAYB,sBAAQ,YAAM,O;K;4CACvC,Y;MAAwD,Q;  
MAA9B,IAAI,eAAQ,YAAM,OAAIB,C;QAAA,OhCiWK,SgCjWmB,aAAM,mBAAN,EAAM,2BAAN,OhCiWnB,  
C;;QgCjWgD,MAAM,2BAAuB,YAAM,WAA7B,C;K;;yCAGzF,mB;MAIS,Q;MAAL,IAAI,eAAC,0EAAD,OAAJ,  
C;QAAgC,OAAO,K;MAEvC,OAAe,WAAR,YAAQ,EAAS,OhCmPK,KgCnPd,C;K;8CAGnB,oB;MACY,Q;MAA  
2B,gBAA3B,gE;MAA2B,c;;Qf0nDvB,U;QADhB,IAAI,wCAAsB,mBAA1B,C;UAAqC,aAAO,I;UAAP,e;SACrB,6  
B;QAAhB,OAGB,gBAAhB,C;UAGB,2B;Ue1nD6B,2Bf0nDR,Oe1nDQ,O;UAAA,W;YAAAsB,oBAAR,YAAQ,E  
f0nD9B,OjB34CJ,KgC/OkC,C;Wf0nD7C,IAAI,OAAJ,C;YAAyB,aAAO,K;YAAP,e;;QAC/C,aAAO,I;;Me3nDH,i  
B;K;kCAGJ,Y;MAAkC,OAAA,IAAK,QAAQ,OAAb,KAAqB,C;K;;IA/CvD,qC;MAAA,mD;MACgC,sBAAK,eAA  
S,IAAT,CAAL,C;MADhC,Y;K;;;mCAPJ,Y;MAAA,OAKqB,oDALrB,M;K;mCAA,Y;MAAA,c;MAKqB,wD;M  
ALrB,a;K;iCAAA,iB;MAAA,2IAKqB,0CALrB,G;K;8EAyDA,yB;MAAA,uC;MAWoC,wC;QAAA,wB;UAAW,O  
AAA,aAAK,KAAL,ChC8NV,K;S;O;MgCzOrC,6B;QAWI,OAAO,mBAAU,gCAAS,IAAT,GAAe,sBAAf,CAAV,  
C;O;KAXX,C;gFACa,oB;MAGkE,e;K;I4LnE5C,wC;MASBIB,iC;MATBsD,2BAAgB,KAAhB,EAAuB,YAAvB,EA  
AqC,CAArC,C;K;kFAC7B,Y;MAAQ,iB;K;yFACD,Y;MAAQ,gB;K;2CAExC,iB;MAA8C,W5NwCoB,Y4NxCPB,  
U5NwCqC,KAAjB,E4NxCX,K5NwCwC,KAA7B,C4NxCPB,K;MAAA,S;QAAkB,O5NwCE,Y4NxCF,K5NwCmB  
,KAAjB,E4NxCO,S5NwCsB,KAA7B,C4NxCF,K;OAAIB,W;K;kCAE9C,Y;MAKkC,O5NiCgC,Y4NjChC,U5NiCi  
D,KAAjB,E4NjCxB,S5NiCqD,KAA7B,C4NjChC,I;K;iCAEiC,iB;MAEY,UAAwB,M;MADhC,2CAAuB,kBAAa,  
KAAM,UAAAnB,KACf,2CAAS,KAAM,MAAf,cAAwB,6CAAQ,KAAM,KAAAd,QAAxB,CADe,CAAvB,C;K;mCA  
GJ,Y;MACI,OAAI,cAAJ,GAAe,EAAf,GAAwB,MAAK,U5NyQA,K4NzQL,QAAqB,S5NyQhB,K4NzQL,I;K;mC  
AE5B,Y;MAAkC,OAAE,UAAF,qBAAU,S;K;IAE5C,+B;MAAA,mC;MACI,aAC8B,cAAU,4BAAK,UAAf,EAA0  
B,4BAAK,UAA/B,C;K;;IAFIC,2C;MAAA,0C;QAAA,yB;OAAA,mC;K;;IA YJ,oD;MA4CI,uC;MATCI,IAAI,SA  
AQ,CAAZ,C;QAAuB,MAAA,gCAAYB,wBAAzB,C;MACpC,IAAI,SAAQ,WAAZ,C;QAA2B,MAAA,gCAAYB,wEA  
AzB,C;MAG5C,aAGyB,K;MAEzB,YAGwB,4BAA0B,KAA1B,EAAiC,YAAjC,EAA+C,IAA/C,C;MAExB,YAGu  
B,I;K;yCAEvB,Y;MAAgD,mCAAwB,UAAxB,EAA+B,SAA/B,EAAqC,SAArC,C;K;wCAEHd,Y;MAMqC,OAAI,  
YAAO,CAAX,G5NvB6B,Y4NuBf,U5NvBgC,KAAjB,E4NuBP,S5NvBoC,KAA7B,C4NuBf,IAAd,G5NvB6B,Y4N  
uBG,U5NvBc,KAAjB,E4NuBW,S5NvBkB,KAA7B,C4NuBG,I;K;uCAErE,iB;MAEY,UAAwB,M;MADhC,iDAA  
6B,kBAAa,KAAM,UAAAnB,KACrB,2CAAS,KAAM,MAAf,cAAwB,6CAAQ,KAAM,KAAAd,QAAxB,KAA8C,cA  
AQ,KAAM,KADvC,CAA7B,C;K;yCAGJ,Y;MACI,OAAI,cAAJ,GAAe,EAAf,GAAwB,OAAM,MAAK,U5NiNN,



K4NjNC,QAAqB,S5NiNtB,K4NjNC,IAAN,SAAGD,SAAhD,I;K;yCAE5B,Y;MAAkC,OAAI,YAAO,CAAX,GAAgB,UAAF,qBAAU,SAAV,cAAqB,SAAnC,GAAgD,UAAF,2BAAgB,SAAhB,eAA4B,CAAC,SAAD,IAA5B,C;K;IAEHf,qC;MAAA,yC;K;kEACI,sC;MAQ2F,2BAAgB,UAAhB,EAA4B,QAA5B,EAA5C,IAATC,C;K;;;IAT/F,iD;MAAA,gD;QAAA,+B;OAAA,yC;K;;IAoBiC,oD;MAAuC,uB;MACx,E,sBAA2B,I;MAC3B,iBAAmC,OAAO,CAA1C,G5NxDe,Y4NwDrB,K5NxDsC,KAAjB,E4NwDZ,I5NxDyC,KAA7B,C4NwDrB,KAA7C,G5NxDe,Y4NwDF,K5NxDb,KAAjB,E4NwDO,I5NxDsB,KAA7B,C4NwDF,K;MACHE,c5N2RmC,S4N3RhB,I5N2RgB,C;M4N1Rn C,cAAuB,cAAJ,GAAa,KAAb,GAAwB,mB;K;gDAE3C,Y;MAAkC,qB;K;iDAEIC,Y;MACI,YAAY,W;MACZ,IAAI,6BAAS,mBAAT,QAAJ,C;QACI,IAAI,CAAC,cAAL,C;UAAc,MAAa,6B;QAC3B,iBAAU,K;;QAEV,c5NID6C,S4NkD7C,W5NIDuD,KAAK,G4NkDpD,W5NID+D,KAAX,IAAf,C;;M4NoDjD,OAAO,K;K;;IC3Hf,yB;K;mCAII,Y;MAA4B,uB;K;;IAMhC,OB;K;oCAII,Y;MAA4B,wB;K;;IAMhC,wB;K;kCAII,Y;MAA4B,sB;K;;IAMhC,yB;K;mCAII,Y;MAA4B,uB;K;;I7M5BP,qB;MAErB,6B;MAFwD,gB;K;IAExD,2B;MAAA,+B;MACI,iBAGoC,a;MAEpC,iBAGoC,c;MAEpC,kBAGmC,C;MAEnC,iBAGkC,E;K;;;IANtC,uC;MAAA,sC;QAAA,qB;OAAA,+B;K;sGAsBA,yB;MjBqRA,WAS6D,wB;MAT7D,+B;MiB7PA,gD;MAxBA,wB;QAM0D,OAYBS,aAAa,IAAK,KAAIB,EAA8B,CjB+P5D,eAAW,oBiBxRyB,KjBwR9B,KAAK,CAAL,UAAN,CiB/P4D,MAA9B,C;O;KA/BnE,C;sGAQA,yB;Mf8QA,aAS6D,OB;MAT7D,+B;Me9PA,gD;MAhBA,wB;QAM2D,OaiBQ,aAAa,IAAK,KAAIB,EAA8B,CfgQ5D,eAAW,oBejR0B,KfiR/B,KAAK,CAAL,YAAN,CehQ4D,MAA9B,C;O;KAvBnE,C;sGAQA,yB;MhByRA,kBAS6D,sB;MAT7D,+B;MgBjRA,gD;MARA,wB;QAMyD,OASU,aAAa,IAAK,KAAIB,EAA8B,ChBmR5D,eAAW,oBgB5RwB,KhB4R7B,KAAK,CAAL,iBAAN,CgBnR4D,MAA9B,C;O;KafnE,C;kGAQA,yB;MAAA,gD;MAAA,wB;QAOmE,oBAAa,IAAK,KAAIB,EAAwB,KAAM,KAA9B,C;O;KAPnE,C;4FASA,yB;MjBoPA,WAS6D,wB;MAT7D,+B;MiBpPA,wB;QAEuD,OASA,eAAM,IAAK,KAAK,KAAW,CjBkP7C,eAAW,oBiB3PiB,KjB2PtB,KAAK,CAAL,UAAN,CiBIP6C,MAAX,CAAhB,C;O;KAXvD,C;4FAGA,yB;MfkPA,aAS6D,OB;MAT7D,+B;MeIPa,wB;QAEwD,OAMD,eAAM,IAAK,KAAK,KAAW,CfmP7C,eAAW,oBezPkB,KfyPvB,KAAK,CAAL,YAAN,CenP6C,MAAX,CAAhB,C;O;KARvD,C;4FAGA,yB;MhBkQA,kBAS6D,sB;MAT7D,+B;MgBlQA,wB;QAEsD,OAGC,eAAM,IAAK,KAAK,KAAW,ChBsQ7C,eAAW,oBgBzQgB,KhByQrB,KAAK,CAAL,iBAAN,CgBtQ6C,MAAX,CAAhB,C;O;KALvD,C;4FAGA,yB;MAAA,+B;MAAA,wB;QAEuD,sBAAM,IAAK,KAAK,KAAK,KAAM,KAAK,CAAhB,C;O;KAFvD,C;8FAIA,yB;MjBuOA,WAS6D,wB;MAT7D,+B;MiBvOA,wB;QAEwD,OASA,eAAM,IAAK,KAAK,UAAy,CjBqO/C,eAAW,oBiB9OmB,KjB8OxB,KAAK,CAAL,UAAN,CiBrO+C,MAAZ,CAAhB,C;O;KAXxD,C;8FAGA,yB;MfqOA,aAS6D,OB;MAT7D,+B;MerOA,wB;QAEyD,OAMD,eAAM,IAAK,KAAK,UAAy,CfsO/C,eAAW,oBe5OoB,Kf4OzB,KAAK,CAAL,YAAN,CetO+C,MAAZ,CAAhB,C;O;KARxD,C;8FAGA,yB;MhBqPA,kBAS6D,sB;MAT7D,+B;MgBrPA,wB;QAEuD,OAGC,eAAM,IAAK,KAAK,UAAy,ChByP/C,eAAW,oBgB5PkB,KhB4PvB,KAAK,CAAL,iBAAN,CgBzP+C,MAAZ,CAAhB,C;O;KALxD,C;8FAGA,yB;MAAA,+B;MAAA,wB;QAEwD,sBAAM,IAAK,KAAK,UAAm,KAAM,KAAZ,CAAhB,C;O;KAFxD,C;8FAIA,yB;MjB0NA,WAS6D,wB;MAT7D,+B;MiB1NA,wB;QAEwD,OASA,eAAM,IAAK,KAAK,UAAy,CjBwN/C,eAAW,oBiBjOmB,KjBiOxB,KAAK,CAAL,UAAN,CiBxN+C,MAAZ,CAAhB,C;O;KAXxD,C;8FAGA,yB;MfWNA,aAS6D,OB;MAT7D,+B;MexNA,wB;QAEyD,OAMD,eAAM,IAAK,KAAK,UAAy,CfyN/C,eAAW,oBe/NoB,Kf+NzB,KAAK,CAAL,YAAN,CezN+C,MAAZ,CAAhB,C;O;KARxD,C;8FAGA,yB;MhBwOA,kBAS6D,sB;MAT7D,+B;MgBxOA,wB;QAEuD,OAGC,eAAM,IAAK,KAAK,UAAy,ChB4O/C,eAAW,oBgB/OkB,KhB+OvB,KAAK,CAAL,iBAAN,CgB5O+C,MAAZ,CAAhB,C;O;KALxD,C;8FAGA,yB;MAAA,+B;MAAA,wB;QAEwD,sBAAM,IAAK,KAAK,UAAm,KAAM,KAAZ,CAAhB,C;O;KAFxD,C;0FAIA,yB;MjB6MA,WAS6D,wB;MAT7D,+B;MiBpMA,8C;MATA,wB;QAEsD,OASA,YAAY,IAAZ,EjB2MjB,eAAW,oBiBpNe,KjBoNpB,KAAK,CAAL,UAAN,CiB3MiB,C;O;KAXtD,C;0FAGA,yB;Mf2MA,aAS6D,OB;MAT7D,+B;MerMA,8C;MANA,wB;QAEuD,OAMD,YAAY,IAAZ,Ef4MjB,eAAW,oBelNgB,KfkNrB,KAAK,CAAL,YAAN,Ce5MiB,C;O;KARtD,C;0FAGA,yB;MhB2NA,kBAS6D,sB;MAT7D,+B;MgBxNA,8C;MAHA,wB;QAEqD,OAGC,YAAY,IAAZ,EhB+NjB,eAAW,oBgBlOc,KhBkOnB,KAAK,CAAL,iBAAN,CgB/NiB,C;O;KALtD,C;0FAGA,yB;MAAA,8C;MAAA,wB;QAEsD,mBAAY,IAAZ,EAAkB,KAAIB,C;O;KAFtD,C;0FAIA,yB;MjBgMA,WAS6D,wB;MAT7D,+B;MiB3KA,oD;MARBA,wB;QAMsD,OaqBA,eAAe,IAAf,EjB8KjB,eAAW,oBiBnMe,KjBmMpB,KAAK,CAAL,UAAN,CiB9KiB,C;O;KA3BtD,C;0FAOA,yB;Mf0LA,aAS6D,OB;MAT7D,+B;Me5KA,oD;MAdA,wB;QAMuD,OAcD,eAAe,IAAf,Ef+KjB,eAAW,oBe7LgB,Kf6LrB,KAAK,CAAL,YAAN,Ce/KiB,C;O;KApBtD,C;0FAOA,yB;MhBsMA,kBAS6D,sB;MAT7D,+B;MgB/LA,oD;MAPA,wB;QAMqD,OA

OC,eAAe,IAAf,EhBkMjB,eAAW,oBgBzMc,KhByMnB,KAAK,CAAL,iBAAN,CgBIMiB,C;O;KAbtD,C;0FAOA,  
yB;MAAA,oD;MAAA,wB;QAMsD,sBA Ae,IAAf,EAAqB,KAArB,C;O;KANtD,C;oGAQA,yB;MjBmKA,WAS6D,  
wB;MAT7D,+B;MiBpMA,8C;MAiCA,wB;QAMkD,OArCI,YAAY,IAAZ,EjB2MjB,eAAW,oBiBtKgB,KjBsKrB,  
KAAK,CAAL,UAAN,CiB3MiB,C;O;KA+BtD,C;oGAOA,yB;Mf6JA,aAS6D,0B;MAT7D,+B;MerMA,8C;MAwC  
A,wB;QAMmD,OA5CG,YAAY,IAAZ,Ef4MjB,eAAW,oBehKiB,KfgKtB,KAAK,CAAL,YAAN,Ce5MiB,C;O;KA  
sCtD,C;oGAOA,yB;MhByKA,kBAS6D,sB;MAT7D,+B;MgBxNA,8C;MA+CA,wB;QAMiD,OAnDK,YAAY,IAA  
Z,EhB+NjB,eAAW,oBgB5Ke,KhB4KpB,KAAK,CAAL,iBAAN,CgB/NiB,C;O;KA6CtD,C;oGAOA,yB;MAtdA,8  
C;MA sDA,wB;QAMkD,OA1DI,YAAY,IAAZ,EA0DA,KA1DA,C;O;KAoDtD,C;0FAQA,yB;MjBsIA,WAS6D,wB  
;MAT7D,+B;MiB3KA,oD;MjB4OJ,0B;MAAA,+B;MiBvMI,wB;QAQ6C,OjB0MP,eAAW,OiBjPK,eAAe,IAAf,Ej  
B8KjB,eAAW,oBiBvIM,KjBuIX,KAAK,CAAL,UAAN,CiB9KiB,CA4KjB,KjBqEY,SAAX,C;O;KiBINtC,C;0FAS  
A,yB;Mf8HA,aAS6D,0B;MAT7D,+B;Me5KA,oD;Mf6OJ,4B;MAAA,iC;Me/LI,wB;QAQ+C,OfkMP,gBAAY,QelP  
E,eAAe,IAAf,Ef+KjB,eAAW,oBe/HQ,Kf+Hb,KAAK,CAAL,YAAN,Ce/KiB,CAsLf,Kf4Da,SAAZ,C;O;Ke1MxC,  
C;0FASA,yB;MhBwIA,kBAS6D,sB;MAT7D,+B;MgB/LA,oD;MhBkQJ,6B;MgB3MI,wB;QAQ2C,OhB8MP,cgBv  
QkB,eAAe,IAAf,EhBkMjB,eAAW,oBgBzII,KhByIT,KAAK,CAAL,iBAAN,CgBIMiB,CAGMnB,KhBuEW,QAAY  
,C;O;KgBtNpC,C;0FASA,yB;MAhEA,oD;MAGEA,wB;QAQ6C,OAIES,eAAe,IAAf,EAkEL,KAIEK,C;O;KA0DtD  
,C;0EAUA,yB;MAAA,+B;MAAA,mB;QAM0C,sBAAM,SAAK,MAAX,C;O;KAN1C,C;0EAQA,yB;MAAA,+B;  
MAAA,mB;QAM0C,sBAAM,SAAK,MAAX,C;O;KAN1C,C;kGAQA,yB;MAAA,gD;MAAA,wB;QAE+D,2BAA  
W,IAAX,EAAiB,KAAjB,C;O;KAF/D,C;0FAIA,yB;MAAA,+B;MAAA,2B;QA0oD,sBAAM,oBAAS,QAAT,CAA  
N,C;O;KAPpD,C;0FASA,yB;MAAA,+B;MAAA,2B;QA0oD,sBAAM,6BAAU,QAAY,CAAN,C;O;KAPpD,C;0F  
ASA,yB;MAAA,+B;MAAA,wB;QAEmD,sBAAM,IAAK,KAAL,KAAC,KAAM,KAApB,CAAN,C;O;KAFnD,C;w  
FAGA,yB;MAAA,+B;MAAA,wB;QAEkD,sBAAM,IAAK,KAAL,IAAa,KAAM,KAAAnB,CAAN,C;O;KAFID,C;0F  
AGA,yB;MAAA,+B;MAAA,wB;QAEmD,sBAAM,IAAK,KAAL,KAAC,KAAM,KAApB,CAAN,C;O;KAFnD,C;0  
EAGA,yB;MAAA,+B;MAAA,mB;QAEiC,sBAAM,SAAK,MAAX,C;O;KAFjC,C;gFAIA,yB;MAAA,0B;MAAA,  
mB;QAUmC,OAAK,OAAL,SAAK,S;O;KAVx C,C;kFAWA,yB;MAAA,4B;MAAA,mB;QAUqC,OAAK,QAAL,S  
AAK,S;O;KAV1C,C;8EAWA,Y;MAUiC,OAAA,SAAK,Q;K;gFACtC,Y;MASmC,gB;K;kFAEnC,yB;MjBmEJ,0B;  
MAAA,+B;MiBnEI,mB;QASqC,OjBqEC,eAAW,OiBrEZ,SjBqEY,SAAX,C;O;KiB9EtC,C;oFAUA,yB;Mf0DJ,4B;  
MAAA,iC;Me1DI,mB;QASuC,Of4DC,gBAAY,Qe5Db,Sf4Da,SAAZ,C;O;KerExC,C;gFAUA,yB;MhBqEJ,6B;Mg  
BrEI,mB;QASmC,OhBuEC,cgBvED,ShBuEW,QAAY,C;O;KgBhFpC,C;kFAUA,Y;MAEqC,W;K;kFAErC,yB;MA  
SA,kD;MATA,mB;QAQqC,OASE,cAAc,SAAd,C;O;KAjBvC,C;oFASA,yB;MAAA,kD;MAAA,mB;QAQuC,qBA  
Ac,SAAd,C;O;KARvC,C;+BAUA,Y;MAAyC,qBAAc,SAAd,C;K;::;+BAnW7C,Y;MAAA,c;MAG4D,qD;MAH5D  
,a;K;6BAAA,iB;MAAA,2IAG4D,oCAH5D,G;K;wEAuWA,yB;MAAA,+B;MAAA,4B;QAW0C,sBAAW,oBAAL,  
SAAK,CAAX,C;O;KAX1C,C;0EAYA,yB;MAAA,+B;MAAA,4B;QAW2C,sBAAW,oBAAL,SAAK,CAAX,C;O;K  
AX3C,C;0EAYA,yB;MAAA,+B;MAAA,4B;QAWyC,sBAAW,oBAAL,SAAK,CAAX,C;O;KAXzC,C;0EAYA,yB;  
MAAA,+B;MAAA,4B;QAU0C,sBAAM,SAAN,C;O;KAV1C,C;yEAYA,yB;MAAA,kD;MAAA,4B;QAS2C,qBAA  
mB,SAAnB,C;O;KAT3C,C;0EAUA,yB;MAAA,kD;MAAA,4B;QAS4C,qBAAc,SAAd,C;O;KAT5C,C;liB9ZA,6B;  
MACqB,sB;K;uCakjB,iB;MAM6C,OjBsYP,UiBtYO,aAAQ,KAAr,CjBsYP,C;K;uCIBpYtC,wB;MAOI,aAAQ,K  
AAR,IAAiB,KjBoRc,K;K;kFiBhRL,Y;MAAQ,OAAA,YAAQ,O;K;oCAE9C,Y;MAC8E,+BAAS,YAAT,C;K;IAGx  
D,oC;MAAiC,wB;MAAhC,oB;MACnB,eAAoB,C;K;4CACpB,Y;MAAyB,sBAAQ,YAAM,O;K;8CACvC,Y;MAA  
yD,Q;MAA9B,IAAI,eAAQ,YAAM,OAAIB,C;QAAA,OjBgXO,UiBhXiB,aAAM,mBAAN,EAAM,2BAAN,OjBgX  
jB,C;;QIBhX+C,MAAM,2BAAuB,YAAM,WAA7B,C;K;;0CAG3F,mB;MAIS,Q;MAAL,IAAI,eAAC,0EAAD,QA  
AJ,C;QAAiC,OAAO,K;MAExC,OAAe,WAAR,YAAQ,EAAS,OjB8PO,KiB9PhB,C;K;+CAGnB,oB;MACY,Q;MA  
A2B,gBAA3B,gE;MAA2B,c;;QhB0nDvB,U;QADhB,IAAI,wCAAsB,mBAA1B,C;UAAqC,aAAO,I;UAAP,e;SACr  
B,6B;QAAhB,OAAGB,gBAAhB,C;UAAgB,2B;UgB1nD6B,2BhB0nDR,OgB1nDQ,Q;UAAA,W;YAAuB,oBAAR,  
YAAQ,EhB0nD/B,ODh4CF,KiB1PiC,C;WhB0nD9C,IAAI,OAAJ,C;YAAyB,aAAO,K;YAAP,e;;QAC/C,aAAO,I;;  
MgB3nDH,iB;K;mCAGJ,Y;MAAkC,OAAA,IAAK,QAAQ,OAAb,KAAqB,C;K;;IA/CvD,sC;MAAA,oD;MACgC,  
uBAAK,iBAAU,IAAV,CAAL,C;MADhC,Y;K;;;oCAPJ,Y;MAAA,OAKqB,qDALrB,M;K;oCAA,Y;MAAA,c;M  
AKqB,wD;MALrB,a;K;kCAA,iB;MAAA,2IAKqB,0CALrB,G;K;gFAyDA,yB;MAAA,yC;MAWsC,yC;QAAA,w  
B;UAAW,OAAA,aAAK,KAAL,CjByOV,K;S;O;MiBpPvC,6B;QAWI,OAAO,oBAAW,kBAAU,IAAV,EAAGB,uB

AAhB,CAAX,C;O;KAXX,C;kFACa,oB;MAGqE,e;K;I6LnE9C,2C;MA5BnB,kC;MAtByD,4BAAiB,KAAjB,EAAwB,YAAxB,K;K;qFAC/B,Y;MAAQ,iB;K;4FACD,Y;MAAQ,gB;K;8CAEzC,iB;MAA+C,W9MgDoB,a8MhDpB,U9MgDsC,KAAIB,E8MhDX,K9MgDyC,KAA9B,C8MhDpB,K;MAAA,S;QAAkB,O9MgDE,a8MhDF,K9MgDoB,KAAIB,E8MhDO,S9MgDuB,KAA9B,C8MhDF,K;OAAIB,W;K;qCAE/C,Y;MAKkC,O9MyCiC,a8MzCjC,U9MyCmD,KAAIB,E8MzCzB,S9MyCuD,KAA9B,C8MzCjC,I;K;oCAEIC,iB;MAEY,UAAwB,M;MADhC,8CAAwB,kBAAa,KAAM,UAAAnB,KACbB,2CAAS,KAAM,MAAf,cAAwB,6CAAQ,KAAM,KAAd,QAAxB,CADgB,CAAxB,C;K;sCAGJ,Y;MACI,OAAI,cAAJ,GAAe,EAaf,GAAwB,M9M0QK,CARckB,U8MrOjB,U9MqO4B,KAAL,KAAoB,CAVzB,U8M3NP,U9M2Na,yB8M3NH,E9M2NG,CAAN,CAUyB,MAApB,CAAN,CAqCIB,MAAK,Q8M1QV,Q9M0QK,CARckB,U8MrOoB,S9MqOT,KAAL,KAAoB,CAVzB,U8M3N6B,S9M2NvB,yB8M3NgC,E9M2NhC,CAAN,CAUyB,MAApB,CAAN,CAqCIB,MAAK,Q8M1QV,I;K;sCAE5B,Y;MAAkC,OAAE,UAAF,qBAAU,S;K;IAE5C,gC;MAAA,oC;MACI,aAC+B,iBAAW,6BAAM,UAAjB,EAA4B,6BAAM,UAAIC,C;K;;;IAFnC,4C;MAAA,2C;QAAA,0B;OAAA,oC;K;;IAYJ,qD;MA4CI,wC;MATCI,IAAI,gBAAJ,C;QAAwB,MAAA,gCAAYB,wBAAzB,C;MA CrC,IAAI,sCAAJ,C;QAA4B,MAAA,gCAAYB,yEAAzB,C;MAG7C,aAG0B,K;MAE1B,YAGyB,4BAA0B,KAA1B,EAAiC,YAAjC,EAA+C,IAA/C,C;MAEZB,YAGwB,I;K;0CAExB,Y;MAAiD,oCAAYB,UAAzB,EAAgC,SAAhC,EAA5C,SAAtC,C;K;yCAEjD,Y;MAMqC,OAAI,uBAAO,CAAX,G9Mf8B,a8MehB,U9MfkC,KAAIB,E8MeR,S9MfsC,KAA9B,C8MehB,IAAd,G9Mf8B,a8MeE,U9MfgB,KAAIB,E8MeU,S9MfoB,KAA9B,C8MeE,I;K;wCAErE,iB;MAEY,UAAwB,M;MADhC,kDAA8B,kBAAa,KAAM,UAAAnB,KACtB,2CAAS,KAAM,MAAf,cAAwB,6CAAQ,KAAM,KAAd,QAAxB,KAA8C,kBAAQ,KAAM,KAAd,CADxB,CAA9B,C;K;0CAGJ,Y;MACI,OAAI,cAAJ,GAAe,EAaf,GAAwB,OAAM,M9MkND,CARckB,U8M7KX,U9M6KsB,KAAL,KAAoB,CAVzB,U8MnKD,U9MmKO,yB8MnKG,E9MmKH,CAAN,CAUyB,MAApB,CAAN,CAqCIB,MAAK,Q8MINJ,Q9MkND,CARckB,U8M7K0B,S9M6Kf,KAAL,KAAoB,CAVzB,U8MnKmC,S9MmK7B,yB8MnKsC,E9MmKtC,CAAN,CAUyB,MAApB,CAAN,CAqCIB,MAAK,Q8MINJ,IAAN,SAaQF,cAAU,6BAAU,EAAV,CAAV,CAAyB,QAA9G,I;K;0CAE5B,Y;MAAKC,OAAI,uBAAO,CAAX,GAAgB,UAAF,qBAAU,SAAV,cAAqB,SAARb,WAAd,GAAgD,UAAF,2BAAgB,SAAhB,cAA6B,SAAD,aAA5B,W;K;IAEhF,sC;MAAA,0C;K;mEACI,sC;MAQ+F,4BAAiB,UAAjB,EAA6B,QAA7B,EA AuC,IAAvC,C;K;;;IATnG,kD;MAAA,iD;QAAA,gC;OAAA,0C;K;;IAoBkC,qD;MAA0C,wB;MAC5E,sBAA2B,I;MAC3B,iBAAmC,kBAAO,CAA1C,G9MhDmE,a8MgDtB,K9MhDwC,KAAIB,E8MgDb,I9MhD2C,KAA9B,C8MgDtB,KAA7C,G9MhDmE,a8MgDH,K9MhDqB,KAAIB,E8MgDM,I9MhDwB,KAA9B,C8MgDH,K;MACHe,c9M0SsC,U8M1SnB,I9M0SmB,C;M8MzStC,cAAuB,cAAJ,GAAa,KAAb,GAAwB,mB;K;iDAE3C,Y;MAAkC,qB;K;mDAEIC,Y;MACI,YAAY,W;MACZ,IAAI,6BAAS,mBAAT,QAAJ,C;QACI,IAAI,CAAC,cAAL,C;UAAc,MAAA,6B;QAC3B,iBAAU,K;;QAEV,c9M/C+C,U8M+C/C,W9M/C0D,KAAK,K8M+CvD,W9M/CkE,KAAX,CAAhB,C;;M8MiDnD,OAAO,K;K;;wEC7Hf,yB;MAAA,8C;MAAA,uB;QAOI,OAAO,MAAM,CAAN,EAAS,CAAT,C;O;KAPX,C;wEAUA,yB;MAAA,8C;MAAA,uB;QAOI,OAAO,MAAM,CAAN,EAAS,CAAT,C;O;KAPX,C;wEAUA,yB;MAAA,8C;MAAA,uB;QAOI,OAAO,MAAM,CAAN,EAAS,CAAT,C;O;KAPX,C;wEAUA,yB;MAAA,8C;MAAA,uB;QAOI,OAAO,MAAM,CAAN,EAAS,CAAT,C;O;KAPX,C;oFC7BA,yB;MAAA,gD;MAAA,4B;QAM6C,OAAQ,ahO+RhB,cgO/RgB,C;O;KANrD,C;oGAQA,yB;M/GwCA,iB;M+GxCA,4B;QAMqD,O/GwCM,MAAO,OjH+O7B,ciH/O6B,C;O;K+G9CIE,C;sGAQA,yB;MAAA,kE;MAAA,4B;QAMsD,OAAQ,sBhO+QzB,cgO/QyB,C;O;KAN9D,C;8FAQA,yB;MAAA,0D;MhOwWA,6B;MgOxWA,4B;QAOmD,OhO2WZ,cgO3WoB,kBhOsQtB,cgOtQsB,ChO2WpB,C;O;KgOIXvC,C;4FASA,yB;MAAA,wD;MhO+VA,6B;MgO/VA,4B;QAOkD,OhOkWX,cgOIWmB,iBhO6PrB,cgO7PqB,ChOkWnB,C;O;KgOzWvC,C;gFASA,yB;MAAA,4C;MhOsVA,6B;MgOtVA,sC;QAayD,OhOmVIB,cgOnV0B,WhO8O5B,cgO9O4B,EAAW,QAAAX,ChOmV1B,C;O;KgOhWvC,C;kFAgBA,yB;MAAA,8C;MhOsUA,6B;MgOtUA,sC;QAa0D,OhOmUnB,cgOnU2B,YhO8N7B,cgO9N6B,EAAY,QAAZ,ChOmU3B,C;O;KgOhVvC,C;oFAgBA,yB;MAAA,gD;MAAA,4B;QAM8C,OAAS,ahNgOhB,cgNhOgB,C;O;KANvD,C;oGAQA,yB;MAAA,gE;MAAA,4B;QAMsD,OAAS,qBhNwNxB,cgNxNwB,C;O;KAN/D,C;sGAQA,yB;MAAA,kE;MAAA,4B;QAMuD,OAAS,sBhNgNzB,cgNhNyB,C;O;KANhE,C;8FAQA,yB;MAAA,0D;MhN6SA,+B;MgN7SA,4B;QAOqD,OhNgTX,egNhToB,kBhNuMvB,cgNvMuB,ChNgTpB,C;O;KgNvT1C,C;4FASA,yB;MAAA,wD;MhNoSA,+B;MgNpSA,4B;QAOoD,OhNuSV,egNvSmB,iBhN8LtB,cgN9LsB,ChNuSnB,C;O;KgN9S1C,C;+EASA,yB;MAAA,4C;MhN2RA,+B;MgN3RA,sC;QAa2D,OhNwRjB,egNxR0B,WhN+K7B,cgN/K6B,EAAW,QAAAX,ChNwR1B,C;O;KgNrS1C,C;iFAeA,yB;M/GgEA,4C;MjG4MA,+B;MgN5QA,sC;QAa4D,OhNyQIB,eiGzMuB,WjGgG1B,ciGhG0B,EAAW

