

< delete  
> add

## Incorrect variables

List of (Low hanging bugs)LHBs bugs related with incorrect variables:

### Bug6

<https://issues.apache.org/jira/browse/LANG-857>

95c95

```
<      pos += Character.charCount(Character.codePointAt(input, pos));  
---  
>      pos += Character.charCount(Character.codePointAt(input, pt));
```

-----  
Bug report url:

<https://issues.apache.org/jira/browse/LANG-857>  
-----

Root cause in triggering tests:

- org.apache.commons.lang3.StringUtilsTest::testEscapeSurrogatePairs  
--> java.lang.StringIndexOutOfBoundsException: String index out of range: 2
- 

### Bug59

diff -r /tmp/lang\_59b/src/java/org/apache/commons/lang/text/StrBuilder.java  
/tmp/lang\_59f/src/java/org/apache/commons/lang/text/StrBuilder.java

884c884

```
<      str.getChars(0, strLen, buffer, size);  
---  
>      str.getChars(0, width, buffer, size);
```

### Bug60

diff -r /tmp/lang\_60b/src/java/org/apache/commons/lang/text/StrBuilder.java  
/tmp/lang\_60f/src/java/org/apache/commons/lang/text/StrBuilder.java

1673c1673

```
<      for (int i = 0; i < thisBuf.length; i++) {  
---  
>      for (int i = 0; i < this.size; i++) {
```

1730c1730

```
<    for (int i = startIndex; i < thisBuf.length; i++) {  
---  
>    for (int i = startIndex; i < size; i++) {
```

Summary for Bug: Lang-60

---

Revision ID (fixed version):  
a8203b65261110c4a30ff69fe0da7a2390d82757

---

Revision date (fixed version):  
2006-10-31 23:00:54 +0000

---

Bug report id:  
LANG-295

---

Bug report url:  
<https://issues.apache.org/jira/browse/LANG-295>

---

Root cause in triggering tests:  
- org.apache.commons.lang.text.StrBuilderTest::testLang295  
--> junit.framework.AssertionFailedError: The contains(char) method is looking beyond the  
end of the string

---

List of modified sources:  
- org.apache.commons.lang.text.StrBuilder

---

### Bug7

```
diff -r /tmp/chart_7b/source/org/jfree/data/time/TimePeriodValues.java  
/tmp/chart_7f/source/org/jfree/data/time/TimePeriodValues.java  
300c300  
<    long s = getDataItem(this.minMiddleIndex).getPeriod().getStart()  
---  
>    long s = getDataItem(this.maxMiddleIndex).getPeriod().getStart()  
302c302  
<    long e = getDataItem(this.minMiddleIndex).getPeriod().getEnd()  
---  
>    long e = getDataItem(this.maxMiddleIndex).getPeriod().getEnd()
```

Summary for Bug: Chart-7

---

Revision ID (fixed version):  
1087

---

Revision date (fixed version):

2008-06-10 02:22:11 -0700

---

Bug report id:  
UNKNOWN

---

Bug report url:  
UNKNOWN

---

Root cause in triggering tests:  
- org.jfree.data.time.junit.TimePeriodValuesTests::testGetMaxMiddleIndex  
--> junit.framework.AssertionFailedError: expected:<1> but was:<3>

---

List of modified sources:  
- org.jfree.data.time.TimePeriodValues

---

### Bug11

diff -r /tmp/chart\_11b/source/org/jfree/chart/util/ShapeUtilities.java  
/tmp/chart\_11f/source/org/jfree/chart/util/ShapeUtilities.java  
275c275

```
<    PathIterator iterator2 = p1.getPathIterator(null);  
---  
>    PathIterator iterator2 = p2.getPathIterator(null);
```

Summary for Bug: Chart-11

---

Revision ID (fixed version):  
1025

---

Revision date (fixed version):  
2008-06-02 00:27:30 -0700

---

Bug report id:  
868

---

Bug report url:  
<https://sourceforge.net/p/jfreechart/bugs/868>

---

Root cause in triggering tests:  
- org.jfree.chart.util.junit.ShapeUtilitiesTests::testEqualGeneralPaths  
--> junit.framework.AssertionFailedError

---

List of modified sources:  
- org.jfree.chart.util.ShapeUtilities

---

### Bug20

```
diff -r /tmp/chart_20b/source/org/jfree/chart/plot/ValueMarker.java
/tmp/chart_20f/source/org/jfree/chart/plot/ValueMarker.java
95c95
```

```
<    super(paint, stroke, paint, stroke, alpha);
---
>    super(paint, stroke, outlinePaint, outlineStroke, alpha);
```