,C+GhEK,Q/GgEL,IAAX,CjGyMvB,C;O;KgNtR1C,C;oFAeA,yB;MjOwJI,6B;MiO1SJ,gD;MAkJA,4B;QAM8C,O  
AlJO,ahO+RhB,CDcE,cAAU,cAAL,GAAiB,GAAtB,CCdF,MgO/RgB,C;O;KA4IrD,C;oGAQA,yB;M/G1GA,iB;M  
+G0GA,4B;QAMsD,O/G1GK,MAAO,OlHuM3B,c0N1Ge,GAAY,GxG7FA,CwG6Fb,GAA6C,EAA7C,I;O;KOO  
rD,C;sGAQA,yB;MPbA,kE;MOaA,4B;QAMuD,OPbkB,sB1NkGlC,c0NIGgB,GAAW,GAAO,C;O;KOOzE,C;8FA  
QA,yB;MAAA,0D;MjO+LA,0B;MAAA,+B;MiO/LA,4B;QAOqD,OjOmMZ,eAAW,OiOnMS,kBjOgGnB,cAAL,G  
AAiB,GiOhGO,CjOmMT,CAAX,C;O;KiO1MzC,C;4FASA,yB;MAAA,wD;MjOsLA,0B;MAAA,+B;MiOtLA,4B;  
QAOoD,OjO0LX,eAAW,OiO1LQ,iBjOuFIB,cAAL,GAAiB,GiOvFM,CjO0LR,CAAX,C;O;KiOjMzC,C;gFAUA,y  
B;MAAA,4C;MjOqJA,+B;MiOrJA,sC;QAa2D,OjOkJjB,eiOlJ0B,WjOmD7B,ciOnD6B,EAAW,QAAX,CjOkJ1B,C  
;O;KiO/J1C,C;kFAeA,yB;MAAA,8C;MjOsIA,+B;MiOtIA,sC;QAa4D,OjOmIIB,eiOnI2B,YjOoC9B,ciOpC8B,EAA  
Y,QAAZ,CjOmI3B,C;O;KiOhJ1C,C;oFAeA,yB;M/NgFl,6B;M+N3SJ,gD;MA2NA,4B;QAM+C,OA3NM,ahO+Rh  
B,CCeE,cAAU,cAAL,GAAiB,KAAtB,CDfF,MgO/RgB,C;O;KAqNrD,C;oGAQA,yB;M/GnLA,iB;M+GmLA,4B;Q  
AMuD,O/GnLI,MAAO,OhHkNzB,cwN3CpC,GAAY,KxGvKiD,CwGuK9D,GAA+C,EAA/C,I;O;KOMJ,C;sGAQ  
A,yB;MPZA,kE;MOYA,4B;QAMwD,OPZoB,sBxNmCnC,cwNnCe,GAAW,KAAS,C;O;KOM5E,C;8FAQA,yB;M  
AAA,0D;M/NuHA,4B;MAAA,iC;M+NvHA,4B;QAOuD,O/N2HZ,gBAAY,Q+N3HQ,kB/NwBrB,cAAL,GAAiB,K  
+NxBS,C/N2HR,CAAZ,C;O;K+NII3C,C;4FASA,yB;MAAA,wD;M/N8GA,4B;MAAA,iC;M+N9GA,4B;QAOsD,  
O/NkHX,gBAAY,Q+NIHO,iB/NepB,cAAL,GAAiB,K+NfQ,C/NkHP,CAAZ,C;O;K+NzH3C,C;gFAUA,yB;MAA  
A,4C;M/NyFA,iC;M+NzFA,sC;QAa6D,O/NsFhB,gB+NtF0B,W/NX9B,c+Nw8B,EAAW,QAAX,C/NsF1B,C;O;K  
+NnG7C,C;kFAeA,yB;MAAA,8C;M/N0EA,iC;M+N1EA,sC;QAa8D,O/NuEjB,gB+NvE2B,Y/N1B/B,c+N0B+B,E  
AAY,QAAZ,C/NuE3B,C;O;K+NpF7C,C;ICtRA,qC;MAEI,SjOuIoD,ciOvI3C,CjOuI2C,EiOvIvC,CjOuIuC,C;MiOt  
IpD,SjOsIoD,ciOtI3C,CjOsI2C,EiOtIvC,CjOsIuC,C;MiOrIpD,OjOmDkE,YiOnDvD,EjOmDwE,KAAjB,EiOnDjD,  
EjOmD8E,KAA7B,CiOnDvD,KAAX,GjOkFsD,SiOIFjC,EjOkF2C,KAAK,GiOIF3C,EjOkFuD,KAAX,IAAf,CiOIFt  
D,GjOqEqD,SAAU,CAaT,SiOIFpB,EjOkF8B,KAAK,GiOIF9B,EjOkF0C,KAAX,IAAf,CABs,MAAK,GiOrExB,Cj  
OqEmC,KAAX,IAAf,C;K;IiOIEzD,qC;MACI,SjNwIsD,eiNxI7C,CjNwI6C,EiNxIzC,CjNwIyC,C;MiNvItD,SjNuIs  
D,eiNvI7C,CjNuI6C,EiNvIzC,CjNuIyC,C;MiNtItD,OjNqDmE,aiNrDxD,EjNqD0E,KAAIB,EiNrDID,EjNqDgF,KA  
A9B,CiNrDxD,KAAX,GjN+EwD,UiN/EnC,EjN+E8C,KAAK,UiN/E9C,EjN+E0D,KAAX,CAAhB,CiN/ExD,GjNk  
EuD,UAAW,CAaV,UiN/EtB,EjN+EiC,KAAK,UiN/EjC,EjN+E6C,KAAX,CAAhB,CABU,MAAK,KiNIE3B,CjNkE  
sC,KAAX,CAAhB,C;K;IiN/D3D,uD;MAMBI,WAAO,CAAP,C;QAD8E,OjOwBZ,YiOvBID,KjOuBmE,KAAjB,Ei  
OvBzC,GjOuBsE,KAA7B,CiOvBID,KAD8D,GACHD,GADgD,GjOuDxB,SiOtDf,GjOsDyB,KAAK,GiOtDxB,mB  
AAiB,GAAjB,EAAsB,KAAtB,EjO2WV,SiO3WuC,IjO2WvC,CiO3WU,CjOsDoC,KAAX,IAAf,C;aiOrDtD,WAA  
O,CAAP,C;QAF8E,OjOwBZ,YiOtBID,KjOsBmE,KAAjB,EiOtBzC,GjOsBsE,KAA7B,CiOtBID,KAF8D,GAEhD,  
GAFgD,GjO0CzB,SiOxCd,GjOwCwB,KAAK,GiOxCvB,mBAAiB,KAAjB,EAAwB,GAAxB,EjO0WV,SiO1WwC,  
CAAC,IAAD,IjO0WxC,CiO1WU,CjOwCkC,KAAX,IAAf,C;QiOvC7C,MAAa,gCAAYB,eAAzB,C;K;IAGzB,uD;  
MAMBI,sBAAO,CAAP,C;QADkF,OjNqF,aiNPNd,KjNOqE,KAAIB,EiNP1C,GjNOwE,KAA9B,CiNPNd,KADkE,  
GACpD,GADoD,GjNkC1B,UiNjCjB,GjNiC4B,KAAK,UiNjC3B,mBAAiB,GAAjB,EAAsB,KAAtB,EjNkWP,UiNl  
WoC,IjNkWP,CiNIWO,CjNiCuC,KAAX,CAAhB,C;aiNhCxD,sBAAO,CAAP,C;QAFkF,OjNqF,aiNNnD,KjNMq  
E,KAAIB,EiNN1C,GjNMwE,KAA9B,CiNNnD,KAFkE,GAEPD,GAFoD,GjNqB3B,UiNnBhB,GjNmB2B,KAAK,  
KiNnB1B,mBAAiB,KAAjB,EAAwB,GAAxB,EjNiWP,UiNjWsC,IAAD,ajNiWrC,CiNjWO,CjNmBqC,KAAX,CA  
AhB,C;QiNIB/C,MAAa,gCAAYB,eAAzB,C;K;IhOIDC,sB;MAEtB,8B;MAFYD,gB;K;IAEzD,4B;MAAA,gC;MAC  
I,iBAGqC,WAAO,CAAP,C;MAErC,iBAGqC,WAAO,MAAP,C;MAErC,kBAGmC,C;MAEnC,iBAGkC,E;K;IAn  
BtC,wC;MAAA,uC;QAAA,sB;OAAA,gC;K;wGAsBA,iB;MAM0D,OAAa,0BA6OjC,SAAL,GAAiB,KA7OqB,EA  
AU,KF4O3C,KAAL,GAAiB,GE5OqB,C;K;oGAEvE,iB;MAOoE,OAAa,0BAoO3C,SAAL,GAAiB,KApO+B,EAA  
U,KAOOrD,KAAL,GAAiB,KApO+B,C;K;wGAejF,yB;MA2PA,6B;MD5PA,8C;MCCA,wB;QAMyD,ODAS,YAA  
iB,CC8PhD,cAAU,SAAL,GAAiB,KAAtB,CD9PgD,MAAjB,ECAe,KDAc,KAA7B,C;O;KCNIE,C;wGAQA,yB;M  
A6PA,aAS6D,0B;MAT7D,+B;Me9PA,gD;MfCA,wB;QAM0D,OeAS,aAAkB,CfgQhD,eAAW,oBAAL,SAAK,CA  
AL,YAAN,CehQgD,MAAIB,EfAgB,KeAc,KAA9B,C;O;KfNnE,C;8FAQA,yB;MA2OA,6B;MA3OA,wB;QAEsD,  
ODMD,cAAU,CC4O5B,cAAU,SAAL,GAAiB,KAAtB,CD5O4B,MAAK,GAAW,CD2O5C,cEjPsC,KFiP5B,KAA  
L,GAAiB,GAAtB,CC3O4C,MAAX,IAAf,C;O;KCRrD,C;8FAGA,yB;MAwOA,6B;MAxOA,wB;QAEuD,ODGF,c  
AAU,CC4O5B,cAAU,SAAL,GAAiB,KAAtB,CD5O4B,MAAK,GAAW,CC4O5C,cA/OuC,KA+O7B,KAAL,GAAi

B,KAAtB,CD5O4C,MAAX,IAAf,C;O;KCLrD,C;8FAGA,yB;MAqOA,6B;MArOA,wB;QAEqD,ODAA,cAAU,CC4O5B,cAAU,SAAL,GAAiB,KAAtB,CD5O4B,MAAK,GCAI,KDAO,KAAZ,IAAf,C;O;KCFrD,C;8FAGA,yB;MA4OA,aAS6D,0B;MAT7D,+B;MA5OA,wB;QAEuD,OeAA,eAAW,CfmP7B,eAAW,oBAAL,SAAK,CAAL,YAAN,CenP6B,MAAK,KfAI,KeAO,KAAZ,CAAhB,C;O;KfFvD,C;gGAIA,yB;MA8NA,6B;MA9NA,wB;QAEuD,ODMD,cAAU,CC+N7B,cAAU,SAAL,GAAiB,KAAtB,CD/N6B,MAAK,GAAY,CD8N9C,cEpOwC,KFoO9B,KAAL,GAAiB,GAAtB,CC9N8C,MAAZ,IAAf,C;O;KCRtD,C;gGAGA,yB;MA2NA,6B;MA3NA,wB;QAEwD,ODGF,cAAU,CC+N7B,cAAU,SAAL,GAAiB,KAAtB,CD/N6B,MAAK,GAAY,CC+N9C,cAlOyC,KAKO/B,KAAL,GAAiB,KAAAtB,CD/N8C,MAAZ,IAAf,C;O;KCLtD,C;gGAGA,yB;MAwNA,6B;MAxNA,wB;QAEsD,ODAA,cAAU,CC+N7B,cAAU,SAAL,GAAiB,KAAtB,CD/N6B,MAAK,GCAK,KDAO,KAAZ,IAAf,C;O;KCFtD,C;gGAGA,yB;MA+NA,aAS6D,0B;MAT7D,+B;MA/NA,wB;QAEwD,OeAA,eAAW,CfsO9B,eAAW,oBAAL,SAAK,CAAL,YAAN,CetO8B,MAAK,UfAK,KeAO,KAAZ,CAAhB,C;O;KfFxD,C;gGAIA,yB;MAiNA,6B;MAjNA,wB;QAEuD,ODMD,cAAe,YAAL,CCkN7B,cAAU,SAAL,GAAiB,KAAtB,CDiN6B,MAAK,EAAY,CDiN9C,cEvNwC,KFuN9B,KAAL,GAAiB,GAAtB,CCjN8C,MAAZ,CAAf,C;O;KCRtD,C;gGAGA,yB;MA8MA,6B;MA9MA,wB;QAEwD,ODGF,cAAe,YAAL,CCkN7B,cAAU,SAAL,GAAiB,KAAtB,CDiN6B,MAAK,EAAY,CCkN9C,cArNyC,KAqN/B,KAAL,GAAiB,KAAtB,CDiN8C,MAAZ,CAAf,C;O;KCLtD,C;gGAGA,yB;MA2MA,6B;MA3MA,wB;QAEsD,ODAA,cAAe,YAAL,CCkN7B,cAAU,SAAL,GAAiB,KAAtB,CDiN6B,MAAK,ECAK,KDAO,KAAZ,CAAf,C;O;KCFtD,C;gGAGA,yB;MAkNA,aAS6D,0B;MAT7D,+B;MAINA,wB;QAEwD,OeAA,eAAW,CfyN9B,eAAW,oBAAL,SAAK,CAAL,YAAN,CezN8B,MAAK,UfAK,KeAO,KAAZ,CAAhB,C;O;KfFxD,C;4FAIA,yB;MAoMA,6B;MD9LA,4C;MCNA,wB;QAEqD,ODMD,WCqMjB,cAAU,SAAL,GAAiB,KAAtB,CDrMiB,EDoMjB,cE1MoC,KF0M1B,KAAL,GAAiB,GAAtB,CCpMiB,C;O;KCRpD,C;4FAGA,yB;MAiMA,6B;MD9LA,4C;MCHA,wB;QAEsD,ODGF,WCqMjB,cAAU,SAAL,GAAiB,KAAtB,CDrMiB,ECqMjB,cAxMqC,KAwM3B,KAAL,GAAiB,KAAtB,CDrMiB,C;O;KCLpD,C;4FAGA,yB;MA8LA,6B;MD9LA,4C;MCAA,wB;QAEoD,ODAA,WCqMjB,cAAU,SAAL,GAAiB,KAAtB,CDrMiB,ECakB,KDAIB,C;O;KCFpD,C;4FAGA,yB;MAqMA,aAS6D,0B;MAT7D,+B;MerMA,8C;MfAA,wB;QAEsD,OeAA,Yf4MjB,eAAW,oBAAL,SAAK,CAAL,YAAN,Ce5MiB,EfAmB,KeAnB,C;O;KfFtD,C;4FAIA,yB;MAuLA,6B;MDzKA,kD;MCdA,wB;QAMqD,ODcD,cC4KjB,cAAU,SAAL,GAAiB,KAAtB,CD5KiB,ED2KjB,cEzLoC,KFyL1B,KAAL,GAAiB,GAAtB,CC3KiB,C;O;KCpBpD,C;4FAOA,yB;MAGLA,6B;MDzKA,kD;MCPA,wB;QAMsD,ODOF,cC4KjB,cAAU,SAAL,GAAiB,KAAtB,CD5KiB,EC4KjB,cAnLqC,KAmL3B,KAAL,GAAiB,KAAtB,CD5KiB,C;O;KCbpD,C;4FAOA,yB;MAyKA,6B;MDzKA,kD;MCAA,wB;QAMoD,ODAA,cC4KjB,cAAU,SAAL,GAAiB,KAAtB,CD5KiB,ECakB,KDAIB,C;O;KCNpD,C;4FAOA,yB;MA4KA,aAS6D,0B;MAT7D,+B;Me5KA,oD;MfAA,wB;QAMsD,OeAA,ef+KjB,eAAW,oBAAL,SAAK,CAAL,YAAN,Ce/KiB,EfAmB,KeAnB,C;O;KfNtD,C;sgAQQA,yB;MA0JA,6B;MD9LA,4C;MCoCA,wB;QAMiD,ODxCG,WCqMjB,cAAU,SAAL,GAAiB,KAAtB,CDrMiB,EDoMjB,cE5JqC,KF4J3B,KAAL,GAAiB,GAAtB,CCpMiB,C;O;KCKCpD,C;sgAOA,yB;MAMJA,6B;MD9LA,4C;MC2CA,wB;QAMkD,OD/CE,WCqMjB,cAAU,SAAL,GAAiB,KAAtB,CDrMiB,ECqMjB,cAtJsC,KAsJ5B,KAAL,GAAiB,KAAtB,CDrMiB,C;O;KCyCpD,C;sgAOA,yB;MA4IA,6B;MD9LA,4C;MCKDA,wB;QAMgD,ODtDI,WCqMjB,cAAU,SAAL,GAAiB,KAAtB,CDrMiB,ECsDmB,KDtDnB,C;O;KCGDpD,C;sgAOA,yB;MA+IA,aAS6D,0B;MAT7D,+B;MerMA,8C;MfsDA,wB;QAMkD,Oe1DI,Yf4MjB,eAAW,oBAAL,SAAK,CAAL,YAAN,Ce5MiB,Ef0DoB,Ke1DpB,C;O;KfoDtD,C;4FAQA,yB;MA6HA,6B;MDzKA,kD;MDuOJ,0B;MAAA,+B;ME3LI,wB;QAQ6C,O F8LR,eAAW,OC5OI,cC4KjB,cAAU,SAAL,GAAiB,KAAtB,CD5KiB,ED2KjB,cE7H4B,KF6HIB,KAAL,GAAiB,GAAtB,CC3KiB,CAKlf,KD0DW,CAAX,C;O;KEtMrC,C;4FASA,yB;MAoHA,6B;MDzKA,kD;MCwOJ,4B;MAAA,iC;MAnLI,wB;QAQ+C,OAsLR,gBAAY,QD7OC,cC4KjB,cAAU,SAAL,GAAiB,KAAtB,CD5KiB,EC4KjB,cArH8B,KAqHpB,KAAL,GAAiB,KAAtB,CD5KiB,CA4Lb,KCiDY,CAAZ,C;O;KA9LvC,C;4FASA,yB;MA2GA,6B;MDzKA,kD;MC8DA,wB;QAQ2C,ODhES,cC4KjB,cAAU,SAAL,GAAiB,KAAtB,CD5KiB,ECgES,KDhET,C;O;KCwDpD,C;4FASA,yB;MA4GA,aAS6D,0B;MAT7D,+B;Me5KA,oD;MfgEA,wB;QAQ6C,OelES,ef+KjB,eAAW,oBAAL,SAAK,CAAL,YAAN,Ce/KiB,EfKEU,KeLEV,C;O;Kf0DtD,C;4EAUA,yB;MAAA,4B;MAAA,iC;MAAA,mB;QAM2C,uBAAY,QAAL,SAAK,KAAZ,C;O;KAN3C,C;4EAQA,yB;MAAA,4B;MAAA,iC;MAAA,mB;QAM2C,uBAAY,QAAL,SAAK,KAAZ,C;O;KAN3C,C;oGAQA,yB;MAAA,8C;MAwEA,6B;MAxEA,wB;QAE+D,0BA+E5B,cAAU,SAAL,GAAiB,KAAtB,CA/E4B,EA+E5B,cA/EqD,KA+E3C,KAAL,GAAiB,KAAtB,CA/E4B,C;O;KAF/D,C;4FAIA,yB;MAAA,iC;M0LnNJ,4B;M1LmNI,wB;QAEqD,uB0LINiC,Q1LkN1B,IAAK,K0LINX,G1LkNoB,K

AAM,K0LINM,C1LkNjC,C;O;KAFrD,C;0FAGA,yB;MAAA,iC;M0LjNJ,4B;M1LiNI,wB;QAEoD,uB0LhNgC,Q1  
LgNzB,IAAK,K0LhNX,G1LgNmB,KAAM,K0LhNM,C1LgNhC,C;O;KAFpD,C;4FAGA,yB;MAAA,iC;M0L/MJ,4  
B;M1L+MI,wB;QAEqD,uB0L9MiC,Q1L8M1B,IAAK,K0L9MX,G1L8MoB,KAAM,K0L9MM,C1L8MjC,C;O;KA  
FrD,C;4EAGA,yB;MAAA,iC;M0L7MJ,4B;M1L6MI,mB;QAEkC,uB0L5MsB,QAAP,C1L4MR,S0L5Me,C1L4Mt  
B,C;O;KAFIC,C;kFAIA,yB;MAAA,0B;MAAA,mB;QAUmC,OAAK,OAAL,SAAK,C;O;KAVxC,C;oFAWA,Y;M  
ASqC,gB;K;gFACrC,Y;MASiC,OAAK,SAAL,GAAiB,K;K;kFACID,yB;MAAA,aASqD,0B;MATrD,mB;QASmC,  
OAAK,oBAAL,SAAK,CAAL,Y;O;KATnC,C;oFAWA,yB;MF+DJ,0B;MAAA,+B;ME/DI,mB;QASqC,OFiEE,eA  
AW,OEjEb,SFiEa,CAAX,C;O;KE1EvC,C;sFAUA,Y;MAEuC,W;K;kFACvC,yB;MAAA,6B;MAAA,mB;QASmC,  
qBAAU,SAAL,GAAiB,KAAtB,C;O;KATnC,C;oFAUA,yB;MAAA,aAS6D,0B;MAT7D,+B;MAAA,mB;QASqC,s  
BAAW,oBAAL,SAAK,CAAL,YAAN,C;O;KATrC,C;oFAWA,Y;MAMqC,OApDC,SAAL,GAAiB,K;K;sFAqDID,  
Y;MAMuC,OA3DD,SAAL,GAAiB,K;K;gCA6DID,Y;MAAyC,OAAQ,CA7DX,SAAL,GAAiB,KA6DD,Y;K;,,,;gC  
A3UrD,Y;MAAA,c;MAG6D,qD;MAH7D,a;K;8BAAA,iB;MAAA,2IAG6D,oCAH7D,G;K;0EA+UA,yB;MAAA,i  
C;MAAA,4B;QAW4C,uBAAy,SAAZ,C;O;KAX5C,C;4EAYA,yB;MAAA,iC;MAAA,4B;QAU6C,uBAAO,SAAP,  
C;O;KAV7C,C;4EAWA,yB;MAAA,4B;MAAA,iC;MAAA,4B;QAW2C,uBAAy,QAAL,SAAK,CAAZ,C;O;KAX3  
C,C;4EAYA,yB;MAAA,4B;MAAA,iC;MAAA,4B;QAW4C,uBAAy,QAAL,SAAK,SAAZ,C;O;KAX5C,C;IiC/W  
A,8B;MACqB,sB;K;wCAKjB,iB;MAM8C,OjCsVL,WiCtVK,AAQ,KAAR,CjCsVL,C;K;wCiCpVzC,wB;MAOI,a  
AAQ,KAAR,IAAiB,KjC4OgB,K;K;mFiCxOP,Y;MAAQ,OAAA,YAAQ,O;K;qCAE9C,Y;MAC+E,gCAAS,YAAT,  
C;K;IAGzD,qC;MAAkC,yB;MAAjC,oB;MACnB,eAAoB,C;K;6CACpB,Y;MAAyB,sBAAQ,YAAM,O;K;gDACv  
C,Y;MAA0D,Q;MAA9B,IAAI,eAAQ,YAAM,OAAIB,C;QAAA,OjCgUS,WiChUe,aAAM,mBAAN,EAAM,2BAA  
N,OjCgUf,C;;QiChU8C,MAAM,2BAAuB,YAAM,WAA7B,C;K;;2CAG7F,mB;MAIS,Q;MAAL,IAAI,eAAC,0EA  
AD,SAAJ,C;QAAkC,OAAO,K;MAEzC,OAAe,WAAR,YAAQ,EAAS,OjCsNS,KiCtNIB,C;K;gDAGnB,oB;MACY  
,Q;MAA2B,gBAA3B,gE;MAA2B,c;;QjB0nDvB,U;QADhB,IAAI,wCAAsB,mBAA1B,C;UAAqC,aAAO,I;UAAp,e  
;SACrB,6B;QAAhB,OAAgB,gBAAhB,C;UAAgB,2B;UiB1nD6B,2BjB0nDR,OiB1nDQ,S;UAAA,W;YAAwB,oB  
AAR,YAAQ,EjB0nDhC,OhBx6CA,KiCINgC,C;WjB0nD/C,IAAI,OAAJ,C;YAAyB,aAAO,K;YAAP,e;;QAC/C,aA  
AO,I;;;MiB3nDH,iB;K;oCAGJ,Y;MAAkC,OAAA,IAAK,QAAQ,OAAb,KAAqB,C;K;;IA/CvD,uC;MAAA,qD;MA  
CgC,wBAAK,eAAW,IAAX,CAAL,C;MADhC,Y;K;,,,;qCAPJ,Y;MAAA,OAKqB,sDALrB,M;K;qCAAA,Y;MAAA  
,c;MAKqB,wD;MALrB,a;K;mCAAA,iB;MAAA,2IAKqB,0CALrB,G;K;kFAyDA,yB;MAAA,2C;MAWwC,0C;QA  
AA,wB;UAAW,OAAA,aAAK,KAAL,CjCiMV,K;S;O;MiC5MzC,6B;QAWI,OAAO,qBAAy,gCAAW,IAAX,GAA  
iB,wBAAjB,CAAZ,C;O;KAXX,C;oFAcA,oB;MAGwE,e;K;Igm5ExE,sC;MAQ2D,OAAa,WAAb,SnOwQjB,KAA  
L,GAAiB,GmOxQkB,EAAS,KAAT,C;K;IAExE,sC;MAQ4D,OAAa,WAAb,SjO+PIB,KAAL,GAAiB,KiO/PmB,E  
AAS,KAAT,C;K;IAGzE,sC;MAQ0D,OAAc,WIOiR5B,oBkOjRc,SIOiRnB,KAAC,CAAL,iBkOjRiC,EAAS,KAAT  
,C;K;IAExE,sC;MAOgD,uBAAc,SINyQvB,KkNzQS,EAA6B,WAAW,KAAX,CAA7B,C;K;IAGhD,8B;MAMqC,Q  
;MAAA,0DAAmB,kBAakB,SAAlB,C;K;IAExD,qC;MAO+C,Q;MAAA,0CAAc,KAAAd,oBAAwB,kBAakB,SAAl  
B,C;K;IAGvE,+B;MAMuC,Q;MAAA,2DAAoB,kBAakB,SAAlB,C;K;IAE3D,sC;MAOiD,Q;MAAA,2CAAE,KA  
Af,oBAAyB,kBAakB,SAAlB,C;K;IAE1E,6B;MAMmC,Q;MAAA,yDAakB,kBAakB,SAAlB,C;K;IAErD,oC;MA  
O6C,Q;MAAA,yCAAA,KAAb,oBAAuB,kBAakB,SAAlB,C;K;IAEpE,8B;MAMqC,Q;MAAA,0DAAmB,kBAakB  
,SAAlB,C;K;IAExD,qC;MAO+C,Q;MAAA,0CAAc,KAAAd,oBAAwB,kBAakB,SAAlB,C;K;IAMvE,kC;MAM4C,  
kCAAsB,EAAtB,C;K;IAE5C,2C;MASmB,Q;MAAA,sBAAL,SAAK,EAAa,KAAb,C;MAAL,iB;QAA4B,OAAO,I;  
OAA7C,UAAU,I;MACV,IIO/EkE,YkO+E9D,GIO/E+E,KAAjB,EAA6B,CD6P5D,SmO9KzB,6BAAM,UnO8K6B,  
KAAL,GAAiB,GAAtB,CC7P4D,MAA7B,CkO+E9D,IAAJ,C;QAA2B,OAAO,I;MACIC,OnO8OqC,UAAW,OmO9  
OzC,GIOoL8B,KD0DW,CAAX,C;K;ImO3OzC,mC;MAM8C,mCAAuB,EAAvB,C;K;IAE9C,4C;MASmB,Q;MAA  
A,sBAAL,SAAK,EAAa,KAAb,C;MAAL,iB;QAA4B,OAAO,I;OAA7C,UAAU,I;MACV,IIOrGkE,YkOqG9D,GIOr  
G+E,KAAjB,EAA6B,CC8P5D,SiOzJzB,8BAAO,UjOyJ4B,KAAL,GAAiB,KAAtB,CD9P4D,MAA7B,CkOqG9D,I  
AAJ,C;QAA4B,OAAO,I;MACnC,OjOyNuC,WAAy,QiOzN5C,GIOwKgC,KCiDY,CAAZ,C;K;IiOtN3C,iC;MAM  
0C,iCAAqB,EAAR,B,C;K;IAE1C,0C;MASI,WAAW,KAAX,C;MAEA,aAAa,SAAK,O;MACIB,IAAI,WAAU,CAA  
d,C;QAAiB,OAAO,I;MAExB,YAAkB,4BAAK,U;MACvB,S;MAEA,gBAAGB,qBAAK,CAAL,C;MACHB,IAAI,Y  
AAy,EAhB,C;QACI,IAAI,WAAU,CAAV,IAAe,cAAa,EAhC,C;UAAqC,OAAO,I;QAC5C,QAAQ,C;;QAER,Q  
AAQ,C;;MAGZ,uBAAuB,mB;MAEvB,qBAAqB,gB;MACrB,alOuMmC,SkOvMtB,KIOuMsB,C;MkOtMnC,aAAa,