Summary for Bug: Chart-20

---

Revision ID (fixed version):  
283

---

Revision date (fixed version):  
2007-10-08 02:39:54 -0700

---

Bug report id:  
UNKNOWN

---

Bug report url:  
UNKNOWN

---

Root cause in triggering tests:  
- org.jfree.chart.plot.junit.ValueMarkerTests::test1808376  
--> junit.framework.AssertionFailedError: expected:<java.awt.Color[r=0,g=0,b=255]> but  
was:<java.awt.Color[r=255,g=0,b=0]>

---

List of modified sources:  
- org.jfree.chart.plot.ValueMarker

---

### Bug24

```
diff -r /tmp/chart_24b/source/org/jfree/chart/renderer/GrayPaintScale.java
/tmp/chart_24f/source/org/jfree/chart/renderer/GrayPaintScale.java
126c126
```

```
<    int g = (int) ((value - this.lowerBound) / (this.upperBound
---
>    int g = (int) ((v - this.lowerBound) / (this.upperBound
```

Summary for Bug: Chart-24

---

Revision ID (fixed version):  
190

---

Revision date (fixed version):  
2007-09-26 07:00:52 -0700

---

Bug report id:  
UNKNOWN

---

Bug report url:  
UNKNOWN

---

Root cause in triggering tests:

- org.jfree.chart.renderer.junit.GrayPaintScaleTests::testGetPaint  
--> java.lang.IllegalArgumentException: Color parameter outside of expected range: Red  
Green Blue
- 

List of modified sources:

- org.jfree.chart.renderer.GrayPaintScale
- 

### Bug27

diff -r /tmp/Cli\_27b/src/java/org/apache/commons/cli/OptionGroup.java  
/tmp/Cli\_27f/src/java/org/apache/commons/cli/OptionGroup.java  
98c98

```
<    if (selected == null || selected.equals(option.getOpt()))  
---  
>    if (selected == null || selected.equals(option.getKey()))  
100c100  
<        selected = option.getOpt();  
---  
>        selected = option.getKey();
```

Summary for Bug: Cli-27

---

Revision ID (fixed version):

4c971f08861e8cefb8ca9ac20799bfdad4e973a4

---

Revision date (fixed version):

2009-05-30 02:31:22 +0000

---

Bug report id:

CLI-182

---

Bug report url:

<https://issues.apache.org/jira/browse/CLI-182>

---

Root cause in triggering tests:

- org.apache.commons.cli.BasicParserTest::testOptionGroupLong  
--> junit.framework.ComparisonFailure: selected option expected:<bar> but was:<null>
  - org.apache.commons.cli.GnuParserTest::testOptionGroupLong  
--> junit.framework.ComparisonFailure: selected option expected:<bar> but was:<null>
  - org.apache.commons.cli.PosixParserTest::testOptionGroupLong  
--> junit.framework.ComparisonFailure: selected option expected:<bar> but was:<null>
- 

List of modified sources:

- org.apache.commons.cli.OptionGroup

---

#### Bug4

diff -r /tmp/Closure\_4b/src/com/google/javascript/rhino/jstype/NamedType.java  
/tmp/Closure\_4f/src/com/google/javascript/rhino/jstype/NamedType.java

190c190

< if (detectImplicitPrototypeCycle()) {

---

> if (detectInheritanceCycle()) {

202c202

< if (detectImplicitPrototypeCycle()) {

---

> if (detectInheritanceCycle()) {

Summary for Bug: Closure-4

---

Revision ID (fixed version):

efefb736fcc2039b5fb079710b3f2ac82b8c6e4

---

Revision date (fixed version):

2012-12-14 20:20:30 +0000

---

Bug report id:

873

---

Bug report url:

<https://storage.googleapis.com/google-code-archive/v2/code.google.com/closure-compiler/issues/issue-873.json>

---

Root cause in triggering tests:

- com.google.javascript.jscomp.TypeCheckTest::testImplementsExtendsLoop

--> junit.framework.AssertionFailedError: unexpected warning(s) :

JSC\_IMPLEMENTES\_NON\_INTERFACE. can only implement interfaces at [testcode] line 2 :