W;MACb,aAAU,KAAV,MAAsB,MAAtB,M;QACI,YAAAY,QAAQ,qBAAK,CAAL,CAAR,EAAiB,KAAjB,C;QAEZ,IAAI,QAAQ,CAAZ,C;UAAe,OAAO,I;QACtB,IIONJ8D,YkOmJ1D,MIONJ2E,KAAjB,EkOmJjD,clOnJ8E,KAA7B,CkOmJ1D,IAAJ,C;UACI,IAAI,+CAAkB,gBAAIB,QAAJ,C;YACI,iBIO5FwC,WkO4FvB,KIO5FuB,EkO4Ff,MI05Fe,C;YkO8FxC,IIOvJsD,YkOuJlD,MIOvJmE,KAAjB,EkOuJzC,clOvJsE,KAA7B,CkOuJlD,IAAJ,C;cACI,OAAO,I;YAGX,OAAO,I;SAIf,SIONHkD,SAAe,YkOmHjE,MIONH4D,KAAK,EkOmHvD,MIONHmE,KAAZ,CAAf,C;QkOqHlD,mBAAMB,M;QACnB,SIOhJiD,SkOgJjD,MIOhJ2D,KAAK,GAAW,CAkU5C,SkOILrB,KIOkLqB,CAIU4C,MAAX,IAAf,C;QkOiJjD,IIONK8D,YkOmK1D,MIONK2E,KAAjB,EkOmKjD,YIONK8E,KAA7B,CkOmK1D,IAAJ,C;UAA2B,OAAO,I;MAGtC,OAAO,M;K;IAGX,kC;MAM4C,kCAAsB,EAAtB,C;K;IAE5C,2C;MASI,WAAW,KAAX,C;MAEA,aAAa,SAAK,O;MACIB,IAAI,WAAU,CAAd,C;QAAiB,OAAO,I;MAExB,YAAmB,6BAAM,U;MACzB,S;MAEA,gBAAGB,qBAAK,CAAL,C;MACHB,IAAI,YAAAY,EAAhB,C;QACI,IAAI,WAAU,CAAV,IAAe,cAAa,EAAhC,C;UAAqC,OAAO,I;QAC5C,QAAQ,C;;QAER,QAAQ,C;;MAIZ,uBAAuB,gD;MAEvB,qBAAqB,gB;MACrB,alN0IqC,UAAW,oBkN1InC,KIN0ImC,CAAX,C;MkNzIrC,aAAa,2B;MACb,aAAU,KAAV,MAAsB,MAAtB,M;QACI,YAAAY,QAAQ,qBAAK,CAAL,CAAR,EAAiB,KAAjB,C;QAEZ,IAAI,QAAQ,CAAZ,C;UAAe,OAAO,I;QACtB,IIN5M+D,akN4M3D,MIN5M6E,KAAIB,EkN4MID,clN5MgF,KAA9B,CkN4M3D,IAAJ,C;UACI,IAAI,+CAAkB,gBAAIB,QAAJ,C;YACI,iBIN1JOC,YkN0JzB,KIN1JyB,EkN0JjB,MIN1JiB,C;YkN4J1C,IINhNuD,akNgNnD,MINhNqE,KAAIB,EkNgN1C,clNhNwE,KAA9B,CkNgNnD,IAAJ,C;cACI,OAAO,I;YAGX,OAAO,I;SAIf,SINjLoD,UkNiLpD,MINjL+D,KAAK,UkNiL1D,MINjLsE,KAAZ,CAAhB,C;QkNmLpD,mBAAMB,M;QACnB,SIN9MmD,UkN8MnD,MIN9M8D,KAAK,KAAW,ChBsQ7C,UAAW,oBAAL,CAYDR,SkOjHrB,KIOiHqB,CAZDQ,MAAK,CAAL,iBAAN,CgBtQ6C,MAAX,CAAhB,C;QkN+MnD,IIN5N+D,akN4N3D,MIN5N6E,KAAIB,EkN4NID,YIN5NgF,KAA9B,CkN4N3D,IAAJ,C;UAA2B,OAAO,I;MAGtC,OAAO,M;K;IIN9RX,6B;MACKD,OAAuB,0BAAtB,KAAO,WAAe,EAAU,KAAO,WAAjB,C;K;IACzE,8B;MACqD,OAAC,gCAAuB,iBAAU,gCAAV,C;K;IAE7E,4B;MACoD,ORiZZ,SAvGI,oBQ1SS,ER0Sd,KAAK,CAAL,iBQ1Sc,KR0ST,oBQ1SuB,ER0S5B,KAAK,CAAL,iBQ1Sc,CRiZH,QAAV,C;K;IQhZxC,+B;MACuD,OR+Yf,SAvGI,oBQxSY,ERwSjB,KAAK,CAAL,iBQxSiB,QRwSZ,oBQxS0B,ERwS/B,KAAK,CAAL,iBQxSiB,CR+YN,QAAV,C;K;IQ1YxC,6B;MAEI,eAAe,EQkSoB,K;MRjSnC,cAAc,EQiSqB,K;MRhSnC,IAAI,qBAAU,CAAd,C;QACI,OQ6C+D,aR7CpD,EQ6CsE,KAAIB,ER7C/C,EQ6C6E,KAA9B,CR7CpD,IAAJ,GAAa,aAAb,GAA2B,a;OAIc,IAAI,uBAAAY,CAAhB,C;QACI,OAAO,UAAm,aAAW,OAAX,CAAN,C;OAIx,eAAiB,4BAAc,CAAd,CAAD,KAAoB,OAAPB,CAAD,WAAkC,CAAIC,C;MACf,UAAU,kBAAW,kBAAW,OAAX,CAAX,C;MACV,OAAO,UAAm,iCQkCsD,aAAkC,CRICzD,UAAm,GAAN,CQkCyD,MAAIB,EAA8B,CRICvD,UAAm,OAAN,CQkCuD,MAA9B,CRICvC,KAAJ,GAAC,CAAIC,GAAYC,CAAPD,EAAAN,C;K;IAIX,gC;MAKe,Q;MAHX,eAAe,EQ8QoB,K;MR7QnC,cAAc,EQ6QqB,K;MR5QnC,IAAI,qBAAU,CAAAd,C;QACW,IQyBwD,aRzBpD,EQyBsE,KAAIB,ERzB/C,EQyB6E,KAA9B,CRzBpD,IAAJ,C;UACH,S;;UAEA,OQgDgD,URhDhD,EQgD2D,KAAK,URhD3D,EQgDuE,KAAZ,CAAhB,C;;QRnDpD,W;OAQJ,IAAI,uBAAAY,CAAhB,C;QACI,OAAO,UAAm,gBAAW,OAAX,CAAN,C;OAIx,eAAiB,4BAAc,CAAd,CAAD,KAAoB,OAAPB,CAAAD,WAAkC,CAAIC,C;MACf,UAAU,kBAAW,kBAAW,OAAX,CAAX,C;MACV,OAAO,UAAm,aQUsD,aAAkB,CRV9D,UAAm,GAAN,CQU8D,MAAIB,EAA8B,CRV5D,UAAm,OAAN,CQU4D,MAA9B,CRV5C,KAAJ,GAAkC,OAAC,KAAN,CAAN,C;K;IAGX,yB;MAEI,IAAE,QAAF,CAAe,CAAF,C;QADyC,OAC5B,W;;QACb,SRwSuC,aQxSiC,4BAAK,URwS0C,KAAb,CQxSvC,C;UAFyC,OAEP,4BAAK,U;;UACvC,SRuSuC,aQvSiC,4BAAK,URuS0C,KAAb,CQvSvC,C;YAHyC,OAGP,4BAAK,U;eACvC,SAAK,UAAAL,C;YAJyC,ORkVN,SQ9UX,YAAF,CAAe,CR8UW,C;;YQIVM,ORgBY,SAAU,CAkU5B,SQ7UP,YAAAnB,IAAI,UAAe,CR6UO,CAIU4B,MAAK,GAAW,CAkU5C,SQ7UY,UR6UZ,CAIU4C,MAAX,IAAf,C;;;K;IQRzD,0B;MAEI,IAAE,QAAF,CAAe,CAAF,C;QAD2C,OAC9B,2B;;QACb,SQkSuC,cRISIC,6BAAM,UQkS0C,KAAAd,CRISvC,C;UAF2C,OAER,6BAAM,U;;UACzC,SQiSuC,cRjSiC,6BAAM,UQiS0C,KAAAd,CRjSvC,C;YAH2C,OAGR,6BAAM,U;eACzC,4C;YAJ2C,OQwVL,U RpVd,uBAAF,CAAe,CQoVc,C;;YRxVK,OQUY,UAAW,CA8U5B,URjVF,uBAA3B,IAAI,oBAAuB,CQiVE,CA9U4B,MAAK,KAAW,CRHzB,gCQGyB,MAAX,CAAhB,C;;;K;IRC3D,yB;MAC4C,QAAC,CAAqB,GAAf,UAAP,IAAmC,CAAC,MAAO,EAAW,IAAJ,EAAf,IAAgC,C;K;IAE/G,0B;MAC8C,OAAC,qBAAO,EAAP,CAAW,WAAZ,GAAyB,IAAZB,GAAiC,YAAjC,W;K;IAG9C,0B;MAA8C,uBAAAc,CAAd,EAAiB,EAAjB,C;K;IAE9C,kC;MACI,IAAI,gBAAK,CAAT,C;QAAY,OAAS,WAAF,CAAe,EAAS,IAAT,C;MAErB,eAAiB,qBAAO,CAAP,CAAD,yBAAa,IAAb,EAAD,WAAwB,CAAxB,C;MACf,UAAU,WAAI,sCAAW,IAAX,EAAJ,C;MACV,IAAI,kBAAO,IAA





This license came from: <http://www.megginson.com/SAX/copying.html>

However please note future versions of SAX may be covered

under <http://saxproject.org/?selected=pd>

This page is now out of date -- see the new SAX site at

<http://www.saxproject.org/> for more up-to-date

releases and other information. Please change your bookmarks.

SAX2 is Free!

I hereby abandon any property rights to SAX 2.0 (the Simple API for XML), and release all of the SAX 2.0 source code, compiled code, and documentation contained in this distribution into the Public Domain.

SAX comes with NO WARRANTY or guarantee of fitness for any purpose.

David Megginson, [david@megginson.com](mailto:david@megginson.com)

2000-05-05

[xml-commons/java/external/LICENSE.dom-software.txt](http://xml-commons/java/external/LICENSE.dom-software.txt) \$Id: LICENSE.dom-software.txt 734314 2009-01-14 03:33:27Z mrglavas \$

This license came from: <http://www.w3.org/TR/2004/REC-DOM-Level-3-Core-20040407/java-binding.zip> (COPYRIGHT.html)

#### W3C SOFTWARE NOTICE AND LICENSE

Copyright 2004 World Wide Web Consortium, (Massachusetts Institute of Technology,

European Research Consortium for Informatics and Mathematics, Keio University).

All Rights Reserved.

The DOM bindings are published under the W3C Software Copyright Notice and License. The software license requires "Notice of any changes or modifications to the W3C files, including the date changes were made." Consequently, modified versions of the DOM bindings must document that they do not conform to the W3C standard; in the case of the IDL definitions, the pragma prefix can no longer be 'w3c.org'; in the case of the Java language binding, the package names can no longer be in the 'org.w3c' package.

Note: The original version of the W3C Software Copyright Notice and License could be found at <http://www.w3.org/Consortium/Legal/2002/copyright-software-20021231>

This work (and included software, documentation such as READMEs, or other related items) is being provided by the copyright holders under the following license. By obtaining, using and/or copying this work, you (the licensee) agree that you have read, understood, and will comply with the following terms and conditions.

Permission to copy, modify, and distribute this software and its documentation, with or without modification, for any purpose and without fee or royalty is hereby granted, provided that you include the following on ALL copies of the software and documentation or portions thereof, including modifications:

1. The full text of this NOTICE in a location viewable to users of the redistributed or derivative work.
2. Any pre-existing intellectual property disclaimers, notices, or terms and conditions. If none exist, the W3C Software Short Notice should be included (hypertext is preferred, text is permitted) within the body of any redistributed or derivative code.
3. Notice of any changes or modifications to the files, including the date changes were made. (We recommend you provide URIs to the location from which the code is derived.)

THIS SOFTWARE AND DOCUMENTATION IS PROVIDED "AS IS," AND COPYRIGHT HOLDERS MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE OR DOCUMENTATION WILL NOT INFRINGE ANY THIRD PARTY PATENTS, COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS.

COPYRIGHT HOLDERS WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THE SOFTWARE OR DOCUMENTATION.

The name and trademarks of copyright holders may NOT be used in advertising or publicity pertaining to the software without specific, written prior permission.

Title to copyright in this software and any associated documentation will at all times remain with copyright holders.

xml-commons/java/external/LICENSE.dom-documentation.txt \$Id: LICENSE.dom-documentation.txt 226215 2005-06-03 22:49:13Z mrglavas \$

This license came from: <http://www.w3.org/Consortium/Legal/copyright-documents-20021231>

#### W3C DOCUMENT LICENSE

<http://www.w3.org/Consortium/Legal/2002/copyright-documents-20021231>

Public documents on the W3C site are provided by the copyright holders under the following license. By using and/or copying this document, or the W3C document from which this statement is linked, you (the licensee) agree that you have read, understood, and will comply with the following terms and conditions:

Permission to copy, and distribute the contents of this document, or the W3C document from which this statement is linked, in any medium for any purpose and without fee or royalty is hereby granted, provided that you include the following on ALL copies of the document, or portions thereof, that you use:

1. A link or URL to the original W3C document.
2. The pre-existing copyright notice of the original author, or if it doesn't exist, a notice (hypertext is preferred, but a textual representation is permitted) of the form: "Copyright [date-of-document] World Wide Web Consortium, (Massachusetts Institute of Technology, European Research Consortium for Informatics and Mathematics, Keio University). All Rights Reserved.  
<http://www.w3.org/Consortium/Legal/2002/copyright-documents-20021231>"
3. If it exists, the STATUS of the W3C document.

When space permits, inclusion of the full text of this NOTICE should be provided. We request that authorship attribution be provided in any software, documents, or other items or products that you create pursuant to the implementation of the contents of this document, or any portion thereof.

No right to create modifications or derivatives of W3C documents is granted pursuant to this license. However, if additional requirements (documented in the Copyright FAQ) are satisfied, the right to create modifications or derivatives is sometimes granted by the W3C to individuals complying with those requirements.

THIS DOCUMENT IS PROVIDED "AS IS," AND COPYRIGHT HOLDERS MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, OR TITLE; THAT THE CONTENTS OF THE DOCUMENT ARE SUITABLE FOR ANY PURPOSE; NOR THAT THE IMPLEMENTATION OF SUCH CONTENTS WILL NOT INFRINGE ANY THIRD PARTY PATENTS, COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS.

COPYRIGHT HOLDERS WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THE DOCUMENT OR THE PERFORMANCE OR IMPLEMENTATION OF THE CONTENTS THEREOF.

The name and trademarks of copyright holders may NOT be used in advertising or publicity pertaining to this document or its contents without specific, written prior permission. Title to copyright in this document will at all times remain with copyright holders.

-----

This formulation of W3C's notice and license became active on December 31 2002. This version removes the copyright ownership notice such that this license can be used with materials other than those owned by the W3C, moves information on style sheets, DTDs, and schemas to the Copyright FAQ, reflects that ERCIM is now a host of the W3C, includes references to this specific dated version of the license, and removes the ambiguous grant of "use". See the older formulation for the policy prior to this date. Please see our Copyright FAQ for common questions about using materials from our site, such as the translating

or annotating specifications. Other questions about this notice can be directed to [site-policy@w3.org](mailto:site-policy@w3.org).

Joseph Reagle <[site-policy@w3.org](mailto:site-policy@w3.org)>

Last revised by Reagle \$Date: 2005-06-03 18:49:13 -0400 (Fri, 03 Jun 2005) \$

Apache License  
Version 2.0, January 2004  
<http://www.apache.org/licenses/>

## TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

### 1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the

editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the

Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.
7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.
8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.
9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

## END OF TERMS AND CONDITIONS

### APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the

same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

```
=====
== NOTICE file corresponding to section 4(d) of the Apache License, ==
== Version 2.0, in this case for the Apache xml-commons xml-apis ==
== distribution. ==
=====
```

Apache XML Commons XML APIs  
Copyright 1999-2009 The Apache Software Foundation.

This product includes software developed at  
The Apache Software Foundation (<http://www.apache.org/>).

Portions of this software were originally based on the following:

- software copyright (c) 1999, IBM Corporation., <http://www.ibm.com>.
- software copyright (c) 1999, Sun Microsystems., <http://www.sun.com>.
- software copyright (c) 2000 World Wide Web Consortium, <http://www.w3.org>

## 1.44 httpcomponents-mime 4.5.12

### 1.44.1 Available under license :

Apache HttpClient Mime  
Copyright 1999-2020 The Apache Software Foundation

This product includes software developed at  
The Apache Software Foundation (<http://www.apache.org/>).

Apache License  
Version 2.0, January 2004  
<http://www.apache.org/licenses/>



## TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

### 1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of

the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:
  - (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
  - (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
  - (c) You must retain, in the Source form of any Derivative Works

that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and

(d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. **Submission of Contributions.** Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. **Trademarks.** This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. **Disclaimer of Warranty.** Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A

PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.
9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

#### END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[ ]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

## 1.45 asm 5.0.1

### 1.45.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
/**
 * ASM XML Adapter
 * Copyright (c) 2004-2011, Eugene Kuleshov
 * All rights reserved.
 *
 * Redistribution and use in source and binary forms, with or without
 * modification, are permitted provided that the following conditions
 * are met:
 * 1. Redistributions of source code must retain the above copyright
 * notice, this list of conditions and the following disclaimer.
 * 2. Redistributions in binary form must reproduce the above copyright
 * notice, this list of conditions and the following disclaimer in the
 * documentation and/or other materials provided with the distribution.
 * 3. Neither the name of the copyright holders nor the names of its
 * contributors may be used to endorse or promote products derived from
 * this software without specific prior written permission.
 *
 * THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS"
 * AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
 * IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
 * ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE
 * LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR
 * CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF
 * SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS
 * INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN
 * CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)
 * ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF
 * THE POSSIBILITY OF SUCH DAMAGE.
 */
```

Found in path(s):

```
* /opt/cola/permits/1137133810_1614022227.85/0/asm-5-0-1-sources-1-
jar/org/objectweb/asm/xml/ASMContentHandler.java
* /opt/cola/permits/1137133810_1614022227.85/0/asm-5-0-1-sources-1-
jar/org/objectweb/asm/xml/SAXCodeAdapter.java
* /opt/cola/permits/1137133810_1614022227.85/0/asm-5-0-1-sources-1-
```

```
jar/org/objectweb/asm/xml/SAXFieldAdapter.java
* /opt/cola/permits/1137133810_1614022227.85/0/asm-5-0-1-sources-1-
jar/org/objectweb/asm/xml/SAXClassAdapter.java
* /opt/cola/permits/1137133810_1614022227.85/0/asm-5-0-1-sources-1-
jar/org/objectweb/asm/xml/SAXAdapter.java
* /opt/cola/permits/1137133810_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/xml/Processor.java
* /opt/cola/permits/1137133810_1614022227.85/0/asm-5-0-1-sources-1-
jar/org/objectweb/asm/xml/SAXAnnotationAdapter.java
No license file was found, but licenses were detected in source scan.
```

```
/**
```

```
* ASM: a very small and fast Java bytecode manipulation framework
* Copyright (c) 2000-2011 INRIA, France Telecom
* All rights reserved.
*
* Redistribution and use in source and binary forms, with or without
* modification, are permitted provided that the following conditions
* are met:
* 1. Redistributions of source code must retain the above copyright
* notice, this list of conditions and the following disclaimer.
* 2. Redistributions in binary form must reproduce the above copyright
* notice, this list of conditions and the following disclaimer in the
* documentation and/or other materials provided with the distribution.
* 3. Neither the name of the copyright holders nor the names of its
* contributors may be used to endorse or promote products derived from
* this software without specific prior written permission.
*
* THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS"
* AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
* ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE
* LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR
* CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF
* SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS
* INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN
* CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)
* ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF
* THE POSSIBILITY OF SUCH DAMAGE.
```

```
*/
```

```
/**
```

```
* Creates a new {@link GeneratorAdapter}. Subclasses must not use this
* constructor. Instead, they must use the
* {@link #GeneratorAdapter(int, MethodVisitor, int, String, String)}
* version.
*
* @param mv
* the method visitor to which this adapter delegates calls.
* @param access
```

```
* the method's access flags (see { @link Opcodes }).
* @param name
* the method's name.
* @param desc
* the method's descriptor (see { @link Type Type }).
* @throws IllegalStateException
* If a subclass calls this constructor.
*/
```

Found in path(s):

```
* /opt/cola/permits/1137133810_1614022227.85/0/asm-5-0-1-sources-1-
jar/org/objectweb/asm/commons/GeneratorAdapter.java
```

No license file was found, but licenses were detected in source scan.

```
/**
```

```
* ASM: a very small and fast Java bytecode manipulation framework
* Copyright (c) 2000-2011 INRIA, France Telecom
* All rights reserved.
*
* Redistribution and use in source and binary forms, with or without
* modification, are permitted provided that the following conditions
* are met:
* 1. Redistributions of source code must retain the above copyright
* notice, this list of conditions and the following disclaimer.
* 2. Redistributions in binary form must reproduce the above copyright
* notice, this list of conditions and the following disclaimer in the
* documentation and/or other materials provided with the distribution.
* 3. Neither the name of the copyright holders nor the names of its
* contributors may be used to endorse or promote products derived from
* this software without specific prior written permission.
*
* THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS"
* AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
* ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE
* LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR
* CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF
* SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS
* INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN
* CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)
* ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF
* THE POSSIBILITY OF SUCH DAMAGE.
*/
```

Found in path(s):

```
* /opt/cola/permits/1137133810_1614022227.85/0/asm-5-0-1-sources-1-
jar/org/objectweb/asm/optimizer/JarOptimizer.java
```

```
* /opt/cola/permits/1137133810_1614022227.85/0/asm-5-0-1-sources-1-
```

jar/org/objectweb/asm/commons/RemappingClassAdapter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/FieldInsnNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/Type.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/commons/RemappingSignatureAdapter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/util/CheckMethodAdapter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/FieldWriter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/LookupSwitchInsnNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/Attribute.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/analysis/BasicInterpreter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/analysis/Interpreter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/analysis/Frame.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/ByteVector.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/analysis/BasicVerifier.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/util/TraceSignatureVisitor.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/util/CheckAnnotationAdapter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/optimizer/MethodConstantsCollector.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/VarInsnNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/MethodInsnNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/util/CheckClassAdapter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/optimizer/ClassConstantsCollector.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/ClassVisitor.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/MethodNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/ClassWriter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/tree/LabelNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/commons/TryCatchBlockSorter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/tree/FieldNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/analysis/Analyzer.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/commons/Method.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-



jar/org/objectweb/asm/optimizer/NameMapping.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/util/TraceAnnotationVisitor.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/FieldVisitor.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/analysis/Subroutine.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/commons/TableSwitchGenerator.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/analysis/SourceValue.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/TryCatchBlockNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/LineNumberNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/signature/SignatureReader.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/FrameNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/optimizer/Constant.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/commons/StaticInitMerger.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/commons/CodeSizeEvaluator.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/commons/SerialVersionUIDAdder.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/commons/SimpleRemapper.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/commons/RemappingMethodAdapter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/analysis/BasicValue.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/util/TraceMethodVisitor.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/commons/RemappingAnnotationAdapter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/MethodVisitor.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/Edge.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/TypeAnnotationNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/InnerClassNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/MultiANewArrayInsnNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/util/CheckSignatureAdapter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/TableSwitchInsnNode.java

\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/tree/IncInsnNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/tree/JumpInsnNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/optimizer/Shrinker.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/tree/LocalVariableNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/commons/LocalVariablesSorter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/tree/analysis/SimpleVerifier.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/tree/AbstractInsnNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/AnnotationWriter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/Handle.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/util/CheckFieldAdapter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/optimizer/MethodOptimizer.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/util/Printer.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/tree/analysis/SmallSet.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/commons/InstructionAdapter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/MethodWriter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/Item.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/AnnotationVisitor.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/tree/analysis/SourceInterpreter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/ClassReader.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/commons/Remapper.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/tree/AnnotationNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/signature/SignatureVisitor.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/tree/InsnNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/optimizer/AnnotationConstantsCollector.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/util/ASMifier.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/optimizer/ConstantPool.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/tree/TypeInsnNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/Opcodes.java

\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/optimizer/ClassOptimizer.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/Context.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/Handler.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/tree/IntInsnNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/tree/analysis/Value.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/util/TraceClassVisitor.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/commons/RemappingFieldAdapter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/tree/InsnList.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/Frame.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/signature/SignatureWriter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/tree/ParameterNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/commons/AdviceAdapter.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/tree/InvokeDynamicInsnNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/tree/LdcInsnNode.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/util/TraceFieldVisitor.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/Label.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/tree/analysis/AnalyzerException.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/optimizer/FieldConstantsCollector.java  
No license file was found, but licenses were detected in source scan.

2011 INRIA, France Telecom

\* All rights reserved.

\*

\* Redistribution and use in source and binary forms, with or without

\* modification, are permitted provided that the following conditions

\* are met:

\* 1. Redistributions of source code must retain the above copyright

\* notice, this list of conditions and the following disclaimer.

\* 2. Redistributions in binary form must reproduce the above copyright

\* notice, this list of conditions and the following disclaimer in the

\* documentation and/or other materials provided with the distribution.

\* 3. Neither the name of the copyright holders nor the names of its

\* contributors may be used to endorse or promote products derived from

\* this software without specific prior written permission.

\*

\* THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS"  
\* AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE  
\* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE  
\* ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE  
\* LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR  
\* CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF  
\* SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS  
\* INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN  
\* CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)  
\* ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF  
\* THE POSSIBILITY OF SUCH DAMAGE.

Found in path(s):

\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/attrs/package.html  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/signature/package.html  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/package.html  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/analysis/package.html  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/util/package.html  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/tree/package.html  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/commons/package.html

No license file was found, but licenses were detected in source scan.

/\*\*\*

\* ASM: a very small and fast Java bytecode manipulation framework  
\* Copyright (c) 2000-2011 INRIA, France Telecom  
\* All rights reserved.  
\*  
\* Redistribution and use in source and binary forms, with or without  
\* modification, are permitted provided that the following conditions  
\* are met:  
\* 1. Redistributions of source code must retain the above copyright  
\* notice, this list of conditions and the following disclaimer.  
\* 2. Redistributions in binary form must reproduce the above copyright  
\* notice, this list of conditions and the following disclaimer in the  
\* documentation and/or other materials provided with the distribution.  
\* 3. Neither the name of the copyright holders nor the names of its  
\* contributors may be used to endorse or promote products derived from  
\* this software without specific prior written permission.

\* THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS"  
\* AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE  
\* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE  
\* ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE  
\* LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR  
\* CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF

\* SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS  
\* INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN  
\* CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)  
\* ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF  
\* THE POSSIBILITY OF SUCH DAMAGE.

\*/

/\*\*

\* Creates a new {[AnalyzerAdapter](#)}. *Subclasses must not use this  
\* constructor*. Instead, they must use the  
\* {[AnalyzerAdapter\(int, String, int, String, String, MethodVisitor\)](#)  
\* version.  
\*  
\* @param owner  
\*     the owner's class name.  
\* @param access  
\*     the method's access flags (see {[Opcodes](#)}).  
\* @param name  
\*     the method's name.  
\* @param desc  
\*     the method's descriptor (see {[Type Type](#)}).  
\* @param mv  
\*     the method visitor to which this adapter delegates calls. May  
\*     be `null`.  
\* @throws IllegalStateException  
\*     If a subclass calls this constructor.  
\*/

Found in path(s):

\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/commons/AnalyzerAdapter.java

No license file was found, but licenses were detected in source scan.

/\*\*

\* ASM: a very small and fast Java bytecode manipulation framework  
\* Copyright (c) 2000-2011 INRIA, France Telecom  
\* All rights reserved.  
\*  
\* Redistribution and use in source and binary forms, with or without  
\* modification, are permitted provided that the following conditions  
\* are met:  
\* 1. Redistributions of source code must retain the above copyright  
\*     notice, this list of conditions and the following disclaimer.  
\* 2. Redistributions in binary form must reproduce the above copyright  
\*     notice, this list of conditions and the following disclaimer in the  
\*     documentation and/or other materials provided with the distribution.  
\* 3. Neither the name of the copyright holders nor the names of its  
\*     contributors may be used to endorse or promote products derived from  
\*     this software without specific prior written permission.

\*  
\* THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS"  
\* AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE  
\* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE  
\* ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE  
\* LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR  
\* CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF  
\* SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS  
\* INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN  
\* CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)  
\* ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF  
\* THE POSSIBILITY OF SUCH DAMAGE.

\*/

/\*\*

\* Constructs a new {@link LocalVariableAnnotationNode}. *<i>Subclasses must*  
\* not use this constructor*</i>. Instead, they must use the*

\* {@link #LocalVariableAnnotationNode(int, TypePath, LabelNode[], LabelNode[], int[], String)}

\* version.

\*

\* @param typeRef

\* a reference to the annotated type. See {@link TypeReference}.

\* @param typePath

\* the path to the annotated type argument, wildcard bound, array

\* element type, or static inner type within 'typeRef'. May be

\* `<tt>null</tt>` if the annotation targets 'typeRef' as a whole.

\* @param start

\* the first instructions corresponding to the continuous ranges

\* that make the scope of this local variable (inclusive).

\* @param end

\* the last instructions corresponding to the continuous ranges

\* that make the scope of this local variable (exclusive). This

\* array must have the same size as the 'start' array.

\* @param index

\* the local variable's index in each range. This array must have

\* the same size as the 'start' array.

\* @param desc

\* the class descriptor of the annotation class.

\*/

Found in path(s):

\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-  
jar/org/objectweb/asm/tree/LocalVariableAnnotationNode.java

No license file was found, but licenses were detected in source scan.

2011, Eugene Kuleshov

\* All rights reserved.

\*

\* Redistribution and use in source and binary forms, with or without

\* modification, are permitted provided that the following conditions  
\* are met:  
\* 1. Redistributions of source code must retain the above copyright  
\* notice, this list of conditions and the following disclaimer.  
\* 2. Redistributions in binary form must reproduce the above copyright  
\* notice, this list of conditions and the following disclaimer in the  
\* documentation and/or other materials provided with the distribution.  
\* 3. Neither the name of the copyright holders nor the names of its  
\* contributors may be used to endorse or promote products derived from  
\* this software without specific prior written permission.  
\*  
\* THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS"  
\* AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE  
\* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE  
\* ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE  
\* LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR  
\* CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF  
\* SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS  
\* INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN  
\* CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)  
\* ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF  
\* THE POSSIBILITY OF SUCH DAMAGE.

Found in path(s):

\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/xml/package.html

No license file was found, but licenses were detected in source scan.

/\*\*

\* ASM: a very small and fast Java bytecode manipulation framework

\* Copyright (c) 2000-2011 INRIA, France Telecom

\* All rights reserved.

\*

\* Redistribution and use in source and binary forms, with or without

\* modification, are permitted provided that the following conditions

\* are met:

\* 1. Redistributions of source code must retain the above copyright

\* notice, this list of conditions and the following disclaimer.

\* 2. Redistributions in binary form must reproduce the above copyright

\* notice, this list of conditions and the following disclaimer in the

\* documentation and/or other materials provided with the distribution.

\* 3. Neither the name of the copyright holders nor the names of its

\* contributors may be used to endorse or promote products derived from

\* this software without specific prior written permission.

\*

\* THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS"

\* AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE

\* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE

\* ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE

\* LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR  
\* CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF  
\* SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS  
\* INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN  
\* CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)  
\* ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF  
\* THE POSSIBILITY OF SUCH DAMAGE.  
\*/

Found in path(s):

\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/util/Textifiable.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/util/ASMifiable.java

No license file was found, but licenses were detected in source scan.

2011, Eugene Kuleshov

All rights reserved.

Redistribution and use in source and binary forms, with or without  
modification, are permitted provided that the following conditions  
are met:

1. Redistributions of source code must retain the above copyright  
notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright  
notice, this list of conditions and the following disclaimer in the  
documentation and/or other materials provided with the distribution.
3. Neither the name of the copyright holders nor the names of its  
contributors may be used to endorse or promote products derived from  
this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS"  
AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE  
IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE  
ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE  
LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR  
CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF  
SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS  
INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN  
CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)  
ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF  
THE POSSIBILITY OF SUCH DAMAGE.

Found in path(s):

\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/xml/asm-xml.dtd

No license file was found, but licenses were detected in source scan.

/\*\*

\* ASM: a very small and fast Java bytecode manipulation framework

\* Copyright (c) 2000-2011 INRIA, France Telecom



```

* All rights reserved.
*
* Redistribution and use in source and binary forms, with or without
* modification, are permitted provided that the following conditions
* are met:
* 1. Redistributions of source code must retain the above copyright
* notice, this list of conditions and the following disclaimer.
* 2. Redistributions in binary form must reproduce the above copyright
* notice, this list of conditions and the following disclaimer in the
* documentation and/or other materials provided with the distribution.
* 3. Neither the name of the copyright holders nor the names of its
* contributors may be used to endorse or promote products derived from
* this software without specific prior written permission.
*
* THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS"
* AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE
* ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE
* LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR
* CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF
* SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS
* INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN
* CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)
* ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF
* THE POSSIBILITY OF SUCH DAMAGE.
*/
/**
 * Constructs a new {@link Textifier}. <i>Subclasses must not use this
 * constructor</i>. Instead, they must use the {@link #Textifier(int)}
 * version.
 *
 * @throws IllegalStateException
 * If a subclass calls this constructor.
 */

```

Found in path(s):

`/opt/cola/permits/1137133810_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/util/Textifier.java`

No license file was found, but licenses were detected in source scan.

```

/**
 * ASM: a very small and fast Java bytecode manipulation framework
 * Copyright (c) 2000-2013 INRIA, France Telecom
 * All rights reserved.
 *
 * Redistribution and use in source and binary forms, with or without
 * modification, are permitted provided that the following conditions
 * are met:
 * 1. Redistributions of source code must retain the above copyright

```

\* notice, this list of conditions and the following disclaimer.  
\* 2. Redistributions in binary form must reproduce the above copyright  
\* notice, this list of conditions and the following disclaimer in the  
\* documentation and/or other materials provided with the distribution.  
\* 3. Neither the name of the copyright holders nor the names of its  
\* contributors may be used to endorse or promote products derived from  
\* this software without specific prior written permission.  
\*  
\* THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS"  
\* AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE  
\* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE  
\* ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE  
\* LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR  
\* CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF  
\* SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS  
\* INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN  
\* CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)  
\* ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF  
\* THE POSSIBILITY OF SUCH DAMAGE.  
\*/

Found in path(s):

\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/TypeReference.java  
\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/TypePath.java

No license file was found, but licenses were detected in source scan.

/\*\*

\* ASM: a very small and fast Java bytecode manipulation framework  
\* Copyright (c) 2000-2011 INRIA, France Telecom  
\* All rights reserved.

\*

\* Redistribution and use in source and binary forms, with or without  
\* modification, are permitted provided that the following conditions  
\* are met:

\* 1. Redistributions of source code must retain the above copyright  
\* notice, this list of conditions and the following disclaimer.  
\* 2. Redistributions in binary form must reproduce the above copyright  
\* notice, this list of conditions and the following disclaimer in the  
\* documentation and/or other materials provided with the distribution.  
\* 3. Neither the name of the copyright holders nor the names of its  
\* contributors may be used to endorse or promote products derived from  
\* this software without specific prior written permission.  
\*

\* THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS"  
\* AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE  
\* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE  
\* ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE  
\* LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR

```
* CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF
* SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS
* INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN
* CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)
* ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF
* THE POSSIBILITY OF SUCH DAMAGE.
```

```
*/
```

```
/**
```

```
 * Creates a new JSRInliner. <i>Subclasses must not use this
 * constructor</i>. Instead, they must use the
 * {@link #JSRInlinerAdapter(int, MethodVisitor, int, String, String, String, String[])}
 * version.
 *
 * @param mv
 * the MethodVisitor to send the resulting inlined
 * method code to (use null for none).
 * @param access
 * the method's access flags (see {@link Opcodes}). This
 * parameter also indicates if the method is synthetic and/or
 * deprecated.
 * @param name
 * the method's name.
 * @param desc
 * the method's descriptor (see {@link Type}).
 * @param signature
 * the method's signature. May be null.
 * @param exceptions
 * the internal names of the method's exception classes (see
 * {@link Type#getInternalName() getInternalName}). May be
 * null.
 * @throws IllegalStateException
 * If a subclass calls this constructor.
 */
```

Found in path(s):

```
* /opt/cola/permits/1137133810_1614022227.85/0/asm-5-0-1-sources-1-
jar/org/objectweb/asm/commons/JSRInlinerAdapter.java
```

No license file was found, but licenses were detected in source scan.

#All rights reserved.

#Redistribution and use in source and binary forms, with or without  
#modification, are permitted provided that the following conditions  
#are met:

- #1. Redistributions of source code must retain the above copyright  
# notice, this list of conditions and the following disclaimer.
- #2. Redistributions in binary form must reproduce the above copyright  
# notice, this list of conditions and the following disclaimer in the  
# documentation and/or other materials provided with the distribution.

#3. Neither the name of the copyright holders nor the names of its  
# this software without specific prior written permission.

Found in path(s):

\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/optimizer/shrink-signatures.properties

\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/optimizer/shrink-resize.properties

\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/optimizer/shrink-annotations.properties

\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/optimizer/shrink.properties

\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/optimizer/shrink-frames.properties

\* /opt/cola/permits/1137133810\_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/optimizer/shrink-writer.properties

No license file was found, but licenses were detected in source scan.

/\*\*

\* ASM: a very small and fast Java bytecode manipulation framework

\* Copyright (c) 2000-2011 INRIA, France Telecom

\* All rights reserved.

\*

\* Redistribution and use in source and binary forms, with or without

\* modification, are permitted provided that the following conditions

\* are met:

\* 1. Redistributions of source code must retain the above copyright

\* notice, this list of conditions and the following disclaimer.

\* 2. Redistributions in binary form must reproduce the above copyright

\* notice, this list of conditions and the following disclaimer in the

\* documentation and/or other materials provided with the distribution.

\* 3. Neither the name of the copyright holders nor the names of its

\* contributors may be used to endorse or promote products derived from

\* this software without specific prior written permission.

\*

\* THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS"

\* AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE

\* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE

\* ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE

\* LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR

\* CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF

\* SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS

\* INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN

\* CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)

\* ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF

\* THE POSSIBILITY OF SUCH DAMAGE.

\*/

/\*\*

```
* Constructs a new {@link ClassNode}. Subclasses must not use this
* constructor</i>. Instead, they must use the {@link #ClassNode(int)}
* version.
*
* @throws IllegalStateException
* If a subclass calls this constructor.
*/
```

Found in path(s):

```
*/opt/cola/permits/1137133810_1614022227.85/0/asm-5-0-1-sources-1-jar/org/objectweb/asm/tree/ClassNode.java
```

## 1.46 annotations 4.1.1.4

### 1.46.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
/*
* Copyright (C) 2012 The Android Open Source Project
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/
```

Found in path(s):

```
*/opt/cola/permits/1258811491_1643111603.33/0/annotations-4-1-1-4-sources-
jar/android/annotation/SuppressLint.java
*/opt/cola/permits/1258811491_1643111603.33/0/annotations-4-1-1-4-sources-
jar/android/annotation/TargetApi.java
```

## 1.47 opentelemetry-sdk 1.19.0

### 1.47.1 Available under license :

Apache-2.0

# 1.48 httpcomponents-client 4.5.13

## 1.48.1 Available under license :

Apache HttpComponents Client  
Copyright 1999-2020 The Apache Software Foundation

This product includes software developed at  
The Apache Software Foundation (<http://www.apache.org/>).

Apache License  
Version 2.0, January 2004  
<http://www.apache.org/licenses/>

### TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

#### 1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed



with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

=====

This project includes Public Suffix List copied from  
<[https://publicsuffix.org/list/effective\\_tld\\_names.dat](https://publicsuffix.org/list/effective_tld_names.dat)>  
licensed under the terms of the Mozilla Public License, v. 2.0

Full license text: <<http://mozilla.org/MPL/2.0/>>

## Mozilla Public License Version 2.0

=====

### 1. Definitions

-----

#### 1.1. "Contributor"

means each individual or legal entity that creates, contributes to the creation of, or owns Covered Software.

#### 1.2. "Contributor Version"

means the combination of the Contributions of others (if any) used by a Contributor and that particular Contributor's Contribution.

#### 1.3. "Contribution"

means Covered Software of a particular Contributor.

#### 1.4. "Covered Software"

means Source Code Form to which the initial Contributor has attached the notice in Exhibit A, the Executable Form of such Source Code Form, and Modifications of such Source Code Form, in each case including portions thereof.

#### 1.5. "Incompatible With Secondary Licenses"

means

(a) that the initial Contributor has attached the notice described in Exhibit B to the Covered Software; or

(b) that the Covered Software was made available under the terms of version 1.1 or earlier of the License, but not also under the terms of a Secondary License.

#### 1.6. "Executable Form"

means any form of the work other than Source Code Form.

#### 1.7. "Larger Work"

means a work that combines Covered Software with other material, in a separate file or files, that is not Covered Software.

#### 1.8. "License"

means this document.

#### 1.9. "Licensable"

means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently, any and

all of the rights conveyed by this License.

1.10. "Modifications"

means any of the following:

(a) any file in Source Code Form that results from an addition to, deletion from, or modification of the contents of Covered Software; or

(b) any new file in Source Code Form that contains any Covered Software.

1.11. "Patent Claims" of a Contributor

means any patent claim(s), including without limitation, method, process, and apparatus claims, in any patent Licensable by such Contributor that would be infringed, but for the grant of the License, by the making, using, selling, offering for sale, having made, import, or transfer of either its Contributions or its Contributor Version.

1.12. "Secondary License"

means either the GNU General Public License, Version 2.0, the GNU Lesser General Public License, Version 2.1, the GNU Affero General Public License, Version 3.0, or any later versions of those licenses.

1.13. "Source Code Form"

means the form of the work preferred for making modifications.

1.14. "You" (or "Your")

means an individual or a legal entity exercising rights under this License. For legal entities, "You" includes any entity that controls, is controlled by, or is under common control with You. For purposes of this definition, "control" means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity.

2. License Grants and Conditions

-----

2.1. Grants

Each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license:

(a) under intellectual property rights (other than patent or trademark)

Licensable by such Contributor to use, reproduce, make available, modify, display, perform, distribute, and otherwise exploit its Contributions, either on an unmodified basis, with Modifications, or as part of a Larger Work; and

(b) under Patent Claims of such Contributor to make, use, sell, offer for sale, have made, import, and otherwise transfer either its Contributions or its Contributor Version.

## 2.2. Effective Date

The licenses granted in Section 2.1 with respect to any Contribution become effective for each Contribution on the date the Contributor first distributes such Contribution.

## 2.3. Limitations on Grant Scope

The licenses granted in this Section 2 are the only rights granted under this License. No additional rights or licenses will be implied from the distribution or licensing of Covered Software under this License. Notwithstanding Section 2.1(b) above, no patent license is granted by a Contributor:

- (a) for any code that a Contributor has removed from Covered Software; or
- (b) for infringements caused by: (i) Your and any other third party's modifications of Covered Software, or (ii) the combination of its Contributions with other software (except as part of its Contributor Version); or
- (c) under Patent Claims infringed by Covered Software in the absence of its Contributions.

This License does not grant any rights in the trademarks, service marks, or logos of any Contributor (except as may be necessary to comply with the notice requirements in Section 3.4).

## 2.4. Subsequent Licenses

No Contributor makes additional grants as a result of Your choice to distribute the Covered Software under a subsequent version of this License (see Section 10.2) or under the terms of a Secondary License (if permitted under the terms of Section 3.3).

## 2.5. Representation

Each Contributor represents that the Contributor believes its

Contributions are its original creation(s) or it has sufficient rights to grant the rights to its Contributions conveyed by this License.

## 2.6. Fair Use

This License is not intended to limit any rights You have under applicable copyright doctrines of fair use, fair dealing, or other equivalents.

## 2.7. Conditions

Sections 3.1, 3.2, 3.3, and 3.4 are conditions of the licenses granted in Section 2.1.

## 3. Responsibilities

-----

### 3.1. Distribution of Source Form

All distribution of Covered Software in Source Code Form, including any Modifications that You create or to which You contribute, must be under the terms of this License. You must inform recipients that the Source Code Form of the Covered Software is governed by the terms of this License, and how they can obtain a copy of this License. You may not attempt to alter or restrict the recipients' rights in the Source Code Form.

### 3.2. Distribution of Executable Form

If You distribute Covered Software in Executable Form then:

- (a) such Covered Software must also be made available in Source Code Form, as described in Section 3.1, and You must inform recipients of the Executable Form how they can obtain a copy of such Source Code Form by reasonable means in a timely manner, at a charge no more than the cost of distribution to the recipient; and
- (b) You may distribute such Executable Form under the terms of this License, or sublicense it under different terms, provided that the license for the Executable Form does not attempt to limit or alter the recipients' rights in the Source Code Form under this License.

### 3.3. Distribution of a Larger Work

You may create and distribute a Larger Work under terms of Your choice, provided that You also comply with the requirements of this License for the Covered Software. If the Larger Work is a combination of Covered Software with a work governed by one or more Secondary Licenses, and the

Covered Software is not Incompatible With Secondary Licenses, this License permits You to additionally distribute such Covered Software under the terms of such Secondary License(s), so that the recipient of the Larger Work may, at their option, further distribute the Covered Software under the terms of either this License or such Secondary License(s).

### 3.4. Notices

You may not remove or alter the substance of any license notices (including copyright notices, patent notices, disclaimers of warranty, or limitations of liability) contained within the Source Code Form of the Covered Software, except that You may alter any license notices to the extent required to remedy known factual inaccuracies.

### 3.5. Application of Additional Terms

You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Software. However, You may do so only on Your own behalf, and not on behalf of any Contributor. You must make it absolutely clear that any such warranty, support, indemnity, or liability obligation is offered by You alone, and You hereby agree to indemnify every Contributor for any liability incurred by such Contributor as a result of warranty, support, indemnity or liability terms You offer. You may include additional disclaimers of warranty and limitations of liability specific to any jurisdiction.

## 4. Inability to Comply Due to Statute or Regulation

-----

If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Covered Software due to statute, judicial order, or regulation then You must: (a) comply with the terms of this License to the maximum extent possible; and (b) describe the limitations and the code they affect. Such description must be placed in a text file included with all distributions of the Covered Software under this License. Except to the extent prohibited by statute or regulation, such description must be sufficiently detailed for a recipient of ordinary skill to be able to understand it.

## 5. Termination

-----

5.1. The rights granted under this License will terminate automatically if You fail to comply with any of its terms. However, if You become compliant, then the rights granted under this License from a particular Contributor are reinstated (a) provisionally, unless and until such

Contributor explicitly and finally terminates Your grants, and (b) on an ongoing basis, if such Contributor fails to notify You of the non-compliance by some reasonable means prior to 60 days after You have come back into compliance. Moreover, Your grants from a particular Contributor are reinstated on an ongoing basis if such Contributor notifies You of the non-compliance by some reasonable means, this is the first time You have received notice of non-compliance with this License from such Contributor, and You become compliant prior to 30 days after Your receipt of the notice.

5.2. If You initiate litigation against any entity by asserting a patent infringement claim (excluding declaratory judgment actions, counter-claims, and cross-claims) alleging that a Contributor Version directly or indirectly infringes any patent, then the rights granted to You by any and all Contributors for the Covered Software under Section 2.1 of this License shall terminate.

5.3. In the event of termination under Sections 5.1 or 5.2 above, all end user license agreements (excluding distributors and resellers) which have been validly granted by You or Your distributors under this License prior to termination shall survive termination.

\*\*\*\*\*

```
*
*
* 6. Disclaimer of Warranty
* -----
*
* Covered Software is provided under this License on an "as is"
* basis, without warranty of any kind, either expressed, implied, or
* statutory, including, without limitation, warranties that the
* Covered Software is free of defects, merchantable, fit for a
* particular purpose or non-infringing. The entire risk as to the
* quality and performance of the Covered Software is with You.
* Should any Covered Software prove defective in any respect, You
* (not any Contributor) assume the cost of any necessary servicing,
* repair, or correction. This disclaimer of warranty constitutes an
* essential part of this License. No use of any Covered Software is
* authorized under this License except under this disclaimer.
*
```

\*\*\*\*\*

\*\*\*\*\*

```
*
*
* 7. Limitation of Liability
* -----
*
* Under no circumstances and under no legal theory, whether tort
* (including negligence), contract, or otherwise, shall any
```

\* Contributor, or anyone who distributes Covered Software as \*  
 \* permitted above, be liable to You for any direct, indirect, \*  
 \* special, incidental, or consequential damages of any character \*  
 \* including, without limitation, damages for lost profits, loss of \*  
 \* goodwill, work stoppage, computer failure or malfunction, or any \*  
 \* and all other commercial damages or losses, even if such party \*  
 \* shall have been informed of the possibility of such damages. This \*  
 \* limitation of liability shall not apply to liability for death or \*  
 \* personal injury resulting from such party's negligence to the \*  
 \* extent applicable law prohibits such limitation. Some \*  
 \* jurisdictions do not allow the exclusion or limitation of \*  
 \* incidental or consequential damages, so this exclusion and \*  
 \* limitation may not apply to You. \*

\*

\*\*\*\*\*

## 8. Litigation

-----

Any litigation relating to this License may be brought only in the courts of a jurisdiction where the defendant maintains its principal place of business and such litigation shall be governed by laws of that jurisdiction, without reference to its conflict-of-law provisions. Nothing in this Section shall prevent a party's ability to bring cross-claims or counter-claims.

## 9. Miscellaneous

-----

This License represents the complete agreement concerning the subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not be used to construe this License against a Contributor.

## 10. Versions of the License

-----

### 10.1. New Versions

Mozilla Foundation is the license steward. Except as provided in Section 10.3, no one other than the license steward has the right to modify or publish new versions of this License. Each version will be given a distinguishing version number.

### 10.2. Effect of New Versions



You may distribute the Covered Software under the terms of the version of the License under which You originally received the Covered Software, or under the terms of any subsequent version published by the license steward.

### 10.3. Modified Versions

If you create software not governed by this License, and you want to create a new license for such software, you may create and use a modified version of this License if you rename the license and remove any references to the name of the license steward (except to note that such modified license differs from this License).

### 10.4. Distributing Source Code Form that is Incompatible With Secondary Licenses

If You choose to distribute Source Code Form that is Incompatible With Secondary Licenses under the terms of this version of the License, the notice described in Exhibit B of this License must be attached.

#### Exhibit A - Source Code Form License Notice

-----

This Source Code Form is subject to the terms of the Mozilla Public License, v. 2.0. If a copy of the MPL was not distributed with this file, You can obtain one at <http://mozilla.org/MPL/2.0/>.

If it is not possible or desirable to put the notice in a particular file, then You may include the notice in a location (such as a LICENSE file in a relevant directory) where a recipient would be likely to look for such a notice.

You may add additional accurate notices of copyright ownership.

#### Exhibit B - "Incompatible With Secondary Licenses" Notice

-----

This Source Code Form is "Incompatible With Secondary Licenses", as defined by the Mozilla Public License, v. 2.0.

## 1.49 failureaccess 1.0.1

# 1.50 jsr305 3.0.2

## 1.50.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
/*
* Copyright (c) 2005 Brian Goetz
* Released under the Creative Commons Attribution License
* (http://creativecommons.org/licenses/by/2.5)
* Official home: http://www.jcip.net
*/
```

Found in path(s):

```
* /opt/cola/permits/1656638364_1682593601.2844107/0/jsr305-3-0-2-sources-9-
jar/javax/annotation/concurrent/ThreadSafe.java
* /opt/cola/permits/1656638364_1682593601.2844107/0/jsr305-3-0-2-sources-9-
jar/javax/annotation/concurrent/NotThreadSafe.java
* /opt/cola/permits/1656638364_1682593601.2844107/0/jsr305-3-0-2-sources-9-
jar/javax/annotation/concurrent/Immutable.java
* /opt/cola/permits/1656638364_1682593601.2844107/0/jsr305-3-0-2-sources-9-
jar/javax/annotation/concurrent/GuardedBy.java
```

# 1.51 log4cxx 0.11.0

## 1.51.1 Available under license :

```
<!--
```

Licensed to the Apache Software Foundation (ASF) under one or more contributor license agreements. See the NOTICE file distributed with this work for additional information regarding copyright ownership. The ASF licenses this file to You under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

```
-->
```

```
</body>
```

```
</html>
```

Apache log4cxx

Copyright 2004-2007 The Apache Software Foundation

This product includes software developed by  
The Apache Software Foundation (<http://www.apache.org/>).

Apache License  
Version 2.0, January 2004  
<http://www.apache.org/licenses/>

## TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

### 1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of,

the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.
  
8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.
  
9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

## END OF TERMS AND CONDITIONS

### APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software  
distributed under the License is distributed on an "AS IS" BASIS,  
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
See the License for the specific language governing permissions and  
limitations under the License.

## 1.52 libjpeg 6b

### 1.52.1 Notifications :

This software is based in part on the work of the Independent JPEG Group.

### 1.52.2 Available under license :

The Independent JPEG Group's JPEG software

=====  
README for release 6b of 27-Mar-1998  
=====

This distribution contains the sixth public release of the Independent JPEG  
Group's free JPEG software. You are welcome to redistribute this software and  
to use it for any purpose, subject to the conditions under LEGAL ISSUES, below.

Serious users of this software (particularly those incorporating it into  
larger programs) should contact IJG at [jpeg-info@uunet.uu.net](mailto:jpeg-info@uunet.uu.net) to be added to  
our electronic mailing list. Mailing list members are notified of updates  
and have a chance to participate in technical discussions, etc.

This software is the work of Tom Lane, Philip Gladstone, Jim Boucher,  
Lee Crocker, Julian Minguillon, Luis Ortiz, George Phillips, Davide Rossi,  
Guido Vollbeding, Ge' Weijers, and other members of the Independent JPEG  
Group.

IJG is not affiliated with the official ISO JPEG standards committee.

#### DOCUMENTATION ROADMAP

=====  
This file contains the following sections:

OVERVIEW      General description of JPEG and the IJG software.

LEGAL ISSUES      Copyright, lack of warranty, terms of distribution.  
REFERENCES        Where to learn more about JPEG.  
ARCHIVE LOCATIONS    Where to find newer versions of this software.  
RELATED SOFTWARE    Other stuff you should get.  
FILE FORMAT WARS    Software \*not\* to get.  
TO DO                Plans for future IJG releases.

Other documentation files in the distribution are:

User documentation:

install.doc      How to configure and install the IJG software.  
usage.doc        Usage instructions for cjpeg, djpeg, jpegtran,  
                  rdjpgcom, and wrjpgcom.  
\*.1                Unix-style man pages for programs (same info as usage.doc).  
wizard.doc      Advanced usage instructions for JPEG wizards only.  
change.log      Version-to-version change highlights.

Programmer and internal documentation:

libjpeg.doc     How to use the JPEG library in your own programs.  
example.c       Sample code for calling the JPEG library.  
structure.doc    Overview of the JPEG library's internal structure.  
filelist.doc    Road map of IJG files.  
coderules.doc   Coding style rules --- please read if you contribute code.

Please read at least the files install.doc and usage.doc. Useful information can also be found in the JPEG FAQ (Frequently Asked Questions) article. See ARCHIVE LOCATIONS below to find out where to obtain the FAQ article.

If you want to understand how the JPEG code works, we suggest reading one or more of the REFERENCES, then looking at the documentation files (in roughly the order listed) before diving into the code.

## OVERVIEW

=====

This package contains C software to implement JPEG image compression and decompression. JPEG (pronounced "jay-peg") is a standardized compression method for full-color and gray-scale images. JPEG is intended for compressing "real-world" scenes; line drawings, cartoons and other non-realistic images are not its strong suit. JPEG is lossy, meaning that the output image is not exactly identical to the input image. Hence you must not use JPEG if you have to have identical output bits. However, on typical photographic images, very good compression levels can be obtained with no visible change, and remarkably high compression levels are possible if you can tolerate a low-quality image. For more details, see the references, or just experiment with various compression settings.

This software implements JPEG baseline, extended-sequential, and progressive



compression processes. Provision is made for supporting all variants of these processes, although some uncommon parameter settings aren't implemented yet. For legal reasons, we are not distributing code for the arithmetic-coding variants of JPEG; see LEGAL ISSUES. We have made no provision for supporting the hierarchical or lossless processes defined in the standard.

We provide a set of library routines for reading and writing JPEG image files, plus two sample applications "cjpeg" and "djpeg", which use the library to perform conversion between JPEG and some other popular image file formats. The library is intended to be reused in other applications.

In order to support file conversion and viewing software, we have included considerable functionality beyond the bare JPEG coding/decoding capability; for example, the color quantization modules are not strictly part of JPEG decoding, but they are essential for output to colormapped file formats or colormapped displays. These extra functions can be compiled out of the library if not required for a particular application. We have also included "jpegtran", a utility for lossless transcoding between different JPEG processes, and "rdjpgcom" and "wrjpgcom", two simple applications for inserting and extracting textual comments in JFIF files.

The emphasis in designing this software has been on achieving portability and flexibility, while also making it fast enough to be useful. In particular, the software is not intended to be read as a tutorial on JPEG. (See the REFERENCES section for introductory material.) Rather, it is intended to be reliable, portable, industrial-strength code. We do not claim to have achieved that goal in every aspect of the software, but we strive for it.

We welcome the use of this software as a component of commercial products. No royalty is required, but we do ask for an acknowledgement in product documentation, as described under LEGAL ISSUES.

## LEGAL ISSUES

=====

In plain English:

1. We don't promise that this software works. (But if you find any bugs, please let us know!)
2. You can use this software for whatever you want. You don't have to pay us.
3. You may not pretend that you wrote this software. If you use it in a program, you must acknowledge somewhere in your documentation that you've used the IJG code.

In legalese:

The authors make NO WARRANTY or representation, either express or implied,

with respect to this software, its quality, accuracy, merchantability, or fitness for a particular purpose. This software is provided "AS IS", and you, its user, assume the entire risk as to its quality and accuracy.

This software is copyright (C) 1991-1998, Thomas G. Lane.  
All Rights Reserved except as specified below.

Permission is hereby granted to use, copy, modify, and distribute this software (or portions thereof) for any purpose, without fee, subject to these conditions:

- (1) If any part of the source code for this software is distributed, then this README file must be included, with this copyright and no-warranty notice unaltered; and any additions, deletions, or changes to the original files must be clearly indicated in accompanying documentation.
- (2) If only executable code is distributed, then the accompanying documentation must state that "this software is based in part on the work of the Independent JPEG Group".
- (3) Permission for use of this software is granted only if the user accepts full responsibility for any undesirable consequences; the authors accept NO LIABILITY for damages of any kind.

These conditions apply to any software derived from or based on the IJG code, not just to the unmodified library. If you use our work, you ought to acknowledge us.

Permission is NOT granted for the use of any IJG author's name or company name in advertising or publicity relating to this software or products derived from it. This software may be referred to only as "the Independent JPEG Group's software".

We specifically permit and encourage the use of this software as the basis of commercial products, provided that all warranty or liability claims are assumed by the product vendor.

ansi2knr.c is included in this distribution by permission of L. Peter Deutsch, sole proprietor of its copyright holder, Aladdin Enterprises of Menlo Park, CA. ansi2knr.c is NOT covered by the above copyright and conditions, but instead by the usual distribution terms of the Free Software Foundation; principally, that you must include source code if you redistribute it. (See the file ansi2knr.c for full details.) However, since ansi2knr.c is not needed as part of any program generated from the IJG code, this does not limit you more than the foregoing paragraphs do.

The Unix configuration script "configure" was produced with GNU Autoconf. It is copyright by the Free Software Foundation but is freely distributable. The same holds for its supporting scripts (config.guess, config.sub, ltconfig, ltmain.sh). Another support script, install-sh, is copyright

by M.I.T. but is also freely distributable.

It appears that the arithmetic coding option of the JPEG spec is covered by patents owned by IBM, AT&T, and Mitsubishi. Hence arithmetic coding cannot legally be used without obtaining one or more licenses. For this reason, support for arithmetic coding has been removed from the free JPEG software. (Since arithmetic coding provides only a marginal gain over the unpatented Huffman mode, it is unlikely that very many implementations will support it.) So far as we are aware, there are no patent restrictions on the remaining code.

The IJG distribution formerly included code to read and write GIF files. To avoid entanglement with the Unisys LZW patent, GIF reading support has been removed altogether, and the GIF writer has been simplified to produce "uncompressed GIFs". This technique does not use the LZW algorithm; the resulting GIF files are larger than usual, but are readable by all standard GIF decoders.

We are required to state that

"The Graphics Interchange Format(c) is the Copyright property of CompuServe Incorporated. GIF(sm) is a Service Mark property of CompuServe Incorporated."

## REFERENCES

=====

We highly recommend reading one or more of these references before trying to understand the innards of the JPEG software.

The best short technical introduction to the JPEG compression algorithm is Wallace, Gregory K. "The JPEG Still Picture Compression Standard", Communications of the ACM, April 1991 (vol. 34 no. 4), pp. 30-44. (Adjacent articles in that issue discuss MPEG motion picture compression, applications of JPEG, and related topics.) If you don't have the CACM issue handy, a PostScript file containing a revised version of Wallace's article is available at <ftp://ftp.uu.net/graphics/jpeg/wallace.ps.gz>. The file (actually a preprint for an article that appeared in IEEE Trans. Consumer Electronics) omits the sample images that appeared in CACM, but it includes corrections and some added material. Note: the Wallace article is copyright ACM and IEEE, and it may not be used for commercial purposes.

A somewhat less technical, more leisurely introduction to JPEG can be found in "The Data Compression Book" by Mark Nelson and Jean-loup Gailly, published by M&T Books (New York), 2nd ed. 1996, ISBN 1-55851-434-1. This book provides good explanations and example C code for a multitude of compression methods including JPEG. It is an excellent source if you are comfortable reading C code but don't know much about data compression in general. The book's JPEG

sample code is far from industrial-strength, but when you are ready to look at a full implementation, you've got one here...

The best full description of JPEG is the textbook "JPEG Still Image Data Compression Standard" by William B. Pennebaker and Joan L. Mitchell, published by Van Nostrand Reinhold, 1993, ISBN 0-442-01272-1. Price US\$59.95, 638 pp. The book includes the complete text of the ISO JPEG standards (DIS 10918-1 and draft DIS 10918-2). This is by far the most complete exposition of JPEG in existence, and we highly recommend it.

The JPEG standard itself is not available electronically; you must order a paper copy through ISO or ITU. (Unless you feel a need to own a certified official copy, we recommend buying the Pennebaker and Mitchell book instead; it's much cheaper and includes a great deal of useful explanatory material.) In the USA, copies of the standard may be ordered from ANSI Sales at (212) 642-4900, or from Global Engineering Documents at (800) 854-7179. (ANSI doesn't take credit card orders, but Global does.) It's not cheap: as of 1992, ANSI was charging \$95 for Part 1 and \$47 for Part 2, plus 7% shipping/handling. The standard is divided into two parts, Part 1 being the actual specification, while Part 2 covers compliance testing methods. Part 1 is titled "Digital Compression and Coding of Continuous-tone Still Images, Part 1: Requirements and guidelines" and has document numbers ISO/IEC IS 10918-1, ITU-T T.81. Part 2 is titled "Digital Compression and Coding of Continuous-tone Still Images, Part 2: Compliance testing" and has document numbers ISO/IEC IS 10918-2, ITU-T T.83.

Some extensions to the original JPEG standard are defined in JPEG Part 3, a newer ISO standard numbered ISO/IEC IS 10918-3 and ITU-T T.84. IJG currently does not support any Part 3 extensions.

The JPEG standard does not specify all details of an interchangeable file format. For the omitted details we follow the "JFIF" conventions, revision 1.02. A copy of the JFIF spec is available from:

Literature Department  
C-Cube Microsystems, Inc.  
1778 McCarthy Blvd.  
Milpitas, CA 95035  
phone (408) 944-6300, fax (408) 944-6314

A PostScript version of this document is available by FTP at <ftp://ftp.uu.net/graphics/jpeg/jfif.ps.gz>. There is also a plain text version at <ftp://ftp.uu.net/graphics/jpeg/jfif.txt.gz>, but it is missing the figures.

The TIFF 6.0 file format specification can be obtained by FTP from <ftp://ftp.sgi.com/graphics/tiff/TIFF6.ps.gz>. The JPEG incorporation scheme found in the TIFF 6.0 spec of 3-June-92 has a number of serious problems. IJG does not recommend use of the TIFF 6.0 design (TIFF Compression tag 6). Instead, we recommend the JPEG design proposed by TIFF Technical Note #2

(Compression tag 7). Copies of this Note can be obtained from [ftp.sgi.com](ftp://ftp.sgi.com) or from <ftp://ftp.uu.net/graphics/jpeg/>. It is expected that the next revision of the TIFF spec will replace the 6.0 JPEG design with the Note's design. Although IJG's own code does not support TIFF/JPEG, the free libtiff library uses our library to implement TIFF/JPEG per the Note. libtiff is available from <ftp://ftp.sgi.com/graphics/tiff/>.

## ARCHIVE LOCATIONS

=====

The "official" archive site for this software is <ftp.uu.net> (Internet address 192.48.96.9). The most recent released version can always be found there in directory [graphics/jpeg](ftp://ftp.uu.net/graphics/jpeg/). This particular version will be archived as <ftp://ftp.uu.net/graphics/jpeg/jpegsrc.v6b.tar.gz>. If you don't have direct Internet access, UUNET's archives are also available via UUCP; contact [help@uunet.uu.net](mailto:help@uunet.uu.net) for information on retrieving files that way.

Numerous Internet sites maintain copies of the UUNET files. However, only <ftp.uu.net> is guaranteed to have the latest official version.

You can also obtain this software in DOS-compatible "zip" archive format from the SimTel archives (<ftp://ftp.simtel.net/pub/simtelnet/msdos/graphics/>), or on CompuServe in the Graphics Support forum (GO CIS:GRAPHSUP), library 12 "JPEG Tools". Again, these versions may sometimes lag behind the <ftp.uu.net> release.

The JPEG FAQ (Frequently Asked Questions) article is a useful source of general information about JPEG. It is updated constantly and therefore is not included in this distribution. The FAQ is posted every two weeks to Usenet newsgroups [comp.graphics.misc](news:comp.graphics.misc), [news.answers](news:news.answers), and other groups. It is available on the World Wide Web at <http://www.faqs.org/faqs/jpeg-faq/> and other [news.answers](news:news.answers) archive sites, including the official [news.answers](news:news.answers) archive at [rtfm.mit.edu: ftp://rtfm.mit.edu/pub/usenet/news.answers/jpeg-faq/](ftp://rtfm.mit.edu/pub/usenet/news.answers/jpeg-faq/). If you don't have Web or FTP access, send e-mail to [mail-server@rtfm.mit.edu](mailto:mail-server@rtfm.mit.edu) with body

send [usenet/news.answers/jpeg-faq/part1](news:usenet/news.answers/jpeg-faq/part1)

send [usenet/news.answers/jpeg-faq/part2](news:usenet/news.answers/jpeg-faq/part2)

## RELATED SOFTWARE

=====

Numerous viewing and image manipulation programs now support JPEG. (Quite a few of them use this library to do so.) The JPEG FAQ described above lists some of the more popular free and shareware viewers, and tells where to obtain them on Internet.

If you are on a Unix machine, we highly recommend Jef Poskanzer's free PBPLUS software, which provides many useful operations on PPM-format image files. In particular, it can convert PPM images to and from a wide range of other formats, thus making cjpeg/djpeg considerably more useful. The latest version is distributed by the NetPBM group, and is available from numerous sites, notably <ftp://wuarchive.wustl.edu/graphics/graphics/packages/NetPBM/>. Unfortunately PBPLUS/NETPBM is not nearly as portable as the IJG software is; you are likely to have difficulty making it work on any non-Unix machine.

A different free JPEG implementation, written by the PVRG group at Stanford, is available from <ftp://havefun.stanford.edu/pub/jpeg/>. This program is designed for research and experimentation rather than production use; it is slower, harder to use, and less portable than the IJG code, but it is easier to read and modify. Also, the PVRG code supports lossless JPEG, which we do not. (On the other hand, it doesn't do progressive JPEG.)

## FILE FORMAT WARS

=====

Some JPEG programs produce files that are not compatible with our library. The root of the problem is that the ISO JPEG committee failed to specify a concrete file format. Some vendors "filled in the blanks" on their own, creating proprietary formats that no one else could read. (For example, none of the early commercial JPEG implementations for the Macintosh were able to exchange compressed files.)

The file format we have adopted is called JFIF (see REFERENCES). This format has been agreed to by a number of major commercial JPEG vendors, and it has become the de facto standard. JFIF is a minimal or "low end" representation. We recommend the use of TIFF/JPEG (TIFF revision 6.0 as modified by TIFF Technical Note #2) for "high end" applications that need to record a lot of additional data about an image. TIFF/JPEG is fairly new and not yet widely supported, unfortunately.

The upcoming JPEG Part 3 standard defines a file format called SPIFF. SPIFF is interoperable with JFIF, in the sense that most JFIF decoders should be able to read the most common variant of SPIFF. SPIFF has some technical advantages over JFIF, but its major claim to fame is simply that it is an official standard rather than an informal one. At this point it is unclear whether SPIFF will supersede JFIF or whether JFIF will remain the de-facto standard. IJG intends to support SPIFF once the standard is frozen, but we have not decided whether it should become our default output format or not. (In any case, our decoder will remain capable of reading JFIF indefinitely.)

Various proprietary file formats incorporating JPEG compression also exist. We have little or no sympathy for the existence of these formats. Indeed, one of the original reasons for developing this free software was to help

force convergence on common, open format standards for JPEG files. Don't use a proprietary file format!

TO DO

=====

The major thrust for v7 will probably be improvement of visual quality. The current method for scaling the quantization tables is known not to be very good at low Q values. We also intend to investigate block boundary smoothing, "poor man's variable quantization", and other means of improving quality-vs-file-size performance without sacrificing compatibility.

In future versions, we are considering supporting some of the upcoming JPEG Part 3 extensions --- principally, variable quantization and the SPIFF file format.

As always, speeding things up is of great interest.

Please send bug reports, offers of help, etc. to [jpeg-info@uunet.uu.net](mailto:jpeg-info@uunet.uu.net).

## 1.53 gson 2.8.9

### 1.53.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2011 Google Inc.
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

```
* /opt/cola/permits/1330613678_1652979131.328877/0/gson-2-8-9-sources-2-
jar/com/google/gson/internal/bind/TreeTypeAdapter.java
* /opt/cola/permits/1330613678_1652979131.328877/0/gson-2-8-9-sources-2-
jar/com/google/gson/internal/bind/DateTypeAdapter.java
```

\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/ConstructorConstructor.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/sql/SqlDateTypeAdapter.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/UnsafeAllocator.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/sql/SqlTimeTypeAdapter.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/LazilyParsedNumber.java  
No license file was found, but licenses were detected in source scan.

/\*  
\* Copyright (C) 2018 The Gson authors  
\*  
\* Licensed under the Apache License, Version 2.0 (the "License");  
\* you may not use this file except in compliance with the License.  
\* You may obtain a copy of the License at  
\*  
\* <http://www.apache.org/licenses/LICENSE-2.0>  
\*  
\* Unless required by applicable law or agreed to in writing, software  
\* distributed under the License is distributed on an "AS IS" BASIS,  
\* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
\* See the License for the specific language governing permissions and  
\* limitations under the License.  
\*/

Found in path(s):

\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/GsonBuildConfig.java  
No license file was found, but licenses were detected in source scan.

/\*  
\* Copyright (C) 2011 Google Inc.  
\*  
\* Licensed under the Apache License, Version 2.0 (the "License");  
\* you may not use this file except in compliance with the License.  
\* You may obtain a copy of the License at  
\*  
\* <http://www.apache.org/licenses/LICENSE-2.0>  
\*  
\* Unless required by applicable law or agreed to in writing, software  
\* distributed under the License is distributed on an "AS IS" BASIS,  
\* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
\* See the License for the specific language governing permissions and  
\* limitations under the License.  
\*/



Found in path(s):

- \* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/bind/ArrayTypeAdapter.java
- \* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/bind/JsonTreeReader.java
- \* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/bind/TypeAdapterRuntimeTypeWrapper.java
- \* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/bind/CollectionTypeAdapterFactory.java
- \* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/bind/MapTypeAdapterFactory.java
- \* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/TypeAdapterFactory.java
- \* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/JsonReaderInternalAccess.java
- \* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/bind/ReflectiveTypeAdapterFactory.java
- \* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/bind/TypeAdapters.java
- \* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/bind/ObjectTypeAdapter.java
- \* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/TypeAdapter.java
- \* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/bind/JsonTreeWriter.java

No license file was found, but licenses were detected in source scan.

/\*

\* Copyright (C) 2009 Google Inc.

\*

\* Licensed under the Apache License, Version 2.0 (the "License");

\* you may not use this file except in compliance with the License.

\* You may obtain a copy of the License at

\*

\* <http://www.apache.org/licenses/LICENSE-2.0>

\*

\* Unless required by applicable law or agreed to in writing, software

\* distributed under the License is distributed on an "AS IS" BASIS,

\* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

\* See the License for the specific language governing permissions and

\* limitations under the License.

\*/

Found in path(s):

- \* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/JsonStreamParser.java
- \* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-

jar/com/google/gson/LongSerializationPolicy.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-  
jar/com/google/gson/FieldAttributes.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/JsonParser.java  
No license file was found, but licenses were detected in source scan.

```
/**
 * Copyright (C) 2008 Google Inc.
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-  
jar/com/google/gson/internal/\$Gson\$Types.java  
No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2008 Google Inc.
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-  
jar/com/google/gson/JsonElement.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/JsonObject.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/JsonArray.java

\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/FieldNamingStrategy.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/annotations/SerializedName.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/JsonDeserializationContext.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/Excluder.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/FieldNamingPolicy.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/\$Gson\$Preconditions.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/bind/DefaultDateTypeAdapter.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/JsonSerializationContext.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/JsonParseException.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/ObjectConstructor.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/Gson.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/JsonIOException.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/reflect/TypeToken.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/JsonDeserializer.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/annotations/Expose.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/Primitives.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/GsonBuilder.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/JsonSerializer.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/annotations/Since.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/JsonPrimitive.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/ExclusionStrategy.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/annotations/Until.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/InstanceCreator.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/JsonNull.java

No license file was found, but licenses were detected in source scan.

```
/*
 * Copyright (C) 2010 The Android Open Source Project
 * Copyright (C) 2012 Google Inc.
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

```
* /opt/cola/permits/1330613678_1652979131.328877/0/gson-2-8-9-sources-2-
jar/com/google/gson/internal/LinkedHashMap.java
* /opt/cola/permits/1330613678_1652979131.328877/0/gson-2-8-9-sources-2-
jar/com/google/gson/internal/LinkedTreeMap.java
No license file was found, but licenses were detected in source scan.
```

```
/*
 * Copyright (C) 2010 Google Inc.
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

```
* /opt/cola/permits/1330613678_1652979131.328877/0/gson-2-8-9-sources-2-
jar/com/google/gson/stream/JsonReader.java
* /opt/cola/permits/1330613678_1652979131.328877/0/gson-2-8-9-sources-2-
jar/com/google/gson/stream/MalformedJsonException.java
* /opt/cola/permits/1330613678_1652979131.328877/0/gson-2-8-9-sources-2-
jar/com/google/gson/stream/JsonScope.java
* /opt/cola/permits/1330613678_1652979131.328877/0/gson-2-8-9-sources-2-
```

jar/com/google/gson/stream/JsonToken.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-  
jar/com/google/gson/stream/JsonWriter.java  
No license file was found, but licenses were detected in source scan.

```
/*
* Copyright (C) 2017 The Gson authors
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/
```

Found in path(s):

\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-  
jar/com/google/gson/internal/reflect/PreJava9ReflectionAccessor.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-  
jar/com/google/gson/internal/reflect/ReflectionAccessor.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-  
jar/com/google/gson/internal/reflect/UnsafeReflectionAccessor.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-  
jar/com/google/gson/internal/PreJava9DateFormatProvider.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-  
jar/com/google/gson/internal/JavaVersion.java  
No license file was found, but licenses were detected in source scan.

```
/*
* Copyright (C) 2021 Google Inc.
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
```

\*/

Found in path(s):

\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/ToNumberPolicy.java

\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/ToNumberStrategy.java

No license file was found, but licenses were detected in source scan.

/\*

\* Copyright (C) 2020 Google Inc.

\*

\* Licensed under the Apache License, Version 2.0 (the "License");

\* you may not use this file except in compliance with the License.

\* You may obtain a copy of the License at

\*

\* <http://www.apache.org/licenses/LICENSE-2.0>

\*

\* Unless required by applicable law or agreed to in writing, software

\* distributed under the License is distributed on an "AS IS" BASIS,

\* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

\* See the License for the specific language governing permissions and

\* limitations under the License.

\*/

Found in path(s):

\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-jar/com/google/gson/internal/bind/NumberTypeAdapter.java

No license file was found, but licenses were detected in source scan.

/\*

\* Copyright (C) 2010 Google Inc.

\*

\* Licensed under the Apache License, Version 2.0 (the "License");

\* you may not use this file except in compliance with the License.

\* You may obtain a copy of the License at

\*

\* <http://www.apache.org/licenses/LICENSE-2.0>

\*

\* Unless required by applicable law or agreed to in writing, software

\* distributed under the License is distributed on an "AS IS" BASIS,

\* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

\* See the License for the specific language governing permissions and

\* limitations under the License.

\*/

Found in path(s):

\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-

jar/com/google/gson/JsonSyntaxException.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-  
jar/com/google/gson/internal/Streams.java  
No license file was found, but licenses were detected in source scan.

```
/*
* Copyright (C) 2014 Google Inc.
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/
```

Found in path(s):

\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-  
jar/com/google/gson/internal/bind/JsonAdapterAnnotationTypeAdapterFactory.java  
\* /opt/cola/permits/1330613678\_1652979131.328877/0/gson-2-8-9-sources-2-  
jar/com/google/gson/annotations/JsonAdapter.java

## 1.54 dom 1.0

### 1.54.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
/*
* Copyright (c) 2001 World Wide Web Consortium,
* (Massachusetts Institute of Technology, Institut National de
* Recherche en Informatique et en Automatique, Keio University). All
* Rights Reserved. This program is distributed under the W3C's Software
* Intellectual Property License. This program is distributed in the
* hope that it will be useful, but WITHOUT ANY WARRANTY; without even
* the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR
* PURPOSE.
* See W3C License http://www.w3.org/Consortium/Legal/ for more details.
*/
```

Found in path(s):

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/dom3/as/ElementEditAS.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/ASNotationDeclaration.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/ASObject.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/CharacterDataEditAS.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/DOMImplementationAS.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/ASModel.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/DocumentAS.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/ASAttributeDeclaration.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/ASElementDeclaration.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/ASEntityDeclaration.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/ASNamedObjectMap.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/ASDataType.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/ASContentModel.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/DOMASWriter.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/DocumentEditAS.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/ASObjectList.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/DOMASBuilder.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/DOMASException.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom3/as/NodeEditAS.java

No license file was found, but licenses were detected in source scan.

Licensed to the Apache Software Foundation (ASF) under one or more contributor license agreements. See the NOTICE file distributed with this work for additional information regarding copyright ownership. The ASF licenses this file to You under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE>

2.0



Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Found in path(s):

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/datatypes/package.html

No license file was found, but licenses were detected in source scan.

/\*

\* Copyright (c) 2000 World Wide Web Consortium,  
\* (Massachusetts Institute of Technology, Institut National de  
\* Recherche en Informatique et en Automatique, Keio University). All  
\* Rights Reserved. This program is distributed under the W3C's Software  
\* Intellectual Property License. This program is distributed in the  
\* hope that it will be useful, but WITHOUT ANY WARRANTY; without even  
\* the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR  
\* PURPOSE. See W3C License <http://www.w3.org/Consortium/Legal/> for more  
\* details.  
\*/

Found in path(s):

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/w3c/dom/html/HTMLDOMImplementation.java

No license file was found, but licenses were detected in source scan.

/\*

\* Licensed to the Apache Software Foundation (ASF) under one or more  
\* contributor license agreements. See the NOTICE file distributed with  
\* this work for additional information regarding copyright ownership.  
\* The ASF licenses this file to You under the Apache License, Version 2.0  
\* (the "License"); you may not use this file except in compliance with  
\* the License. You may obtain a copy of the License at  
\*  
\* <http://www.apache.org/licenses/LICENSE-2.0>  
\*  
\* Unless required by applicable law or agreed to in writing, software  
\* distributed under the License is distributed on an "AS IS" BASIS,  
\* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
\* See the License for the specific language governing permissions and  
\* limitations under the License.

\*/

/\*\*

\* Checks if this content model has had its min/maxOccurs values reduced for  
\* purposes of speeding up UPA. If so, this content model should not be used  
\* for any purpose other than checking unique particle attribution

```
*
* @return a boolean that says whether this content has been compacted for UPA
*/
```

Found in path(s):

```
*/opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/models/XSCMValidator.java
```

No license file was found, but licenses were detected in source scan.

```
/*
```

```
* Licensed to the Apache Software Foundation (ASF) under one or more
* contributor license agreements. See the NOTICE file distributed with
* this work for additional information regarding copyright ownership.
* The ASF licenses this file to You under the Apache License, Version 2.0
* (the "License"); you may not use this file except in compliance with
* the License. You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
```

```
*/
```

```
/**
```

```
* DOM Level 3 LS CR - Experimental.
```

```
* Create a new LSParser. The newly constructed parser may
* then be configured by means of its DOMConfiguration
* object, and used to parse documents by means of its parse
* method.
```

```
* @param mode The mode argument is either
```

```
* MODE_SYNCHRONOUS or MODE_ASYNCHRONOUS, if
* mode is MODE_SYNCHRONOUS then the
* LSParser that is created will operate in synchronous
* mode, if it's MODE_ASYNCHRONOUS then the
* LSParser that is created will operate in asynchronous
* mode.
```

```
* @param schemaType An absolute URI representing the type of the schema
```

```
* language used during the load of a Document using the
* newly created LSParser. Note that no lexical checking
* is done on the absolute URI. In order to create a
* LSParser for any kind of schema types (i.e. the
* LSParser will be free to use any schema found), use the value
* null.
```

```
* <p>Note: For W3C XML Schema [http://www.w3.org/TR/2001/REC-xmlschema-1-20010502/] XML Schema Part 1]
```

```
* , applications must use the value
```

- \* `"http://www.w3.org/2001/XMLSchema"`. For XML DTD [[XML 1.0](http://www.w3.org/TR/2000/REC-xml-20001006)],
- \* applications must use the value
- \* `"http://www.w3.org/TR/REC-xml"`. Other Schema languages
- \* are outside the scope of the W3C and therefore should recommend an
- \* absolute URI in order to use this method.
- \* @return The newly created `LSParser` object. This
- \* `LSParser` is either synchronous or asynchronous
- \* depending on the value of the `mode` argument.
- \* **Note:** By default, the newly created `LSParser`
- \* does not contain a `DOMErrorHandler`, i.e. the value of
- \* the "[parameter-error-handler](http://www.w3.org/TR/2003/WD-DOM-Level-3-Core-20030609/core.html#parameter-error-handler)"
- \* `error-handler` configuration parameter is `null`. However, implementations
- \* may provide a default error handler at creation time. In that case,
- \* the initial value of the `"error-handler"` configuration
- \* parameter on the new created `LSParser` contains a
- \* reference to the default error handler.
- \* @exception DOMException
- \* NOT\_SUPPORTED\_ERR: Raised if the requested mode or schema type is
- \* not supported.

Found in path(s):

- \* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/CoreDOMImplementationImpl.java

No license file was found, but licenses were detected in source scan.

/\*

- \* Licensed to the Apache Software Foundation (ASF) under one or more
- \* contributor license agreements. See the NOTICE file distributed with
- \* this work for additional information regarding copyright ownership.
- \* The ASF licenses this file to You under the Apache License, Version 2.0
- \* (the "License"); you may not use this file except in compliance with
- \* the License. You may obtain a copy of the License at
- \* <http://www.apache.org/licenses/LICENSE-2.0>
- \* Unless required by applicable law or agreed to in writing, software
- \* distributed under the License is distributed on an "AS IS" BASIS,
- \* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
- \* See the License for the specific language governing permissions and
- \* limitations under the License.

Found in path(s):

- \* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DOMImplementationListImpl.java

No license file was found, but licenses were detected in source scan.

```
/*
 * Licensed to the Apache Software Foundation (ASF) under one or more
 * contributor license agreements. See the NOTICE file distributed with
 * this work for additional information regarding copyright ownership.
 * The ASF licenses this file to You under the Apache License, Version 2.0
 * (the "License"); you may not use this file except in compliance with
 * the License. You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
/**
```

```
 * used to check the 3 constraints against each complex type
 * (should be each model group):
 * Unique Particle Attribution, Particle Derivation (Restriction),
 * Element Declarations Consistent.
 */
```

Found in path(s):

```
 * /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/XSConstraints.java
```

No license file was found, but licenses were detected in source scan.

```
/*
 * Licensed to the Apache Software Foundation (ASF) under one or more
 * contributor license agreements. See the NOTICE file distributed with
 * this work for additional information regarding copyright ownership.
 * The ASF licenses this file to You under the Apache License, Version 2.0
 * (the "License"); you may not use this file except in compliance with
 * the License. You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Found in path(s):

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/XSDDocumentInfo.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/XSDElementTraverser.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/parser/XMLErrorHandler.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLFrameElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/XMLEntityDescriptionImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/ShadowedSymbolTable.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/util/ObjectListImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLImgElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLOptgroupElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/parser/XMLInputSource.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLImgElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DeferredCDATASectionImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/XSDAbstractIDConstraintTraverser.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLTimerElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSParticle.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLWmlElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/AnySimpleDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/StringList.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLTimerElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xpath/regex/CaseInsensitiveMap.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/opti/SchemaDOMImplementation.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/opti/DefaultXMLDocumentHandler.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DeferredElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLAnchorElement.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/HTMLSerializer.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLHtmlElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/stax/DefaultNamespaceContext.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xinclude/MultipleScopeNamespaceSupport.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/opti/SchemaParsingConfig.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/XML11NSDTDValidator.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xpointer/XPointerMessageFormatter.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSException.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLMetaElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLQuoteElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/EncodingMap.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xinclude/XIncludeTextReader.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DOMInputImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/ObjectFactory.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xpointer/XPointerHandler.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/XMLCatalogResolver.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/TeeXMLDocumentFilterImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLTableSectionElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/models/CMStateSet.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/Base64BinaryDV.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/DraconianErrorHandler.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/JAXPValidatorComponent.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLTitleElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/XML11NonValidatingConfiguration.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/ElementDefinitionImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/XMLElementDecl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSAttributeGroupDecl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/AbstractDOMParser.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLSelectElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLLabelElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLFieldSetElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLCardElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/util/ShortListImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/util/Base64.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/CDATASectionImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/XSGrammarPoolContainer.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/models/CMBuilder.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLMetaElement.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/XSSimpleType.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/XSSimpleTypeDelegate.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/opti/SchemaDOMParser.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xpath/regex/RegularExpression.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/opti/ElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/events/UIEventImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/Method.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/stax/events/EntityReferenceImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/datatypes/ByteList.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLBodyElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/XMLNSDTDValidator.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/models/XSCMbinOp.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DeferredAttrImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/DOMUtil.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLIElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/SAXParserFactoryImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xpointer/ElementSchemePointer.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/msg/XMLMessageFormatter.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/opti/DefaultElement.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/SoftReferenceGrammarPool.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/AbstractXMLSchema.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/AttrNSImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/datatype/DurationImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLTdElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/XMLEntityDescription.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/parser/XMLDTDSscanner.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/SecurityManager.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSModel.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/XMLErrorCode.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/DOMResultAugmentor.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/identity/FieldActivator.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/ParentNode.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/util/XIntPool.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLTableCellElementImpl.java



\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/SchemaSymbols.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/ObjectFactory.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/io/UTF16Reader.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/TextImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DOMStringListImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/NonValidatingConfiguration.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLImageElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/DecimalDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSModelImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/ShortList.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/dtd/ListDatatypeValidator.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/StAXEventResultBuilder.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DeferredAttrNSImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/DTDGrammar.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DeferredEntityReferenceImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/datatypes/ObjectList.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/identity/XPathMatcher.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLHeadElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/PSVIErrorList.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/dtd/XML11NMTOKENDatatypeValidator.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/stax/events/StartDocumentImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/XMLSerializer.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/identity/KeyRef.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSDDescription.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xni/XMLAttributes.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/wml/dom/WMLHeadElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/dom/DeferredEntityImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/jaxp/validation/StAXDocumentHandler.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/io/Latin1Reader.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/dom/LCount.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dtd/XMLDTDProcessor.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/xs/BooleanDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xni/parser/XMLEntityResolver.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/dom/DOMMessageFormatter.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/SchemaGrammar.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xni/grammars/XMLGrammarDescription.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/util/XSInputSource.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/ValidatedInfo.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/dom/ChildNode.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/util/XSNamedMapImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/Constants.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/dom/events/MouseEventImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dtd/XMLDTDValidatorFilter.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/XMLDocumentScannerImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/jaxp/validation/Util.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xinclude/XInclude11TextReader.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/jaxp/DefaultValidationErrorHandler.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/wml/dom/WMLOptgroupElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/SchemaValidatorConfiguration.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLPostfieldElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/StAXSchemaParser.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DeferredNotationImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/CoreDocumentImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/XMLNSDocumentScannerImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/ReadOnlyGrammarPool.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DOMErrorImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/XMLAttributesImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/XSDAttributeTraverser.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/XMLDocumentParser.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/XSDComplexTypeTraverser.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/DatatypeMessageFormatter.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLIElement.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLNoopElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/SecuritySupport.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/DatatypeException.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/dtd/ENTITYDatatypeValidator.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLInputElement.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLTableElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/stax/events/ElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/SchemaContentHandler.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/SoftReferenceSymbolTableConfiguration.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/BalancedDTDGrammar.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xpointer/ShortHandPointer.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/parser/XMLParserConfiguration.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/BasicParserConfiguration.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLPreElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/SecurityConfiguration.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/AbstractXMLDocumentParser.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/validation/ValidationState.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/HTMLdtd.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLDOMImplementation.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/AugmentationsImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSImplementation.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/parser/XMLDocumentScanner.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/SAXLocatorWrapper.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/SynchronizedSymbolTable.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSGrammarBucket.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLNoopElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xpointer/XPointerErrorHandler.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/parser/XMLDTDSources.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/stax/events/ProcessingInstructionImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/NamespaceContext.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/XMLSchemaFactory.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLTdElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLDListElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/DayTimeDurationDV.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLUElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/util/XSNamedMap4Types.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/datatypes/XSDateTime.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/opti/DefaultText.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/models/CMLLeaf.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSTerm.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/parser/XMLComponent.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLSmallElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/DocumentBuilderImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/DatatypeValidator.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLTextAreaElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/AttributePSVI.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xpath/regex/Token.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DeferredNode.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/XML11Serializer.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/XSDAttributeGroupTraverser.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/HexBinaryDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLGoElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/util/SimpleLocator.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/MessageFormatter.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/XMLErrorHandler.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSLoaderImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/XML11NamespaceBinder.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/SecuritySupport.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLFormElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/XMLResourceIdentifierImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xpath/XPath.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLMenuElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLCollectionImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/XMLDocumentFragmentHandler.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSComplexTypeDecl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/SAXInputSource.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/XPointerParserConfiguration.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/datatype/SerializedDuration.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/io/UTF8Reader.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/InvalidDatatypeValueException.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/DOMInputSource.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSNotationDecl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLAreaElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLBigElement.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/XMLChar.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLPostfieldElement.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DeepNodeListImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/EntityReferenceImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/ProcessingInstructionImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLPrevElement.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DOMXSImplementationSourceImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/models/MixedContentModel.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/Augmentations.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/BaseDVFactory.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/XMLVersionDetector.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/grammars/XMLDTDDescription.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/dtd/IDDatatypeValidator.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/StAXValidatorHelper.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSComplexTypeDefinition.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/NotationImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLBElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/identity/UniqueOrKey.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/datatype/DatatypeFactoryImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLAnchorElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/DOMSerializerImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLIFrameElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/LineSeparator.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/XMLLocatorWrapper.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSWildcard.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/StreamValidatorHelper.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/StAXLocationWrapper.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLDoElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/IntegratedParserConfiguration.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/XMLNotationDecl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/ValidatorHelper.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/BaseSchemaDVFactory.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/identity/IdentityConstraint.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/datatypes/XSDouble.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xinclude/SecuritySupport.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/CommentImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DeferredProcessingInstructionImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/stax/events/CommentImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLSetvarElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/ASDOMImplementationImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/stax/events/NotationDeclarationImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/SoftReferenceSymbolTable.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/validation/EntityState.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/XHTMLSerializer.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLWmlElement.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/ASModelImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DeferredDocumentTypeImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/DOMValidatorHelper.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/XSAnnotationInfo.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/XML11DTDSscannerImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/opti/NodeImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/XMLGrammarCachingConfiguration.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLBaseElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xpointer/XPointerPart.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/QName.java



\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLEmElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/grammars/XMLGrammarPool.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLFormControl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DeferredTextImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/FloatDV.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/XML11DocumentScannerImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/ErrorHandlerWrapper.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSAttributeGroupDefinition.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/models/CMAny.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/stax/events/StartElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/DOMSerializer.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSModelGroupDefinition.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/stax/events/EndElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/QNameDV.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLBrElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLScriptElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/XMLStringBuffer.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/events/MutationEventImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/ObjectFactory.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/XSDGroupTraverser.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/FullDVFactory.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xinclude/ObjectFactory.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/stax/events/DTDImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/DOMParserImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLTrElement.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/models/CMUniOp.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DocumentFragmentImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLSelectElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/XSDSimpleTypeTraverser.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/XML11EntityScanner.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/StringDV.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/IDREFDV.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLButtonElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/identity/Field.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DocumentImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/opti/TextImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLOneventElement.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/util/ByteListImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/XIncludeParserConfiguration.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLStrongElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/CachingParserPool.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/ParserConfigurationSettings.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLDocument.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/EmptyXMLSchema.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSObjectList.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/opti/DefaultNode.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLMapElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/XML11NSDocumentScannerImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLSmallElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/XMLDTDCContentModelHandler.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLEmElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/PSVIDocumentImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/DTDGrammarBucket.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/ElementPSVImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xpath/regex/REUtil.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/parser/XMLParseException.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xpath/regex/Op.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/parser/XMLDTDCContentModelSource.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/XML11DTDCConfiguration.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLTemplateElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/SecuritySupport.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLInputElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/dtd/NMTOKENDatatypeValidator.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLParagraphElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/OutputFormat.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/dtd/NOTATIONDatatypeValidator.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/DTDParse.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/SymbolHash.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/ListDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLUListElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DOMImplementationSourceImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLBrElement.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/CharacterDataImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/RangeImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/SerializerFactoryImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XMLSchemaLoader.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/XMLScanner.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/XMLGrammarPoolImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/ElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLStrongElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSNotationDeclaration.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/EncodingInfo.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLMetaElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/models/CMNodeFactory.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLFontElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLTableElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLAppletElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/IDDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/SecuritySupport.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSObject.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/SchemaDVFactory.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/XMLEntityDecl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/ErrorHandlerProxy.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/dtd/DTDDVFactoryImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/models/CMNode.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/util/StringListImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLTemplateElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/XML11Configurable.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/InvalidDatatypeFacetException.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/traversers/XSDAbstractParticleTraverser.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/StAXStreamResultBuilder.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/datatype/XMLGregorianCalendarImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/util/XInt.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSConstants.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/Serializer.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/SubstitutionGroupHandler.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/TypeValidator.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/SAXParserImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/XMLParser.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSGroupDecl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/DoubleDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/Version.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/IntStack.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/io/ASCIIReader.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSIDCDefinition.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLCardElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLFieldsetElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/AttrImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLAElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/opti/DefaultDocument.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/FilePathToURI.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/ObjectFactory.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLPrevElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/util/HexBin.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/datatype/SerializedXMLGregorianCalendar.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/parser/XMLDTDCContentModelFilter.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSModelGroup.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLBaseFontElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/XMLDTDLoader.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DeferredElementDefinitionImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSElementDeclHelper.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/parser/XMLComponentManager.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/PrimeNumberSequenceGenerator.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLOneventElementImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/SchemaDVFactoryImpl.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/stax/ImmutableLocation.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/XMLSchema.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSLoader.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/UnionDV.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/XNIException.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/parser/XMLDocumentSource.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/grammars/XSGrammar.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLBElement.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/SAXParser.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/datatypes/XSDecimal.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSWildcardDecl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DOMConfigurationImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLTableColElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLTrElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLDOMImplementationImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/models/XSCMUniOp.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/grammars/XMLGrammarLoader.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/validation/ConfigurableValidationState.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/IndentPrinter.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/ElementState.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/ObjectFactory.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/PSVIDOMImplementationImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dtd/models/DFACContentModel.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/AttributeMap.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/stax/events/EndDocumentImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLPElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/datatypes/XSFloat.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/dtd/StringDatatypeValidator.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/models/XSCMRepeatingLeaf.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/PSVIAttrNSImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/XMLDocumentFragmentScannerImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/ValidationContext.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/grammars/Grammar.java

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLAccessElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xpath/regex/Match.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSMessageFormatter.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xml/serialize/TextSerializer.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/stax/events/NamespaceImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSAttributeDeclaration.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/JAXPCConstants.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLAElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/EntityResolverWrapper.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DOMOutputImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DOMImplementationImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/SecuritySupport.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/ExternalSubsetResolver.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/NodeListCache.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/PSVIElementNSImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xinclude/XIncludeHandler.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/SAXMessageFormatter.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/DeferredCommentImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLTableElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLHRElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSNamespaceItemList.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/DOMEntityResolverWrapper.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xpath/regex/RegexParser.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/dom/ElementNSImpl.java



\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/stax/events/AttributeImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/dtd/IDREFDatatypeValidator.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/WMLUElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLHeadElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/models/XSCMLLeaf.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/LocatorProxy.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/identity/Selector.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/dtd/XML11IDDatatypeValidator.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSElementDeclaration.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/XSAnnotationImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/LSInputList.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xpath/XPathException.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/stax/events/EntityDeclarationImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/parsers/AbstractSAXParser.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/wml/dom/WMLBigElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xni/XMLLocator.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/XSTypeDefinition.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/xs/ItemPSVI.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/util/URI.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLObjectElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/dv/xs/AnyAtomicDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/impl/xs/opti/NamedNodeMapImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/html/dom/HTMLBuilder.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-jar/org/apache/xerces/jaxp/validation/WeakReferenceXMLSchema.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-

jar/org/apache/xerces/xs/datatypes/XS QName.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/dom/NodeIteratorImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/util/DefaultErrorHandler.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xpath/regex/BMPattern.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/parsers/DTDConfiguration.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/jaxp/validation/SimpleXMLSchema.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/html/dom/HTMLLegendElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/xs/YearMonthDurationDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/traversers/XSDWildcardTraverser.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/html/dom/HTMLHeadingElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/XSFacets.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xs/ElementPSVI.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/wml/WMLRefreshElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/util/XSGrammarPool.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xni/XMLResourceIdentifier.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/html/dom/HTMLDirectoryElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/parsers/XML11Configuration.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/dom/EntityImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/io/MalformedByteSequenceException.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/jaxp/UnparsedEntityHandler.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/wml/WMLAccessElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/util/XMLSymbols.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xpointer/XPointerProcessor.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/wml/WMLSetvarElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-

jar/org/apache/xerces/xni/XMLDTDHandler.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xs/XSMultiValueFacet.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xs/XSAnnotation.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/html/dom/HTMLLinkElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/dom/events/EventImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/DTDDVFactory.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/identity/ValueStore.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/jaxp/validation/ValidatorHandlerImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/util/DOMErrorHandlerWrapper.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/stax/events/XMLEventImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/util/XS10TypeHelper.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/html/dom/HTMLDivElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xs/XSNamespaceItem.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/util/XML11Char.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/html/dom/HTMLFrameSetElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/XMLNamespaceBinder.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/parsers/XMLGrammarPreparser.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/XSImplementationImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/html/dom/HTMLBRElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/dom/RangeExceptionImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xs/PSVIProvider.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/XMLSchemaException.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xs/XSNamedMap.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/html/dom/HTMLStyleElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-

jar/org/apache/xerces/impl/xs/XSAttributeUseImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/validation/ValidationManager.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/util/EntityResolver2Wrapper.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/XSElementDecl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/parsers/DOMParser.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dtd/XMLAttributeDecl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/html/dom/HTMLLIElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/XSParticleDecl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dtd/models/ContentModelValidator.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/util/StAXInputSource.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dtd/XMLContentSpec.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/dom/DocumentTypeImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/wml/dom/WMLOptionElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/html/dom/HTMLFormElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xinclude/XIncludeMessageFormatter.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/AttributePSVImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/wml/WMLSelectElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xni/XMLString.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/jaxp/validation/XMLSchemaValidatorComponentManager.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/html/dom/HTMLTableRowElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/html/dom/HTMLListElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/opti/SchemaDOM.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/XMLDTDSscannerImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/html/dom/HTMLInputElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-

jar/org/apache/xerces/impl/dv/xs/PrecisionDecimalDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/jaxp/validation/DOMDocumentHandler.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xni/parser/XMLPullParserConfiguration.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/parsers/SecureProcessingConfiguration.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xni/parser/XMLDocumentFilter.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/util/XSObjectListImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/dom/NamedNodeMapImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xs/XSFacet.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/wml/dom/WMLGoElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/traversers/XSDAbstractTraverser.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xml/serialize/Printer.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dtd/XML11DTDProcessor.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dtd/XMLDTDDescription.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/wml/dom/WMLRefreshElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xpath/regex/ParserForXMLSchema.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/dom/DOMNormalizer.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/xs/IntegerDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/jaxp/DocumentBuilderFactoryImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/html/dom/HTMLIsIndexElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dtd/models/SimpleContentModel.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/dom/DeferredDocumentImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xs/XSSimpleTypeDefinition.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/stax/EmptyLocation.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xml/serialize/SerializerFactory.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-

jar/org/apache/xerces/util/HTTPInputSource.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xml/serialize/Encodings.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xs/XSAttributeUse.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xml/serialize/BaseMarkupSerializer.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/stax/events/CharactersImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/dom/DeferredDOMImplementationImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/stax/XMLEventFactoryImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/util/JAXPNamespaceContextWrapper.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/util/Namespacesupport.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xni/XMLDocumentHandler.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/dom/DOMLocatorImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/util/LSInputListImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/XSDeclarationPool.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/jaxp/validation/JAXPValidationMessageFormatter.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dtd/models/CMBinOp.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/xs/ExtendedSchemaDVFactoryImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dtd/XML11DTDValidator.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/xs/EntityDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/util/SymbolTable.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/xs/AnyURIDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/XMLEntityScanner.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/XMLEntityManager.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/XSAttributeDecl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xinclude/XIncludeNamespaceSupport.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-

jar/org/apache/xerces/impl/xs/models/XSEmptyCM.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/html/dom/HTMLOptGroupElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/DVFactoryException.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/html/dom/HTMLDocumentImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/xs/SchemaDateTimeException.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/wml/WMLOptionElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/wml/WMLPElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/html/dom/HTMLOptionElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/wml/WMLElement.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/html/dom/HTMLParamElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/dom/TreeWalkerImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/dtd/XML11DTDDVFactoryImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xpath/regex/ParseException.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xni/parser/XMLDTDFilter.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dtd/XMLDTDValidator.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/traversers/XSDNotationTraverser.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xni/grammars/XMLSchemaDescription.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/jaxp/validation/DOMResultBuilder.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/wml/dom/WMLAnchorElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/html/dom/HTMLModElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/wml/dom/WMLDocumentImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/dom/DeferredElementNSImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/html/dom/HTMLTableCaptionElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/XMLEntityHandler.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-

jar/org/apache/xerces/parsers/StandardParserConfiguration.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/models/XSAllCM.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/opti/AttrImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/wml/dom/WMLFieldsetElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/wml/dom/WMLDoElementImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xpath/regex/RangeToken.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/parsers/DOMASBuilderImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/html/dom/NameNodeListImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/wml/dom/WMLDOMImplementationImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/io/UCSReader.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/parsers/XIncludeAwareParserConfiguration.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/RevalidationHandler.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xs/XSValue.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/dom/NodeImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/dtd/XML11IDREFDatatypeValidator.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/xni/parser/XMLConfigurationException.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/util/AttributesProxy.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/jaxp/validation/ValidatorImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/parsers/XMLGrammarParser.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dtd/XMLSimpleType.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/SchemaNamespaceSupport.java  
No license file was found, but licenses were detected in source scan.

/\*

- \* Licensed to the Apache Software Foundation (ASF) under one or more
- \* contributor license agreements. See the NOTICE file distributed with
- \* this work for additional information regarding copyright ownership.
- \* The ASF licenses this file to You under the Apache License, Version 2.0



\* (the "License"); you may not use this file except in compliance with  
\* the License. You may obtain a copy of the License at  
\*  
\* <http://www.apache.org/licenses/LICENSE-2.0>  
\*  
\* Unless required by applicable law or agreed to in writing, software  
\* distributed under the License is distributed on an "AS IS" BASIS,  
\* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
\* See the License for the specific language governing permissions and  
\* limitations under the License.  
\*/

Found in path(s):

\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/xs/AbstractDateTimeDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/xs/YearDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/traversers/XSDKeyrefTraverser.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/xs/DateDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/xs/DateTimeDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/traversers/XSDUniqueOrKeyTraverser.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/xs/MonthDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/xs/DurationDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/xs/MonthDayDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/xs/TimeDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/traversers/XSAttributeChecker.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/xs/YearMonthDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/XSModelGroupImpl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/xs/XSSimpleTypeDecl.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/traversers/XSDHandler.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/dv/xs/DayDV.java  
\* /opt/cola/permits/1257218116\_1642790294.82/0/xercesimpl-2-12-0-sources-  
jar/org/apache/xerces/impl/xs/XMLSchemaValidator.java

No license file was found, but licenses were detected in source scan.

```
The ASF licenses this file to You under the Apache License, Version 2.0
(the "License"); you may not use this file except in compliance with
the License. You may obtain a copy of the License at
http://www.apache.org/licenses/LICENSE-2.0
distributed under the License is distributed on an "AS IS" BASIS,
```

Found in path(s):

```
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/msg/XMLSchemaMessages.properties
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xpath/regex/message.properties
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/msg/DOMMessages.properties
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/msg/XPointerMessages.properties
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/msg/DatatypeMessages.properties
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xpath/regex/message_fr.properties
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/msg/SAXMessages.properties
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/msg/XIncludeMessages.properties
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/msg/XMLMessages.properties
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/msg/XMLSerializerMessages.properties
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xpath/regex/message_ja.properties
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/msg/JAXPValidationMessages.properties
```

No license file was found, but licenses were detected in source scan.

/\*

```
* Licensed to the Apache Software Foundation (ASF) under one or more
* contributor license agreements. See the NOTICE file distributed with
* this work for additional information regarding copyright ownership.
* The ASF licenses this file to You under the Apache License, Version 2.0
* (the "License"); you may not use this file except in compliance with
* the License. You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
```

```
* See the License for the specific language governing permissions and
* limitations under the License.
*/
// Unique Particle Attribution
```

Found in path(s):

```
* /opt/cola/permits/1257218116_1642790294.82/0/xercesimpl-2-12-0-sources-
jar/org/apache/xerces/impl/xs/models/XSDFACM.java
```

## 1.55 protobuf-java 3.19.6

### 1.55.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
Manifest-Version: 1.0
Automatic-Module-Name: com.google.protobuf
Bnd-LastModified: 1664485905970
Build-Jdk: 1.8.0_181-google-v7
Built-By: mkruskal
Bundle-Description: Core Protocol Buffers library. Protocol Buffers are
a way of encoding structured data in an efficient yet extensible for
mat.
Bundle-DocURL: https://developers.google.com/protocol-buffers/
Bundle-License: https://opensource.org/licenses/BSD-3-Clause
Bundle-ManifestVersion: 2
Bundle-Name: Protocol Buffers [Core]
Bundle-SymbolicName: com.google.protobuf
Bundle-Version: 3.19.6
Created-By: Apache Maven Bundle Plugin
Export-Package: com.google.protobuf;version="3.19.6"
Import-Package: sun.misc;resolution:=optional,com.google.protobuf;versio
n="[3.19,4)"
Require-Capability: osgi.ee;filter="(&(osgi.ee=JavaSE)(version=1.7))"
Tool: Bnd-3.0.0.201509101326
```

Found in path(s):

```
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/META-INF/MANIFEST.MF
No license file was found, but licenses were detected in source scan.
```

```
// Copyright 2008 Google Inc. All rights reserved.
// Redistribution and use in source and binary forms, with or without
// modification, are permitted provided that the following conditions are
// * Redistributions of source code must retain the above copyright
// notice, this list of conditions and the following disclaimer.
// * Redistributions in binary form must reproduce the above
// copyright notice, this list of conditions and the following disclaimer
// in the documentation and/or other materials provided with the
```

```
// * Neither the name of Google Inc. nor the names of its
// this software without specific prior written permission.
```

Found in path(s):

```
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/timestamp.proto
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/struct.proto
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/wrappers.proto
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/type.proto
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/empty.proto
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/any.proto
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/descriptor.proto
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/duration.proto
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/field_mask.proto
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/compiler/plugin.proto
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/source_context.proto
* /opt/cola/permits/1444789790_1666041710.804059/0/protobuf-java-3-19-6-jar/google/protobuf/api.proto
```

## 1.56 animal-sniffer-annotation 1.19

### 1.56.1 Available under license :

No license file was found, but licenses were detected in source scan.

The MIT License

Copyright (c) 2009 codehaus.org.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Found in path(s):

```
* /opt/cola/permits/1258876677_1643115784.16/0/animal-sniffer-annotations-1-19-sources-jar/META-INF/maven/org.codehaus.mojo/animal-sniffer-annotations/pom.xml
```

No license file was found, but licenses were detected in source scan.

```
/*
```

```
* The MIT License
```

```
*
```

```
* Copyright (c) 2008 Kohsuke Kawaguchi and codehaus.org.
```

```
*
```

```
* Permission is hereby granted, free of charge, to any person obtaining a copy
```

```
* of this software and associated documentation files (the "Software"), to deal
```

```
* in the Software without restriction, including without limitation the rights
```

```
* to use, copy, modify, merge, publish, distribute, sublicense, and/or sell
```

```
* copies of the Software, and to permit persons to whom the Software is
```

```
* furnished to do so, subject to the following conditions:
```

```
*
```

```
* The above copyright notice and this permission notice shall be included in
```

```
* all copies or substantial portions of the Software.
```

```
*
```

```
* THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR
```

```
* IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,
```

```
* FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE
```

```
* AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER
```

```
* LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM,
```

```
* OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN
```

```
* THE SOFTWARE.
```

```
*
```

```
*/
```

Found in path(s):

```
* /opt/cola/permits/1258876677_1643115784.16/0/animal-sniffer-annotations-1-19-sources-jar/org/codehaus/mojo/animal_sniffer/IgnoreJRERequirement.java
```

## 1.57 commons-logging 1.2

### 1.57.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
/*
```

```
* Copyright 2001-2006 The Apache Software Foundation.
```

```
*
```

```
* Licensed under the Apache License, Version 2.0 (the "License");
```

```
* you may not use this file except in compliance with the License.
```

```
* You may obtain a copy of the License at
```

```
*
```

```
* http://www.apache.org/licenses/LICENSE-2.0
```

```
*
```

\* Unless required by applicable law or agreed to in writing, software  
\* distributed under the License is distributed on an "AS IS" BASIS,  
\* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
\* See the License for the specific language governing permissions and  
\* limitations under the License.  
\*/

Found in path(s):

\* /opt/cola/permits/1135840457\_1613613080.13/0/commons-logging-1-1-sources-9-  
jar/org/apache/commons/logging/LogFactory.java

No license file was found, but licenses were detected in source scan.

/\*

\* Copyright 2001-2004,2006 The Apache Software Foundation.

\*

\* Licensed under the Apache License, Version 2.0 (the "License");

\* you may not use this file except in compliance with the License.

\* You may obtain a copy of the License at

\*

\* <http://www.apache.org/licenses/LICENSE-2.0>

\*

\* Unless required by applicable law or agreed to in writing, software

\* distributed under the License is distributed on an "AS IS" BASIS,

\* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

\* See the License for the specific language governing permissions and

\* limitations under the License.

\*/

Found in path(s):

\* /opt/cola/permits/1135840457\_1613613080.13/0/commons-logging-1-1-sources-9-  
jar/org/apache/commons/logging/impl/AvalonLogger.java

No license file was found, but licenses were detected in source scan.

/\*

\* Copyright 2004 The Apache Software Foundation.

\*

\* Licensed under the Apache License, Version 2.0 (the "License");

\* you may not use this file except in compliance with the License.

\* You may obtain a copy of the License at

\*

\* <http://www.apache.org/licenses/LICENSE-2.0>

\*

\* Unless required by applicable law or agreed to in writing, software

\* distributed under the License is distributed on an "AS IS" BASIS,

\* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

\* See the License for the specific language governing permissions and

\* limitations under the License.

\*/

Found in path(s):

\* /opt/cola/permits/1135840457\_1613613080.13/0/commons-logging-1-1-sources-9-jar/org/apache/commons/logging/impl/WeakHashtable.java

No license file was found, but licenses were detected in source scan.

2004 The Apache Software Foundation.

Licensed under the Apache License, Version 2.0 (the "License");

you may not use this file except in compliance with the License.

You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE>

2.0

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

See the License for the specific language governing permissions and limitations under the License.

Found in path(s):

\* /opt/cola/permits/1135840457\_1613613080.13/0/commons-logging-1-1-sources-9-jar/org/apache/commons/logging/package.html

\* /opt/cola/permits/1135840457\_1613613080.13/0/commons-logging-1-1-sources-9-jar/org/apache/commons/logging/impl/package.html

No license file was found, but licenses were detected in source scan.

/\*

\* Copyright 2001-2004 The Apache Software Foundation.

\*

\* Licensed under the Apache License, Version 2.0 (the "License");

\* you may not use this file except in compliance with the License.

\* You may obtain a copy of the License at

\*

\* <http://www.apache.org/licenses/LICENSE-2.0>

\*

\* Unless required by applicable law or agreed to in writing, software

\* distributed under the License is distributed on an "AS IS" BASIS,

\* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

\* See the License for the specific language governing permissions and

\* limitations under the License.

\*/

Found in path(s):

\* /opt/cola/permits/1135840457\_1613613080.13/0/commons-logging-1-1-sources-9-jar/org/apache/commons/logging/LogConfigurationException.java

\* /opt/cola/permits/1135840457\_1613613080.13/0/commons-logging-1-1-sources-9-

```
jar/org/apache/commons/logging/impl/Log4JLogger.java
* /opt/cola/permits/1135840457_1613613080.13/0/commons-logging-1-1-sources-9-
jar/org/apache/commons/logging/impl/LogFactoryImpl.java
* /opt/cola/permits/1135840457_1613613080.13/0/commons-logging-1-1-sources-9-
jar/org/apache/commons/logging/impl/Jdk13LumberjackLogger.java
* /opt/cola/permits/1135840457_1613613080.13/0/commons-logging-1-1-sources-9-
jar/org/apache/commons/logging/impl/SimpleLog.java
* /opt/cola/permits/1135840457_1613613080.13/0/commons-logging-1-1-sources-9-
jar/org/apache/commons/logging/impl/Jdk14Logger.java
* /opt/cola/permits/1135840457_1613613080.13/0/commons-logging-1-1-sources-9-
jar/org/apache/commons/logging/LogSource.java
* /opt/cola/permits/1135840457_1613613080.13/0/commons-logging-1-1-sources-9-
jar/org/apache/commons/logging/impl/NoOpLog.java
* /opt/cola/permits/1135840457_1613613080.13/0/commons-logging-1-1-sources-9-
jar/org/apache/commons/logging/impl/LogKitLogger.java
* /opt/cola/permits/1135840457_1613613080.13/0/commons-logging-1-1-sources-9-
jar/org/apache/commons/logging/Log.java
No license file was found, but licenses were detected in source scan.
```

```
/*
* Copyright 2005 The Apache Software Foundation.
*
* Licensed under the Apache License, Version 2.0 (the "License");
* you may not use this file except in compliance with the License.
* You may obtain a copy of the License at
*
* http://www.apache.org/licenses/LICENSE-2.0
*
* Unless required by applicable law or agreed to in writing, software
* distributed under the License is distributed on an "AS IS" BASIS,
* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
* See the License for the specific language governing permissions and
* limitations under the License.
*/
```

Found in path(s):

```
* /opt/cola/permits/1135840457_1613613080.13/0/commons-logging-1-1-sources-9-
jar/org/apache/commons/logging/impl/ServletContextCleaner.java
```

# 1.58 opentelemetry-proto 0.11.0

## 1.58.1 Available under license :

Apache License  
Version 2.0, January 2004  
<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION



## 1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted"

means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:
  - (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
  - (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
  - (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and

attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and

- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the

appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.
  
9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

#### END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[ ]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software

distributed under the License is distributed on an "AS IS" BASIS,  
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
See the License for the specific language governing permissions and  
limitations under the License.

## 1.59 protobuf 22.2

### 1.59.1 Available under license :

MIT License

Copyright (c) 2019 Yibo Cai  
Copyright 2022 Google LLC

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Copyright 2008 Google Inc. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- \* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

- \* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

- \* Neither the name of Google Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS

"AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Code generated by the Protocol Buffer compiler is owned by the owner of the input file used when generating it. This code is not standalone and requires a support library to be linked with it. This support library is itself covered by the above license. This file contains a list of people who have made large contributions to the public version of Protocol Buffers.

Original Protocol Buffers design and implementation:

Sanjay Ghemawat <sanjay@google.com>

Jeff Dean <jeff@google.com>

Daniel Dulitz <daniel@google.com>

Craig Silverstein

Paul Haahr <haahr@google.com>

Corey Anderson <corin@google.com>

(and many others)

Proto2 C++ and Java primary author:

Kenton Varda <kenton@google.com>

Proto2 Python primary authors:

Will Robinson <robinson@google.com>

Petar Petrov <petar@google.com>

Java Nano primary authors:

Brian Duff <bduff@google.com>

Tom Chao <chaot@google.com>

Max Cai <maxtroy@google.com>

Ulas Kirazci <ulas@google.com>

Large code contributions:

Jason Hsueh <jasonh@google.com>

Joseph Schorr <jschorr@google.com>

Wenbo Zhu <wenboz@google.com>

Large quantity of code reviews:

Scott Bruce <sbruce@google.com>

Frank Yellin

Neal Norwitz <nnorwitz@google.com>  
Jeffrey Yasskin <jyasskin@google.com>  
Ambrose Feinstein <ambrose@google.com>

Documentation:

Lisa Carey <lcarey@google.com>

Maven packaging:

Gregory Kick <gak@google.com>

Patch contributors:

Kevin Ko <kevin.s.ko@gmail.com>

- \* Small patch to handle trailing slashes in --proto\_path flag.

Johan Euphrosine <proppy@aminche.com>

- \* Small patch to fix Python CallMethod().

Ulrich Kunitz <kune@deine-taler.de>

- \* Small optimizations to Python serialization.

Leandro Lucarella <llucax@gmail.com>

- \* VI syntax highlighting tweaks.
- \* Fix compiler to not make output executable.

Dilip Joseph <dilip.antony.joseph@gmail.com>

- \* Heuristic detection of sub-messages when printing unknown fields in text format.

Brian Atkinson <nairb774@gmail.com>

- \* Added @Override annotation to generated Java code where appropriate.

Vincent Choinire <Choiniere.Vincent@hydro.qc.ca>

- \* Tru64 support.

Monty Taylor <monty.taylor@gmail.com>

- \* Solaris 10 + Sun Studio fixes.

Alek Storm <alek.storm@gmail.com>

- \* Slicing support for repeated scalar fields for the Python API.

Oleg Smolsky <oleg.smolsky@gmail.com>

- \* MS Visual Studio error format option.
- \* Detect unordered\_map in stl\_hash.m4.

Brian Olson <brianolson@google.com>

- \* gzip/zlib I/O support.

Michael Poole <mdpoole@troilus.org>

- \* Fixed warnings about generated constructors not explicitly initializing all fields (only present with certain compiler settings).
- \* Added generation of field number constants.

Wink Saville <wink@google.com>

- \* Fixed initialization ordering problem in logging code.

Will Pierce <willp@nuclei.com>

- \* Small patch improving performance of in Python serialization.

Alexandre Vassalotti <alexandre@peadrop.com>

- \* Emacs mode for Protocol Buffers (editors/protobuf-mode.el).

Scott Stafford <scott.stafford@gmail.com>

- \* Added Swap(), SwapElements(), and RemoveLast() to Reflection interface.

Alexander Melnikov <alm@sibmail.ru>

- \* HPUX support.

Oliver Jowett <oliver.jowett@gmail.com>

- \* Detect whether zlib is new enough in configure script.
- \* Fixes for Solaris 10 32/64-bit confusion.

Evan Jones <evanj@mit.edu>

- \* Optimize Java serialization code when writing a small message to a stream.
- \* Optimize Java serialization of strings so that UTF-8 encoding happens only once per string per serialization call.
- \* Clean up some Java warnings.
- \* Fix bug with permanent callbacks that delete themselves when run.

Michael Kucharski <m.kucharski@gmail.com>

- \* Added CodedInputStream.getTotalBytesRead().

Kacper Kowalik <xarthisius.kk@gmail.com>

- \* Fixed m4/acx\_pthread.m4 problem for some Linux distributions.

William Orr <will@worrbase.com>

- \* Fixed detection of sched\_yield on Solaris.
- \* Added atomicops for Solaris

Andrew Paprocki <andrew@ishiboo.com>

- \* Fixed minor IBM xLC compiler build issues
- \* Added atomicops for AIX (POWER)

Nipunn Koorapati <nipunn1313@gmail.com>

- \* Provide a type alias field ValueType on EnumTypeWrapper
- \* Match service argument names to abstract interface

# 1.60 commons-io 2.8.0

## 1.60.1 Available under license :

Apache Commons IO

Copyright 2002-2020 The Apache Software Foundation

This product includes software developed at  
The Apache Software Foundation (<https://www.apache.org/>).

Apache License

Version 2.0, January 2004

<http://www.apache.org/licenses/>

### TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

#### 1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.



"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:
  - (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
  - (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
  - (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
  - (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not

pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special,

incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

## END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[ ]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

# 1.61 commons-codec 1.15

## 1.61.1 Available under license :

Apache Commons Codec

Copyright 2002-2020 The Apache Software Foundation

This product includes software developed at  
The Apache Software Foundation (<https://www.apache.org/>).

`src/test/org/apache/commons/codec/language/DoubleMetaphoneTest.java`

contains test data from <http://aspell.net/test/orig/batch0.tab>.

Copyright (C) 2002 Kevin Atkinson ([kevina@gnu.org](mailto:kevina@gnu.org))

---

The content of package `org.apache.commons.codec.language.bm` has been translated from the original php source code available at <http://stevemorse.org/phoneticinfo.htm> with permission from the original authors.

Original source copyright:

Copyright (c) 2008 Alexander Beider & Stephen P. Morse.

Apache License

Version 2.0, January 2004

<http://www.apache.org/licenses/>

### TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

#### 1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications,

including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual,

worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. **Submission of Contributions.** Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.
6. **Trademarks.** This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.
7. **Disclaimer of Warranty.** Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.
8. **Limitation of Liability.** In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.
9. **Accepting Warranty or Additional Liability.** While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf



of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

## END OF TERMS AND CONDITIONS

### APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[ ]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

# 1.62 apache-log4j 2.17.1

## 1.62.1 Available under license :

Apache Log4j Core  
Copyright 1999-2012 Apache Software Foundation

This product includes software developed at  
The Apache Software Foundation (<http://www.apache.org/>).

ResolverUtil.java  
Copyright 2005-2006 Tim Fennell

Apache License  
Version 2.0, January 2004  
<http://www.apache.org/licenses/>

## TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

### 1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner

or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. **Grant of Copyright License.** Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
3. **Grant of Patent License.** Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.
4. **Redistribution.** You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:
  - (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
  - (b) You must cause any modified files to carry prominent notices stating that You changed the files; and

- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.
6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.
7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions

of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.
  
9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

#### END OF TERMS AND CONDITIONS

#### APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[ ]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright 1999-2005 The Apache Software Foundation

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

/\*

\* Licensed to the Apache Software Foundation (ASF) under one or more  
\* contributor license agreements. See the NOTICE file distributed with  
\* this work for additional information regarding copyright ownership.  
\* The ASF licenses this file to You under the Apache license, Version 2.0  
\* (the "License"); you may not use this file except in compliance with  
\* the License. You may obtain a copy of the License at

\*

\* <http://www.apache.org/licenses/LICENSE-2.0>

\*

\* Unless required by applicable law or agreed to in writing, software  
\* distributed under the License is distributed on an "AS IS" BASIS,  
\* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
\* See the license for the specific language governing permissions and  
\* limitations under the license.

\*/

## 1.63 openjdk 11.0.19

### 1.63.1 Available under license :

```
Pako v1.0
```

```
Pako License
```

```
<pre>
```

```
Copyright (C) 2014-2017 by Vitaly Puzrin and Andrei Tuputcyn
```

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM,

OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

(C) 1995-2013 Jean-loup Gailly and Mark Adler

(C) 2014-2017 Vitaly Puzrin and Andrey Tupitsin

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

</pre>

## The Unicode Standard, Unicode Character Database, Version 10.0.0

### Unicode Character Database

...

#### UNICODE, INC. LICENSE AGREEMENT - DATA FILES AND SOFTWARE

Unicode Data Files include all data files under the directories

<http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>,

<http://www.unicode.org/cldr/data/>,

<http://source.icu-project.org/repos/icu/>, and

<http://www.unicode.org/utility/trac/browser/>.

Unicode Data Files do not include PDF online code charts under the directory <http://www.unicode.org/Public/>.

Software includes any source code published in the Unicode Standard or under the directories

<http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>,

<http://www.unicode.org/cldr/data/>,

<http://source.icu-project.org/repos/icu/>, and

<http://www.unicode.org/utility/trac/browser/>.

NOTICE TO USER: Carefully read the following legal agreement.

BY DOWNLOADING, INSTALLING, COPYING OR OTHERWISE USING UNICODE INC.'S DATA FILES ("DATA FILES"), AND/OR SOFTWARE ("SOFTWARE"),

YOU UNEQUIVOCALLY ACCEPT, AND AGREE TO BE BOUND BY, ALL OF THE TERMS AND CONDITIONS OF THIS AGREEMENT.  
IF YOU DO NOT AGREE, DO NOT DOWNLOAD, INSTALL, COPY, DISTRIBUTE OR USE THE DATA FILES OR SOFTWARE.

#### COPYRIGHT AND PERMISSION NOTICE

Copyright 1991-2018 Unicode, Inc. All rights reserved.  
Distributed under the Terms of Use in <http://www.unicode.org/copyright.html>.

Permission is hereby granted, free of charge, to any person obtaining a copy of the Unicode data files and any associated documentation (the "Data Files") or Unicode software and any associated documentation (the "Software") to deal in the Data Files or Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Data Files or Software, and to permit persons to whom the Data Files or Software are furnished to do so, provided that either  
(a) this copyright and permission notice appear with all copies of the Data Files or Software, or  
(b) this copyright and permission notice appear in associated Documentation.

THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS.  
IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in these Data Files or Software without prior written authorization of the copyright holder.

...

```
Khronos Group OpenGL Headers v2.1
```

```
Khronos Group License
```

```
<pre>
```

Copyright (c) 2007 The Khronos Group Inc.

Permission is hereby granted, free of charge, to any person obtaining a



copy of this software and/or associated documentation files (the "Materials"), to deal in the Materials without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Materials, and to permit persons to whom the Materials are furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Materials.

THE MATERIALS ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE MATERIALS OR THE USE OR OTHER DEALINGS IN THE MATERIALS.

```
</pre>
Little Color Management System (LCMS) v2.9
```

```
LCMS License
<pre>
```

Little Color Management System  
Copyright (c) 1998-2011 Marti Maria Saguer

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

```
</pre>
c-libutl 20160225
```

### c-libutl License

^^^

This software is distributed under the terms of the BSD license.

== BSD LICENSE =====

(C) 2009 by Remo Dentato (rdentato@gmail.com)

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- \* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- \* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

<http://opensource.org/licenses/bsd-license.php>

^^^

## Mozilla Elliptic Curve Cryptography (ECC)

### Mozilla ECC Notice

This notice is provided with respect to Elliptic Curve Cryptography, which is included with JRE, JDK, and OpenJDK.

You are receiving a

[copy](<http://hg.openjdk.java.net/jdk9/jdk9/jdk/file/tip/src/jdk.crypto.ec/share/native/libsunec/impl>) of the Elliptic Curve Cryptography library in source form with the JDK and OpenJDK source distributions, and as object code in the JRE & JDK runtimes.

<pre>

In the case of the JRE & JDK runtimes, the terms of the Oracle license do NOT apply to the Elliptic Curve Cryptography library; it is licensed under the

following license, separately from Oracle's JDK & JRE. If you do not wish to install the Elliptic Curve Cryptography library, you may delete the Elliptic Curve Cryptography library:

- On Solaris and Linux systems: delete \$(JAVA\_HOME)/lib/libsunec.so
- On Mac OSX systems: delete \$(JAVA\_HOME)/lib/libsunec.dylib
- On Windows systems: delete \$(JAVA\_HOME)\bin\sunec.dll

</pre>

### Written Offer for Source Code

<pre>

For third party technology that you receive from Oracle in binary form which is licensed under an open source license that gives you the right to receive the source code for that binary, you can obtain a copy of the applicable source code from this page:

<http://hg.openjdk.java.net/jdk9/jdk9/jdk/file/tip/src/jdk.crypto.ec/share/native/libsunec/impl>

If the source code for the technology was not provided to you with the binary, you can also receive a copy of the source code on physical media by submitting a written request to:

Oracle America, Inc.  
Attn: Associate General Counsel,  
Development and Engineering Legal  
500 Oracle Parkway, 10th Floor  
Redwood Shores, CA 94065

Or, you may send an email to Oracle using the form at:

<http://www.oracle.com/goto/opensourcecode/request>

Your request should include:

- The name of the component or binary file(s) for which you are requesting the source code
- The name and version number of the Oracle product containing the binary
- The date you received the Oracle product
- Your name
- Your company name (if applicable)
- Your return mailing address and email and
- A telephone number in the event we need to reach you.

We may charge you a fee to cover the cost of physical media and processing. Your request must be sent (i) within three (3) years of the date you received the Oracle product that included the component or binary file(s) that are the subject of your request, or (ii) in the case of code licensed under the GPL v3, for as long as Oracle offers spare parts or customer support for that product model.

</pre>

### LGPL 2.1

<pre>

## GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA  
Everyone is permitted to copy and distribute verbatim copies  
of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts  
as the successor of the GNU Library Public License, version 2, hence  
the version number 2.1.]

### Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these

rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages

are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

## GNU LESSER GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated

straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- a) The modified work must itself be a software library.
- b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of

its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form



under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies

the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

- a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.
- b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and

conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

#### END OF TERMS AND CONDITIONS

##### How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is

safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the library's name and a brief idea of what it does.>
Copyright (C) <year> <name of author>
```

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

```
<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice
```

That's all there is to it!

```
</pre>
IAIK (Institute for Applied Information Processing and Communication) PKCS#11 wrapper files v1

IAIK License
<pre>
```

Copyright (c) 2002 Graz University of Technology. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. The end-user documentation included with the redistribution, if any, must include the following acknowledgment:

"This product includes software developed by IAIK of Graz University of Technology."

Alternately, this acknowledgment may appear in the software itself, if and wherever such third-party acknowledgments normally appear.

4. The names "Graz University of Technology" and "IAIK of Graz University of Technology" must not be used to endorse or promote products derived from this software without prior written permission.

5. Products derived from this software may not be called "IAIK PKCS Wrapper", nor may "IAIK" appear in their name, without prior written permission of Graz University of Technology.

THIS SOFTWARE IS PROVIDED "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE LICENSOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

</pre>

## JLine v2.14.6

### JLine License

<pre>

Copyright (c) 2002-2016, the original author or authors.

All rights reserved.

<http://www.opensource.org/licenses/bsd-license.php>

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of JLine nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

```
</pre>
libpng v1.6.35
```

```
libpng License
<pre>
```

This copy of the libpng notices is provided for your convenience. In case of any discrepancy between this copy and the notices in the file png.h that is included in the libpng distribution, the latter shall prevail.

COPYRIGHT NOTICE, DISCLAIMER, and LICENSE:

If you modify libpng you may insert additional notices immediately following this sentence.

This code is released under the libpng license.

libpng versions 1.0.7, July 1, 2000 through 1.6.35, September 29, 2017 are Copyright (c) 2000-2002, 2004, 2006-2018 Glenn Randers-Pehrson, are derived from libpng-1.0.6, and are distributed according to the same disclaimer and license as libpng-1.0.6 with the following individuals added to the list of Contributing Authors:



Simon-Pierre Cadieux  
Eric S. Raymond  
Mans Rullgard  
Cosmin Truta  
Gilles Vollant  
James Yu  
Mandar Sahastrabuddhe  
Google Inc.  
Vadim Barkov

and with the following additions to the disclaimer:

There is no warranty against interference with your enjoyment of the library or against infringement. There is no warranty that our efforts or the library will fulfill any of your particular purposes or needs. This library is provided with all faults, and the entire risk of satisfactory quality, performance, accuracy, and effort is with the user.

Some files in the "contrib" directory and some configure-generated files that are distributed with libpng have other copyright owners and are released under other open source licenses.

libpng versions 0.97, January 1998, through 1.0.6, March 20, 2000, are Copyright (c) 1998-2000 Glenn Randers-Pehrson, are derived from libpng-0.96, and are distributed according to the same disclaimer and license as libpng-0.96, with the following individuals added to the list of Contributing Authors:

Tom Lane  
Glenn Randers-Pehrson  
Willem van Schaik

libpng versions 0.89, June 1996, through 0.96, May 1997, are Copyright (c) 1996-1997 Andreas Dilger, are derived from libpng-0.88, and are distributed according to the same disclaimer and license as libpng-0.88, with the following individuals added to the list of Contributing Authors:

John Bowler  
Kevin Bracey  
Sam Bushell  
Magnus Holmgren  
Greg Roelofs  
Tom Tanner

Some files in the "scripts" directory have other copyright owners

but are released under this license.

libpng versions 0.5, May 1995, through 0.88, January 1996, are  
Copyright (c) 1995-1996 Guy Eric Schalnat, Group 42, Inc.

For the purposes of this copyright and license, "Contributing Authors"  
is defined as the following set of individuals:

Andreas Dilger  
Dave Martindale  
Guy Eric Schalnat  
Paul Schmidt  
Tim Wegner

The PNG Reference Library is supplied "AS IS". The Contributing Authors  
and Group 42, Inc. disclaim all warranties, expressed or implied,  
including, without limitation, the warranties of merchantability and of  
fitness for any purpose. The Contributing Authors and Group 42, Inc.  
assume no liability for direct, indirect, incidental, special, exemplary,  
or consequential damages, which may result from the use of the PNG  
Reference Library, even if advised of the possibility of such damage.

Permission is hereby granted to use, copy, modify, and distribute this  
source code, or portions hereof, for any purpose, without fee, subject  
to the following restrictions:

1. The origin of this source code must not be misrepresented.
2. Altered versions must be plainly marked as such and must not  
be misrepresented as being the original source.
3. This Copyright notice may not be removed or altered from any  
source or altered source distribution.

The Contributing Authors and Group 42, Inc. specifically permit, without  
fee, and encourage the use of this source code as a component to  
supporting the PNG file format in commercial products. If you use this  
source code in a product, acknowledgment is not required but would be  
appreciated.

END OF COPYRIGHT NOTICE, DISCLAIMER, and LICENSE.

```
</pre>
GIFLIB v5.1.4

GIFLIB License
<pre>
```

The GIFLIB distribution is Copyright (c) 1997 Eric S. Raymond

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

```
</pre>
JSZip v3.1.5
```

```
MIT License
<pre>
```

Copyright (c) 2009-2016 Stuart Knightley, David Duponchel, Franz Buchinger, Antnio Afonso

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

```
</pre>
```

## Double-conversion v1.1.5

### Double-conversion License

<https://raw.githubusercontent.com/google/double-conversion/master/LICENSE>

<pre>

Copyright 2006-2011, the V8 project authors. All rights reserved.  
Redistribution and use in source and binary forms, with or without  
modification, are permitted provided that the following conditions are  
met:

- \* Redistributions of source code must retain the above copyright  
notice, this list of conditions and the following disclaimer.
- \* Redistributions in binary form must reproduce the above  
copyright notice, this list of conditions and the following  
disclaimer in the documentation and/or other materials provided  
with the distribution.
- \* Neither the name of Google Inc. nor the names of its  
contributors may be used to endorse or promote products derived  
from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS  
"AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT  
LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR  
A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT  
OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,  
SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT  
LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,  
DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY  
THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT  
(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE  
OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

</pre>

## Apache Xerces v2.11.0

### Apache Xerces Notice

<pre>

=====  
== NOTICE file corresponding to section 4(d) of the Apache License, ==  
== Version 2.0, in this case for the Apache Xerces Java distribution. ==  
=====

Apache Xerces Java  
Copyright 1999-2010 The Apache Software Foundation  
This product includes software developed at

The Apache Software Foundation (<http://www.apache.org/>).  
Portions of this software were originally based on the following:  
- software copyright (c) 1999, IBM Corporation., <http://www.ibm.com>.  
- software copyright (c) 1999, Sun Microsystems., <http://www.sun.com>.  
- voluntary contributions made by Paul Eng on behalf of the  
Apache Software Foundation that were originally developed at iClick, Inc.,  
software copyright (c) 1999.

</pre>  
  
### Apache 2.0 License  
<pre>

Apache License  
Version 2.0, January 2004  
<http://www.apache.org/licenses/>

## TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

### 1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a

copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct

or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of

this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following



boilerplate notice, with the fields enclosed by brackets "[ ]"  
replaced with your own identifying information. (Don't include  
the brackets!) The text should be enclosed in the appropriate  
comment syntax for the file format. We also recommend that a  
file or class name and description of purpose be included on the  
same "printed page" as the copyright notice for easier  
identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software  
distributed under the License is distributed on an "AS IS" BASIS,  
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
See the License for the specific language governing permissions and  
limitations under the License.

</pre>

```
PC/SC Lite for Suse Linux v1.1.1
```

```
PC/SC Lite License
```

<pre>

Copyright (c) 1999-2004 David Corcoran <corcoran@linuxnet.com>  
Copyright (c) 1999-2004 Ludovic Rousseau <ludovic.rousseau (at) free.fr>  
All rights reserved.

Redistribution and use in source and binary forms, with or without  
modification, are permitted provided that the following conditions  
are met:

1. Redistributions of source code must retain the above copyright  
notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright  
notice, this list of conditions and the following disclaimer in the  
documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software  
must display the following acknowledgement:  
This product includes software developed by:  
David Corcoran <corcoran@linuxnet.com>  
<http://www.linuxnet.com> (MUSCLE)
4. The name of the author may not be used to endorse or promote products  
derived from this software without specific prior written permission.

Changes to this license can be made only by the copyright author with explicit written consent.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

</pre>

## jQuery UI v1.11.4

### jQuery UI License

---

Copyright jQuery Foundation and other contributors, <https://jquery.org/>

This software consists of voluntary contributions made by many individuals. For exact contribution history, see the revision history available at <https://github.com/jquery/jquery-ui>

The following license applies to all parts of this software except as documented below:

====

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION

WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

====

Copyright and related rights for sample code are waived via CC0. Sample code is defined as all source code contained within the demos directory.

CC0: <http://creativecommons.org/publicdomain/zero/1.0/>

====

All files located in the node\_modules and external directories are externally maintained libraries used by this software which have their own licenses; we recommend you read them, as their terms may differ from the terms above.

...

## Apache Xalan v2.7.2

### Apache Xalan Notice

<pre>

=====

====

== NOTICE file corresponding to the section 4d of the Apache License, Version 2.0, ==  
== in this case for the Apache Xalan distribution. ==

=====

====

This product includes software developed by  
The Apache Software Foundation (<http://www.apache.org/>).

Specifically, we only include the XSLTC portion of the source from the Xalan distribution.  
The Xalan project has two processors: an interpretive one (Xalan Interpretive) and a compiled one (The XSLT Compiler (XSLTC)). We \*only\* use the XSLTC part of Xalan; We use the source from the packages that are part of the XSLTC sources.

Portions of this software was originally based on the following:

- software copyright (c) 1999-2002, Lotus Development Corporation., <http://www.lotus.com>.
- software copyright (c) 2001-2002, Sun Microsystems., <http://www.sun.com>.
- software copyright (c) 2003, IBM Corporation., <http://www.ibm.com>.
- voluntary contributions made by Ovidiu Predescu ([ovidiu@cup.hp.com](mailto:ovidiu@cup.hp.com)) on behalf of the Apache Software Foundation and was originally developed at Hewlett Packard Company.

</pre>

### Apache 2.0 License

<pre>

Apache License  
Version 2.0, January 2004  
<http://www.apache.org/licenses/>

## TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

### 1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

(a) You must give any other recipients of the Work or

Derivative Works a copy of this License; and

- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software  
distributed under the License is distributed on an "AS IS" BASIS,  
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
See the License for the specific language governing permissions and  
limitations under the License.

</pre>

## Thai Dictionary

### Thai Dictionary License

<pre>

Copyright (C) 1982 The Royal Institute, Thai Royal Government.

Copyright (C) 1998 National Electronics and Computer Technology Center,  
National Science and Technology Development Agency,  
Ministry of Science Technology and Environment,  
Thai Royal Government.

Permission is hereby granted, free of charge, to any person obtaining a copy  
of this software and associated documentation files (the "Software"), to deal  
in the Software without restriction, including without limitation the rights  
to use, copy, modify, merge, publish, distribute, sublicense, and/or sell  
copies of the Software, and to permit persons to whom the Software is  
furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all  
copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR  
IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY,  
FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE  
AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER  
LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM,  
OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE  
SOFTWARE.

</pre>

## jQuery Migrate v3.0.1

### jQuery Migrate License

...



Copyright jQuery Foundation and other contributors, <https://jquery.org/>

This software consists of voluntary contributions made by many individuals. For exact contribution history, see the revision history available at <https://github.com/jquery/jquery-migrate>

The following license applies to all parts of this software except as documented below:

====

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

====

All files located in the node\_modules and external directories are externally maintained libraries used by this software which have their own licenses; we recommend you read them, as their terms may differ from the terms above.

...

## Eastman Kodak Company: Portions of color management and imaging software

### Eastman Kodak Notice

<pre>

Portions Copyright Eastman Kodak Company 1991-2003

</pre>

#### ADDITIONAL INFORMATION ABOUT LICENSING

Certain files distributed by Oracle America, Inc. and/or its affiliates are subject to the following clarification and special exception to the GPLv2, based on the GNU Project exception for its Classpath libraries, known as the

## GNU Classpath Exception.

Note that Oracle includes multiple, independent programs in this software package. Some of those programs are provided under licenses deemed incompatible with the GPLv2 by the Free Software Foundation and others. For example, the package includes programs licensed under the Apache License, Version 2.0 and may include FreeType. Such programs are licensed to you under their original licenses.

Oracle facilitates your further distribution of this package by adding the Classpath Exception to the necessary parts of its GPLv2 code, which permits you to use that code in combination with other independent modules not licensed under the GPLv2. However, note that this would not permit you to commingle code under an incompatible license with Oracle's GPLv2 licensed code by, for example, cutting and pasting such code into a file also containing Oracle's GPLv2 licensed code and then distributing the result.

Additionally, if you were to remove the Classpath Exception from any of the files to which it applies and distribute the result, you would likely be required to license some or all of the other code in that distribution under the GPLv2 as well, and since the GPLv2 is incompatible with the license terms of some items included in the distribution by Oracle, removing the Classpath Exception could therefore effectively compromise your ability to further distribute the package.

Failing to distribute notices associated with some files may also create unexpected legal consequences.

Proceed with caution and we recommend that you obtain the advice of a lawyer skilled in open source matters before removing the Classpath Exception or making modifications to this package which may subsequently be redistributed and/or involve the use of third party software.

```
JRuby Joni v1.1.9
```

```
JRuby License
```

```
<pre>
```

```
Jruby 2012
```

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

</pre>

## International Components for Unicode (ICU4J) v60.2

### ICU4J License

...

#### UNICODE, INC. LICENSE AGREEMENT - DATA FILES AND SOFTWARE

Unicode Data Files include all data files under the directories

<http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>,

<http://www.unicode.org/cldr/data/>,

<http://source.icu-project.org/repos/icu/>, and

<http://www.unicode.org/utility/trac/browser/>.

Unicode Data Files do not include PDF online code charts under the directory <http://www.unicode.org/Public/>.

Software includes any source code published in the Unicode Standard or under the directories

<http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>,

<http://www.unicode.org/cldr/data/>,

<http://source.icu-project.org/repos/icu/>, and

<http://www.unicode.org/utility/trac/browser/>.

NOTICE TO USER: Carefully read the following legal agreement.

BY DOWNLOADING, INSTALLING, COPYING OR OTHERWISE USING UNICODE INC.'S DATA FILES ("DATA FILES"), AND/OR SOFTWARE ("SOFTWARE"),

YOU UNEQUIVOCALLY ACCEPT, AND AGREE TO BE BOUND BY, ALL OF THE TERMS AND CONDITIONS OF THIS AGREEMENT.

IF YOU DO NOT AGREE, DO NOT DOWNLOAD, INSTALL, COPY, DISTRIBUTE OR USE THE DATA FILES OR SOFTWARE.

#### COPYRIGHT AND PERMISSION NOTICE

Copyright 1991-2018 Unicode, Inc. All rights reserved.

Distributed under the Terms of Use in <http://www.unicode.org/copyright.html>.

Permission is hereby granted, free of charge, to any person obtaining a copy of the Unicode data files and any associated documentation

(the "Data Files") or Unicode software and any associated documentation (the "Software") to deal in the Data Files or Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Data Files or Software, and to permit persons to whom the Data Files or Software are furnished to do so, provided that either

- (a) this copyright and permission notice appear with all copies of the Data Files or Software, or
- (b) this copyright and permission notice appear in associated Documentation.

THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS.

IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in these Data Files or Software without prior written authorization of the copyright holder.

...

## Cryptix AES v3.2.0

### Cryptix General License

<pre>

Cryptix General License

Copyright (c) 1995-2005 The Cryptix Foundation Limited.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the

distribution.

THIS SOFTWARE IS PROVIDED BY THE CRYPTIX FOUNDATION LIMITED AND CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE CRYPTIX FOUNDATION LIMITED OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

```
</pre>
jopt-simple v5.0.4
```

```
MIT License
<pre>
```

Copyright (c) 2004-2015 Paul R. Holser, Jr.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

```
</pre>
```

OPENJDK ASSEMBLY EXCEPTION

The OpenJDK source code made available by Oracle America, Inc. (Oracle) at [openjdk.java.net](http://openjdk.java.net) ("OpenJDK Code") is distributed under the terms of the GNU

General Public License <<http://www.gnu.org/copyleft/gpl.html>> version 2 only ("GPL2"), with the following clarification and special exception.

Linking this OpenJDK Code statically or dynamically with other code is making a combined work based on this library. Thus, the terms and conditions of GPL2 cover the whole combination.

As a special exception, Oracle gives you permission to link this OpenJDK Code with certain code licensed by Oracle as indicated at <http://openjdk.java.net/legal/exception-modules-2007-05-08.html> ("Designated Exception Modules") to produce an executable, regardless of the license terms of the Designated Exception Modules, and to copy and distribute the resulting executable under GPL2, provided that the Designated Exception Modules continue to be governed by the licenses under which they were offered by Oracle.

As such, it allows licensees and sublicensees of Oracle's GPL2 OpenJDK Code to build an executable that includes those portions of necessary code that Oracle could not provide under GPL2 (or that Oracle has provided under GPL2 with the Classpath exception). If you modify or add to the OpenJDK code, that new GPL2 code may still be combined with Designated Exception Modules if the new code is made subject to this exception by its copyright holder.

## Apache Commons Byte Code Engineering Library (BCEL) Version 6.0

### Apache Commons BCEL Notice

<pre>

```
=====
== NOTICE file corresponding to the section 4 d of ==
== the Apache License, Version 2.0, ==
== in this case for the Apache Commons BCEL distribution. ==
=====
```

This product includes software developed by  
The Apache Software Foundation (<http://www.apache.org/>).

</pre>

### Apache 2.0 License

<pre>

```
 Apache License
 Version 2.0, January 2004
 http://www.apache.org/licenses/
```

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to

communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of



the Derivative Works; and

(d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[ ]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

See the License for the specific language governing permissions and limitations under the License.

</pre>

## Independent JPEG Group: JPEG release 6b

### JPEG License

<pre>

Must reproduce following license in documentation and/or other materials provided with distribution:

The authors make NO WARRANTY or representation, either express or implied, with respect to this software, its quality, accuracy, merchantability, or fitness for a particular purpose. This software is provided "AS IS", and you, its user, assume the entire risk as to its quality and accuracy.

This software is copyright (C) 1991-1998, Thomas G. Lane.  
All Rights Reserved except as specified below.

Permission is hereby granted to use, copy, modify, and distribute this software (or portions thereof) for any purpose, without fee, subject to these conditions:

- (1) If any part of the source code for this software is distributed, then this README file must be included, with this copyright and no-warranty notice unaltered; and any additions, deletions, or changes to the original files must be clearly indicated in accompanying documentation.
- (2) If only executable code is distributed, then the accompanying documentation must state that "this software is based in part on the work of the Independent JPEG Group".
- (3) Permission for use of this software is granted only if the user accepts full responsibility for any undesirable consequences; the authors accept NO LIABILITY for damages of any kind.

These conditions apply to any software derived from or based on the IJG code, not just to the unmodified library. If you use our work, you ought to acknowledge us.

Permission is NOT granted for the use of any IJG author's name or company name in advertising or publicity relating to this software or products derived from it. This software may be referred to only as "the Independent JPEG Group's software".

We specifically permit and encourage the use of this software as the basis of commercial products, provided that all warranty or liability claims are

assumed by the product vendor.

ansi2knr.c is included in this distribution by permission of L. Peter Deutsch, sole proprietor of its copyright holder, Aladdin Enterprises of Menlo Park, CA. ansi2knr.c is NOT covered by the above copyright and conditions, but instead by the usual distribution terms of the Free Software Foundation; principally, that you must include source code if you redistribute it.

(See the file ansi2knr.c for full details.) However, since ansi2knr.c is not needed as part of any program generated from the IJG code, this does not limit you more than the foregoing paragraphs do.

The Unix configuration script "configure" was produced with GNU Autoconf. It is copyright by the Free Software Foundation but is freely distributable. The same holds for its supporting scripts (config.guess, config.sub, ltconfig, ltmain.sh). Another support script, install-sh, is copyright by M.I.T. but is also freely distributable.

It appears that the arithmetic coding option of the JPEG spec is covered by patents owned by IBM, AT&T, and Mitsubishi. Hence arithmetic coding cannot legally be used without obtaining one or more licenses. For this reason, support for arithmetic coding has been removed from the free JPEG software. (Since arithmetic coding provides only a marginal gain over the unpatented Huffman mode, it is unlikely that very many implementations will support it.) So far as we are aware, there are no patent restrictions on the remaining code.

The IJG distribution formerly included code to read and write GIF files. To avoid entanglement with the Unisys LZW patent, GIF reading support has been removed altogether, and the GIF writer has been simplified to produce "uncompressed GIFs". This technique does not use the LZW algorithm; the resulting GIF files are larger than usual, but are readable by all standard GIF decoders.

We are required to state that "The Graphics Interchange Format(c) is the Copyright property of CompuServe Incorporated. GIF(sm) is a Service Mark property of CompuServe Incorporated."

</pre>

```
Mozilla Public Suffix List
```

```
Public Suffix Notice
```

```
...
```

You are receiving a copy of the Mozilla Public Suffix List in the following file: <java-home>/lib/security/public\_suffix\_list.dat. The terms of the Oracle license do NOT apply to this file; it is licensed under the Mozilla Public License 2.0, separately from the Oracle programs you receive. If you do not wish to use the Public Suffix List, you may remove the

<java-home>/lib/security/public\_suffix\_list.dat file.

The Source Code of this file is available under the Mozilla Public License, v. 2.0 and is located at [https://raw.githubusercontent.com/publicsuffix/list/2225db8d9f4a2a27ec697c883360632fa0c16261/public\\_suffix\\_list.dat](https://raw.githubusercontent.com/publicsuffix/list/2225db8d9f4a2a27ec697c883360632fa0c16261/public_suffix_list.dat).

If a copy of the MPL was not distributed with this file, you can obtain one at <https://mozilla.org/MPL/2.0/>.

Software distributed under the License is distributed on an "AS IS" basis, WITHOUT WARRANTY OF ANY KIND, either express or implied. See the License for the specific language governing rights and limitations under the License.

...

### MPL v2.0

...

Mozilla Public License Version 2.0

=====

## 1. Definitions

-----

### 1.1. "Contributor"

means each individual or legal entity that creates, contributes to the creation of, or owns Covered Software.

### 1.2. "Contributor Version"

means the combination of the Contributions of others (if any) used by a Contributor and that particular Contributor's Contribution.

### 1.3. "Contribution"

means Covered Software of a particular Contributor.

### 1.4. "Covered Software"

means Source Code Form to which the initial Contributor has attached the notice in Exhibit A, the Executable Form of such Source Code Form, and Modifications of such Source Code Form, in each case including portions thereof.

### 1.5. "Incompatible With Secondary Licenses"

means

(a) that the initial Contributor has attached the notice described in Exhibit B to the Covered Software; or

(b) that the Covered Software was made available under the terms of version 1.1 or earlier of the License, but not also under the terms of a Secondary License.

1.6. "Executable Form"

means any form of the work other than Source Code Form.

1.7. "Larger Work"

means a work that combines Covered Software with other material, in a separate file or files, that is not Covered Software.

1.8. "License"

means this document.

1.9. "Licensable"

means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently, any and all of the rights conveyed by this License.

1.10. "Modifications"

means any of the following:

(a) any file in Source Code Form that results from an addition to, deletion from, or modification of the contents of Covered Software; or

(b) any new file in Source Code Form that contains any Covered Software.

1.11. "Patent Claims" of a Contributor

means any patent claim(s), including without limitation, method, process, and apparatus claims, in any patent Licensable by such Contributor that would be infringed, but for the grant of the License, by the making, using, selling, offering for sale, having made, import, or transfer of either its Contributions or its Contributor Version.

1.12. "Secondary License"

means either the GNU General Public License, Version 2.0, the GNU Lesser General Public License, Version 2.1, the GNU Affero General Public License, Version 3.0, or any later versions of those licenses.

1.13. "Source Code Form"

means the form of the work preferred for making modifications.

1.14. "You" (or "Your")

means an individual or a legal entity exercising rights under this License. For legal entities, "You" includes any entity that controls, is controlled by, or is under common control with You. For purposes of this definition, "control" means (a) the power, direct

or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity.

## 2. License Grants and Conditions

-----

### 2.1. Grants

Each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license:

- (a) under intellectual property rights (other than patent or trademark) Licensable by such Contributor to use, reproduce, make available, modify, display, perform, distribute, and otherwise exploit its Contributions, either on an unmodified basis, with Modifications, or as part of a Larger Work; and
- (b) under Patent Claims of such Contributor to make, use, sell, offer for sale, have made, import, and otherwise transfer either its Contributions or its Contributor Version.

### 2.2. Effective Date

The licenses granted in Section 2.1 with respect to any Contribution become effective for each Contribution on the date the Contributor first distributes such Contribution.

### 2.3. Limitations on Grant Scope

The licenses granted in this Section 2 are the only rights granted under this License. No additional rights or licenses will be implied from the distribution or licensing of Covered Software under this License. Notwithstanding Section 2.1(b) above, no patent license is granted by a Contributor:

- (a) for any code that a Contributor has removed from Covered Software; or
- (b) for infringements caused by: (i) Your and any other third party's modifications of Covered Software, or (ii) the combination of its Contributions with other software (except as part of its Contributor Version); or
- (c) under Patent Claims infringed by Covered Software in the absence of its Contributions.

This License does not grant any rights in the trademarks, service marks, or logos of any Contributor (except as may be necessary to comply with the notice requirements in Section 3.4).

#### 2.4. Subsequent Licenses

No Contributor makes additional grants as a result of Your choice to distribute the Covered Software under a subsequent version of this License (see Section 10.2) or under the terms of a Secondary License (if permitted under the terms of Section 3.3).

#### 2.5. Representation

Each Contributor represents that the Contributor believes its Contributions are its original creation(s) or it has sufficient rights to grant the rights to its Contributions conveyed by this License.

#### 2.6. Fair Use

This License is not intended to limit any rights You have under applicable copyright doctrines of fair use, fair dealing, or other equivalents.

#### 2.7. Conditions

Sections 3.1, 3.2, 3.3, and 3.4 are conditions of the licenses granted in Section 2.1.

### 3. Responsibilities

-----

#### 3.1. Distribution of Source Form

All distribution of Covered Software in Source Code Form, including any Modifications that You create or to which You contribute, must be under the terms of this License. You must inform recipients that the Source Code Form of the Covered Software is governed by the terms of this License, and how they can obtain a copy of this License. You may not attempt to alter or restrict the recipients' rights in the Source Code Form.

#### 3.2. Distribution of Executable Form

If You distribute Covered Software in Executable Form then:

- (a) such Covered Software must also be made available in Source Code Form, as described in Section 3.1, and You must inform recipients of the Executable Form how they can obtain a copy of such Source Code



Form by reasonable means in a timely manner, at a charge no more than the cost of distribution to the recipient; and

(b) You may distribute such Executable Form under the terms of this License, or sublicense it under different terms, provided that the license for the Executable Form does not attempt to limit or alter the recipients' rights in the Source Code Form under this License.

### 3.3. Distribution of a Larger Work

You may create and distribute a Larger Work under terms of Your choice, provided that You also comply with the requirements of this License for the Covered Software. If the Larger Work is a combination of Covered Software with a work governed by one or more Secondary Licenses, and the Covered Software is not Incompatible With Secondary Licenses, this License permits You to additionally distribute such Covered Software under the terms of such Secondary License(s), so that the recipient of the Larger Work may, at their option, further distribute the Covered Software under the terms of either this License or such Secondary License(s).

### 3.4. Notices

You may not remove or alter the substance of any license notices (including copyright notices, patent notices, disclaimers of warranty, or limitations of liability) contained within the Source Code Form of the Covered Software, except that You may alter any license notices to the extent required to remedy known factual inaccuracies.

### 3.5. Application of Additional Terms

You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Software. However, You may do so only on Your own behalf, and not on behalf of any Contributor. You must make it absolutely clear that any such warranty, support, indemnity, or liability obligation is offered by You alone, and You hereby agree to indemnify every Contributor for any liability incurred by such Contributor as a result of warranty, support, indemnity or liability terms You offer. You may include additional disclaimers of warranty and limitations of liability specific to any jurisdiction.

## 4. Inability to Comply Due to Statute or Regulation

-----

If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Covered Software due to statute, judicial order, or regulation then You must: (a) comply with

the terms of this License to the maximum extent possible; and (b) describe the limitations and the code they affect. Such description must be placed in a text file included with all distributions of the Covered Software under this License. Except to the extent prohibited by statute or regulation, such description must be sufficiently detailed for a recipient of ordinary skill to be able to understand it.

## 5. Termination

-----

5.1. The rights granted under this License will terminate automatically if You fail to comply with any of its terms. However, if You become compliant, then the rights granted under this License from a particular Contributor are reinstated (a) provisionally, unless and until such Contributor explicitly and finally terminates Your grants, and (b) on an ongoing basis, if such Contributor fails to notify You of the non-compliance by some reasonable means prior to 60 days after You have come back into compliance. Moreover, Your grants from a particular Contributor are reinstated on an ongoing basis if such Contributor notifies You of the non-compliance by some reasonable means, this is the first time You have received notice of non-compliance with this License from such Contributor, and You become compliant prior to 30 days after Your receipt of the notice.

5.2. If You initiate litigation against any entity by asserting a patent infringement claim (excluding declaratory judgment actions, counter-claims, and cross-claims) alleging that a Contributor Version directly or indirectly infringes any patent, then the rights granted to You by any and all Contributors for the Covered Software under Section 2.1 of this License shall terminate.

5.3. In the event of termination under Sections 5.1 or 5.2 above, all end user license agreements (excluding distributors and resellers) which have been validly granted by You or Your distributors under this License prior to termination shall survive termination.

\*\*\*\*\*

```
*
*
* 6. Disclaimer of Warranty
* -----
*
* Covered Software is provided under this License on an "as is"
* basis, without warranty of any kind, either expressed, implied, or
* statutory, including, without limitation, warranties that the
* Covered Software is free of defects, merchantable, fit for a
* particular purpose or non-infringing. The entire risk as to the
* quality and performance of the Covered Software is with You.
* Should any Covered Software prove defective in any respect, You
```

\* (not any Contributor) assume the cost of any necessary servicing, \*  
\* repair, or correction. This disclaimer of warranty constitutes an \*  
\* essential part of this License. No use of any Covered Software is \*  
\* authorized under this License except under this disclaimer. \*

\*\*\*\*\*

\*\*\*\*\*

\* \*  
\* 7. Limitation of Liability \*  
\* ----- \*

\* Under no circumstances and under no legal theory, whether tort \*  
\* (including negligence), contract, or otherwise, shall any \*  
\* Contributor, or anyone who distributes Covered Software as \*  
\* permitted above, be liable to You for any direct, indirect, \*  
\* special, incidental, or consequential damages of any character \*  
\* including, without limitation, damages for lost profits, loss of \*  
\* goodwill, work stoppage, computer failure or malfunction, or any \*  
\* and all other commercial damages or losses, even if such party \*  
\* shall have been informed of the possibility of such damages. This \*  
\* limitation of liability shall not apply to liability for death or \*  
\* personal injury resulting from such party's negligence to the \*  
\* extent applicable law prohibits such limitation. Some \*  
\* jurisdictions do not allow the exclusion or limitation of \*  
\* incidental or consequential damages, so this exclusion and \*  
\* limitation may not apply to You. \*

\*\*\*\*\*

### 8. Litigation -----

Any litigation relating to this License may be brought only in the courts of a jurisdiction where the defendant maintains its principal place of business and such litigation shall be governed by laws of that jurisdiction, without reference to its conflict-of-law provisions. Nothing in this Section shall prevent a party's ability to bring cross-claims or counter-claims.

### 9. Miscellaneous -----

This License represents the complete agreement concerning the subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. Any law or regulation which provides that the language of a contract shall be construed against the drafter

shall not be used to construe this License against a Contributor.

## 10. Versions of the License

-----

### 10.1. New Versions

Mozilla Foundation is the license steward. Except as provided in Section 10.3, no one other than the license steward has the right to modify or publish new versions of this License. Each version will be given a distinguishing version number.

### 10.2. Effect of New Versions

You may distribute the Covered Software under the terms of the version of the License under which You originally received the Covered Software, or under the terms of any subsequent version published by the license steward.

### 10.3. Modified Versions

If you create software not governed by this License, and you want to create a new license for such software, you may create and use a modified version of this License if you rename the license and remove any references to the name of the license steward (except to note that such modified license differs from this License).

### 10.4. Distributing Source Code Form that is Incompatible With Secondary Licenses

If You choose to distribute Source Code Form that is Incompatible With Secondary Licenses under the terms of this version of the License, the notice described in Exhibit B of this License must be attached.

#### Exhibit A - Source Code Form License Notice

-----

This Source Code Form is subject to the terms of the Mozilla Public License, v. 2.0. If a copy of the MPL was not distributed with this file, You can obtain one at <https://mozilla.org/MPL/2.0/>.

If it is not possible or desirable to put the notice in a particular file, then You may include the notice in a location (such as a LICENSE file in a relevant directory) where a recipient would be likely to look for such a notice.

You may add additional accurate notices of copyright ownership.

Exhibit B - "Incompatible With Secondary Licenses" Notice

-----

This Source Code Form is "Incompatible With Secondary Licenses", as defined by the Mozilla Public License, v. 2.0.

...

## DOM Level 3 Core Specification v1.0

### W3C License

<pre>

W3C SOFTWARE NOTICE AND LICENSE

<http://www.w3.org/Consortium/Legal/2002/copyright-software-20021231>

This work (and included software, documentation such as READMEs, or other related items) is being provided by the copyright holders under the following license. By obtaining, using and/or copying this work, you (the licensee) agree that you have read, understood, and will comply with the following terms and conditions.

Permission to copy, modify, and distribute this software and its documentation, with or without modification, for any purpose and without fee or royalty is hereby granted, provided that you include the following on ALL copies of the software and documentation or portions thereof, including modifications:

- 1.The full text of this NOTICE in a location viewable to users of the redistributed or derivative work.
- 2.Any pre-existing intellectual property disclaimers, notices, or terms and conditions. If none exist, the W3C Software Short Notice should be included (hypertext is preferred, text is permitted) within the body of any redistributed or derivative code.
- 3.Notice of any changes or modifications to the files, including the date changes were made. (We recommend you provide URIs to the location from which the code is derived.)

THIS SOFTWARE AND DOCUMENTATION IS PROVIDED "AS IS," AND COPYRIGHT HOLDERS MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE OR DOCUMENTATION WILL NOT INFRINGE ANY THIRD PARTY PATENTS,COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS.

COPYRIGHT HOLDERS WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THE SOFTWARE OR

DOCUMENTATION. The name and trademarks of copyright holders may NOT be used in advertising or publicity pertaining to the software without specific, written prior permission. Title to copyright in this software and any associated documentation will at all times remain with copyright holders.

---

This formulation of W3C's notice and license became active on December 31 2002. This version removes the copyright ownership notice such that this license can be used with materials other than those owned by the W3C, reflects that ERCIM is now a host of the W3C, includes references to this specific dated version of the license, and removes the ambiguous grant of "use". Otherwise, this version is the same as the previous version and is written so as to preserve the Free Software Foundation's assessment of GPL compatibility and OSI's certification under the Open Source Definition. Please see our Copyright FAQ for common questions about using materials from our site, including specific terms and conditions for packages like libwww, Amaya, and Jigsaw. Other questions about this notice can be directed to [site-policy@w3.org](mailto:site-policy@w3.org).

```
</pre>
CUP Parser Generator for Java v 0.10k
```

```
CUP Parser Generator License
<pre>
```

Copyright 1996-1999 by Scott Hudson, Frank Flannery, C. Scott Ananian

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both the copyright notice and this permission notice and warranty disclaimer appear in supporting documentation, and that the names of the authors or their employers not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

The authors and their employers disclaim all warranties with regard to this software, including all implied warranties of merchantability and fitness. In no event shall the authors or their employers be liable for any special, indirect or consequential damages or any damages whatsoever resulting from loss of use, data or profits, whether in an action of contract, negligence or other tortious action, arising out of or in connection with the use or performance of this software.

```
</pre>
Mesa 3-D Graphics Library v4.1
```

```
Mesa License
```

<pre>

Mesa 3-D graphics library  
Version: 4.1

Copyright (C) 1999-2002 Brian Paul All Rights Reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL BRIAN PAUL BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

</pre>

The GNU General Public License (GPL)

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.  
51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to

distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

## TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is



not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the

right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so

long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original

copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

## How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

One line to give the program's name and a brief idea of what it does.

Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type 'show w'. This is free software, and you are welcome to redistribute it under certain conditions; type 'show c' for details.

The hypothetical commands 'show w' and 'show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than 'show w' and 'show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program 'Gnomovision' (which makes passes at compilers) written by James Hacker.

signature of Ty Coon, 1 April 1989

Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

#### "CLASSPATH" EXCEPTION TO THE GPL

Certain source files distributed by Oracle America and/or its affiliates are subject to the following clarification and special exception to the GPL, but only where Oracle has expressly included in the particular source file's header the words "Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code."

Linking this library statically or dynamically with other modules is making a combined work based on this library. Thus, the terms and conditions of the GNU General Public License cover the whole combination.

As a special exception, the copyright holders of this library give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent modules, and to copy and distribute the resulting executable under terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module. An independent module is a module which is not derived from or based on this library. If you modify this library, you may extend this exception to your version of the library, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version.

## Dynalink v.5

### Dynalink License

<pre>

Copyright (c) 2009-2013, Attila Szegedi

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

\* Redistributions of source code must retain the above copyright

notice, this list of conditions and the following disclaimer.

\* Redistributions in binary form must reproduce the above copyright

notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

\* Neither the name of the copyright holder nor the names of contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL COPYRIGHT HOLDER BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

</pre>

## Unicode Common Local Data Repository (CLDR) v33

### CLDR License

...

#### UNICODE, INC. LICENSE AGREEMENT - DATA FILES AND SOFTWARE

Unicode Data Files include all data files under the directories

<http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>,

<http://www.unicode.org/cldr/data/>,

<http://source.icu-project.org/repos/icu/>, and

<http://www.unicode.org/utility/trac/browser/>.

Unicode Data Files do not include PDF online code charts under the directory <http://www.unicode.org/Public/>.

Software includes any source code published in the Unicode Standard or under the directories

<http://www.unicode.org/Public/>, <http://www.unicode.org/reports/>,

<http://www.unicode.org/cldr/data/>,

<http://source.icu-project.org/repos/icu/>, and

<http://www.unicode.org/utility/trac/browser/>.

NOTICE TO USER: Carefully read the following legal agreement.

BY DOWNLOADING, INSTALLING, COPYING OR OTHERWISE USING UNICODE INC.'S DATA FILES ("DATA FILES"), AND/OR SOFTWARE ("SOFTWARE"),

YOU UNEQUIVOCALLY ACCEPT, AND AGREE TO BE BOUND BY, ALL OF THE

TERMS AND CONDITIONS OF THIS AGREEMENT.

IF YOU DO NOT AGREE, DO NOT DOWNLOAD, INSTALL, COPY, DISTRIBUTE OR USE THE DATA FILES OR SOFTWARE.

#### COPYRIGHT AND PERMISSION NOTICE

Copyright 1991-2018 Unicode, Inc. All rights reserved.

Distributed under the Terms of Use in <http://www.unicode.org/copyright.html>.

Permission is hereby granted, free of charge, to any person obtaining a copy of the Unicode data files and any associated documentation (the "Data Files") or Unicode software and any associated documentation (the "Software") to deal in the Data Files or Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Data Files or Software, and to permit persons to whom the Data Files or Software are furnished to do so, provided that either (a) this copyright and permission notice appear with all copies of the Data Files or Software, or (b) this copyright and permission notice appear in associated Documentation.

THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS.

IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in these Data Files or Software without prior written authorization of the copyright holder.

...

## jQuery v3.3.1

### jQuery License

...

jQuery v 3.3.1

Copyright 2005, 2018 jQuery Foundation, Inc. and other contributors

<http://jquery.com/>

Permission is hereby granted, free of charge, to any person obtaining



a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

\*\*\*\*\*

The jQuery JavaScript Library v3.3.1 also includes Sizzle.js

Sizzle.js includes the following license:

Copyright JS Foundation and other contributors, <https://js.foundation/>

This software consists of voluntary contributions made by many individuals. For exact contribution history, see the revision history available at <https://github.com/jquery/sizzle>

The following license applies to all parts of this software except as documented below:

====

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF

MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

====

All files located in the node\_modules and external directories are externally maintained libraries used by this software which have their own licenses; we recommend you read them, as their terms may differ from the terms above.

\*\*\*\*\*

...

## X Windows System v6.8.2

### X Windows System License

<pre>

This is the copyright for the files in src/java.desktop/unix/native/libawt\_xawt: list.h, multiVis.h, wsutils.h, list.c, multiVis.c

Copyright (c) 1994 Hewlett-Packard Co.

Copyright (c) 1996 X Consortium

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE X CONSORTIUM BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of the X Consortium shall not be used in advertising or otherwise to promote the sale, use or

other dealings in this Software without prior written authorization from the X Consortium.

---

The files in motif/lib/Xm/util included this copyright:  
mkdirhier.man,xmkmf.man, chownxterm.c, makeg.man, mergelib.cpp,  
lndir.man, makestrs.man, checktree.c, lndir.c, makestrs.c

Copyright (c) 1993, 1994 X Consortium

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE X CONSORTIUM BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of the X Consortium shall not be used in advertising or otherwise to promote the sale, use or other dealing in this Software without prior written authorization from the X Consortium.

---

Xmos\_r.h:

/\*

Copyright (c) 1996 X Consortium

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE X CONSORTIUM BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of the X Consortium shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from the X Consortium.

\*/

---

Copyright notice for extutil.h:  
Copyright 1989, 1998 The Open Group

All Rights Reserved.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE OPEN GROUP BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of The Open Group shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from The Open Group.

\*

\* Author: Jim Fulton, MIT The Open Group

\*

\* Xlib Extension-Writing Utilities

\*

\* This package contains utilities for writing the client API for various

\* protocol extensions. THESE INTERFACES ARE NOT PART OF THE X STANDARD AND

\* ARE SUBJECT TO CHANGE!

\*/

---

Copyright notice for HPkeysym.h:

/\*

Copyright 1987, 1998 The Open Group

All Rights Reserved.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE OPEN GROUP BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of The Open Group shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from The Open Group.

Copyright 1987 by Digital Equipment Corporation, Maynard, Massachusetts,

All Rights Reserved

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the names of Hewlett Packard or Digital not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

DIGITAL DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL DIGITAL BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

HEWLETT-PACKARD MAKES NO WARRANTY OF ANY KIND WITH REGARD TO THIS SOFTWARE, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Hewlett-Packard shall not be liable for errors contained herein or direct, indirect, special, incidental or

consequential damages in connection with the furnishing,  
performance, or use of this material.

\*/

---

Copyright notice in keysym2ucs.h:

Copyright 1987, 1994, 1998 The Open Group

Permission to use, copy, modify, distribute, and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation.

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE OPEN GROUP BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of The Open Group shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from The Open Group.

Copyright 1987 by Digital Equipment Corporation, Maynard, Massachusetts

All Rights Reserved

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Digital not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission.

DIGITAL DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL DIGITAL BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR

ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS,  
WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION,  
ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS  
SOFTWARE.

\*\*\*\*\*/

</pre>

## Harfbuzz v1.8.2

### Harfbuzz License

<http://cgit.freedesktop.org/harfbuzz/tree/COPYING>

<pre>

HarfBuzz is licensed under the so-called "Old MIT" license. Details follow.  
For parts of HarfBuzz that are licensed under different licenses see individual  
files names COPYING in subdirectories where applicable.

Copyright 2010,2011,2012 Google, Inc.  
Copyright 2012 Mozilla Foundation  
Copyright 2011 Codethink Limited  
Copyright 2008,2010 Nokia Corporation and/or its subsidiary(-ies)  
Copyright 2009 Keith Stribley  
Copyright 2009 Martin Hosken and SIL International  
Copyright 2007 Chris Wilson  
Copyright 2006 Behdad Esfahbod  
Copyright 2005 David Turner  
Copyright 2004,2007,2008,2009,2010 Red Hat, Inc.  
Copyright 1998-2004 David Turner and Werner Lemberg

For full copyright notices consult the individual files in the package.

Permission is hereby granted, without written agreement and without  
license or royalty fees, to use, copy, modify, and distribute this  
software and its documentation for any purpose, provided that the  
above copyright notice and the following two paragraphs appear in  
all copies of this software.

IN NO EVENT SHALL THE COPYRIGHT HOLDER BE LIABLE TO ANY PARTY FOR  
DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES  
ARISING OUT OF THE USE OF THIS SOFTWARE AND ITS DOCUMENTATION, EVEN  
IF THE COPYRIGHT HOLDER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH  
DAMAGE.

THE COPYRIGHT HOLDER SPECIFICALLY DISCLAIMS ANY WARRANTIES, INCLUDING,

BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE SOFTWARE PROVIDED HEREUNDER IS ON AN "AS IS" BASIS, AND THE COPYRIGHT HOLDER HAS NO OBLIGATION TO PROVIDE MAINTENANCE, SUPPORT, UPDATES, ENHANCEMENTS, OR MODIFICATIONS.

All source code, except for one section, is licensed as above. The one exception is licensed with a slightly different MIT variant:

The contents of this directory are licensed under the following terms:

Copyright (C) 2012 Grigori Goronzy <greg@kinoho.net>

Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

</pre>

## Apache Santuario v2.1.1

### Apache Santuario Notice

<pre>

Apache Santuario - XML Security for Java  
Copyright 1999-2018 The Apache Software Foundation

This product includes software developed at  
The Apache Software Foundation (<http://www.apache.org/>).

It was originally based on software copyright (c) 2001, Institute for  
Data Communications Systems, <<http://www.nue.et-inf.uni-siegen.de/>>.

The development of this software was partly funded by the European  
Commission in the <WebSig> project in the ISIS Programme.

</pre>

### Apache 2.0 License

<pre>

Apache License  
Version 2.0, January 2004



## TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

### 1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally

submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and

- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. **Submission of Contributions.** Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.
6. **Trademarks.** This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.
7. **Disclaimer of Warranty.** Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or

implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work.

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright [yyyy] [name of copyright owner]

Licensed under the Apache License, Version 2.0 (the "License");  
you may not use this file except in compliance with the License.  
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

</pre>

## ASM Bytecode Manipulation Framework v6.0

### ASM License

<pre>

Copyright (c) 2000-2011 France Tlcom

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the copyright holders nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

</pre>

## PKCS #11 Cryptographic Token Interface v2.20 Amendment 3 Header Files

### PKCS #11 Cryptographic Token Interface License

<pre>

License to copy and use this software is granted provided that it is identified as "RSA Security Inc. PKCS #11 Cryptographic Token Interface (Cryptoki)" in all material mentioning or referencing this software.

License is also granted to make and use derivative works provided that such works are identified as "derived from the RSA Security Inc. PKCS #11 Cryptographic Token Interface (Cryptoki)" in all material mentioning or referencing the derived work.

RSA Security Inc. makes no representations concerning either the merchantability of this software or the suitability of this software for any particular purpose. It is provided "as is" without express or implied warranty of any kind.

</pre>

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: [www.cisco.com/go/trademarks](http://www.cisco.com/go/trademarks). Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

©2023 Cisco Systems, Inc. All rights reserved.