29, JSC\_IMPLEMENTES\_NON\_INTERFACE. can only implement interfaces at [testcode] line

3 : 26 expected:<1> but was:<2>

- com.google.javascript.jscomp.TypeCheckTest::testImplementsLoop

--> junit.framework.AssertionFailedError: expected:<[Parse error. Cycle detected in

inheritance chain of type T]> but was:<[can only implement interfaces]>

-

com.google.javascript.jscomp.TypeCheckTest::testConversionFromInterfaceToRecursiveConstructor

--> java.lang.StackOverflowError

---

List of modified sources:

- com.google.javascript.rhino.jstype.NamedType

---

### Bug14

diff -r /tmp/Closure\_14b/src/com/google/javascript/jscomp/ControlFlowAnalysis.java  
/tmp/Closure\_14f/src/com/google/javascript/jscomp/ControlFlowAnalysis.java  
767c767

```
<      cfa.createEdge(fromNode, Branch.UNCOND, finallyNode);  
---  
>      cfa.createEdge(fromNode, Branch.ON_EX, finallyNode);
```

Summary for Bug: Closure-14

---

Revision ID (fixed version):

4b15b25f400335b6e2820cb690430324748372f9

---

Revision date (fixed version):

2012-07-24 21:04:32 +0000

---

Bug report id:

779

---

Bug report url:

<https://storage.googleapis.com/google-code-archive/v2/code.google.com/closure-compiler/issues/issue-779.json>

---

Root cause in triggering tests:

- com.google.javascript.jscomp.CheckMissingReturnTest::testIssue779  
--> junit.framework.AssertionFailedError: Unexpected error(s):  
JSC\_MISSING\_RETURN\_STATEMENT. Missing return statement. Function expected to return number. at testcode line 1 : 24 expected:<0> but was:<1>
  - com.google.javascript.jscomp.ControlFlowAnalysisTest::testDeepNestedFinally  
--> junit.framework.AssertionFailedError: No cross edges found
  - com.google.javascript.jscomp.ControlFlowAnalysisTest::testDeepNestedBreakwithFinally  
--> junit.framework.AssertionFailedError: No cross edges found
- 

List of modified sources:

- com.google.javascript.jscomp.ControlFlowAnalysis
- 

### Bug92

diff -r /tmp/Closure\_92b/src/com/google/javascript/jscomp/ProcessClosurePrimitives.java  
/tmp/Closure\_92f/src/com/google/javascript/jscomp/ProcessClosurePrimitives.java  
789c789

```
<      int indexOfDot = namespace.indexOf('.');  
---  
>      int indexOfDot = namespace.lastIndexOf('.');
```

## Summary for Bug: Closure-92

---

Revision ID (fixed version):

8980b60033b1c6853cbca593ec89d3d332adf7dc

---

Revision date (fixed version):

2010-10-15 17:51:45 +0000

---

Bug report id:

261

---

Bug report url:

<https://storage.googleapis.com/google-code-archive/v2/code.google.com/closure-compiler/issues/issue-261.json>

---

Root cause in triggering tests:

-  
com.google.javascript.jscomp.ProcessClosurePrimitivesTest::testProvideInIndependentModules4  
--> junit.framework.AssertionFailedError:

---

List of modified sources:

- com.google.javascript.jscomp.ProcessClosurePrimitives

---

## Bug61

```
diff -r /tmp/lang_61b/src/java/org/apache/commons/lang/text/StrBuilder.java  
/tmp/lang_61f/src/java/org/apache/commons/lang/text/StrBuilder.java  
1776c1776
```

```
<    int len = thisBuf.length - strLen;
```

```
---
```

```
>    int len = size - strLen + 1;
```

## Summary for Bug: Lang-61

---

Revision ID (fixed version):

88c76d207f642831ca899e144159424aaa60cf8e

---

Revision date (fixed version):

2006-10-31 22:15:00 +0000

---

Bug report id:

LANG-294

---

Bug report url:

<https://issues.apache.org/jira/browse/LANG-294>



---

Root cause in triggering tests:

- org.apache.commons.lang.text.StrBuilderTest::testIndexOfLang294  
--> junit.framework.AssertionFailedError: expected:<-1> but was:<6>
- org.apache.commons.lang.text.StrBuilderTest::testLang294  
--> java.lang.ArrayIndexOutOfBoundsException

---

List of modified sources:

- org.apache.commons.lang.text.StrBuilder
- 

**==/!=**

LHBs related with **==/!=**:

### Bug1

diff -r

/tmp/chart\_1b/source/org/jfree/chart/renderer/category/AbstractCategoryItemRenderer.java

/tmp/chart\_1f/source/org/jfree/chart/renderer/category/AbstractCategoryItemRenderer.java

1797c1797

<     **if (dataset != null) {**

---

>     **if (dataset == null) {**

Summary for Bug: Chart-1

---

Revision ID (fixed version):

2266

---

Revision date (fixed version):

2010-02-09 13:23:49 -0800

---

Bug report id:

983

---

Bug report url:

<https://sourceforge.net/p/jfreechart/bugs/983>

---

Root cause in triggering tests:

- org.jfree.chart.renderer.category.junit.AbstractCategoryItemRendererTests::test2947660  
--> junit.framework.AssertionFailedError: expected:<1> but was:<0>

---

List of modified sources:

- org.jfree.chart.renderer.category.AbstractCategoryItemRenderer

</<=

LHBs related with </<=:

### Bug62

diff -r

/tmp/Closure\_62b/src/com/google/javascript/jscomp/LightweightMessageFormatter.java

/tmp/Closure\_62f/src/com/google/javascript/jscomp/LightweightMessageFormatter.java

98c98

<        && 0 <= charno && charno < sourceExcerpt.length()) {

---

>        && 0 <= charno && charno <= sourceExcerpt.length()) {

Summary for Bug: Closure-62

-----  
Revision ID (fixed version):

b12d1d6489329c989b15635f6f7f06681b3f6582

-----  
Revision date (fixed version):

2011-06-28 17:08:53 +0000

-----  
Bug report id:

487

-----  
Bug report url:

<https://storage.googleapis.com/google-code-archive/v2/code.google.com/closure-compiler/issues/issue-487.json>

-----  
Root cause in triggering tests:

-

com.google.javascript.jscomp.LightweightMessageFormatterTest::testFormatErrorSpaceEnd  
OfLine1

--> junit.framework.ComparisonFailure: expected:<...ion here

-

com.google.javascript.jscomp.LightweightMessageFormatterTest::testFormatErrorSpaceEnd  
OfLine2

--> junit.framework.ComparisonFailure: expected:<...iption here

-----  
List of modified sources:

- com.google.javascript.jscomp.LightweightMessageFormatter

-----

### Bug73

```
diff -r /tmp/Closure_73b/src/com/google/javascript/jscomp/CodeGenerator.java
/tmp/Closure_73f/src/com/google/javascript/jscomp/CodeGenerator.java
1045c1045
```

```
<      if (c > 0x1f && c <= 0x7f) {
```

```
---
```

```
>      if (c > 0x1f && c < 0x7f) {
```

Summary for Bug: Closure-73

-----  
Revision ID (fixed version):

ee8344091722c28c9351e78dcb4155bfddfd1af

-----  
Revision date (fixed version):

2011-04-15 16:10:54 +0000

-----  
Bug report id:

416

-----  
Bug report url:

<https://storage.googleapis.com/google-code-archive/v2/code.google.com/closure-compiler/issues/issue-416.json>

-----  
Root cause in triggering tests:

- com.google.javascript.jscomp.CodePrinterTest::testUnicode  
--> junit.framework.ComparisonFailure: expected:<var x="[u007f]"> but was:<var x="[]">

-----  
List of modified sources:

- com.google.javascript.jscomp.CodeGenerator

-----

<=/==

LHBs related with <=/==:

### Bug22

```
diff -r /tmp/lang_22b/src/main/java/org/apache/commons/lang3/math/Fraction.java
/tmp/lang_22f/src/main/java/org/apache/commons/lang3/math/Fraction.java
582a583,588
```

```
>      if ((u == 0) || (v == 0)) {
>          if ((u == Integer.MIN_VALUE) || (v == Integer.MIN_VALUE)) {
>              throw new ArithmeticException("overflow: gcd is 2^31");
>          }
>          return Math.abs(u) + Math.abs(v);
>      }
```

**584c590**

```
<      if (Math.abs(u) <= 1 || Math.abs(v) <= 1) {  
---  
>      if (Math.abs(u) == 1 || Math.abs(v) == 1) {
```

Summary for Bug: Lang-22

-----  
Revision ID (fixed version):

0b2b82ad923b0455cde93286e3f504a1abd0863b  
-----

Revision date (fixed version):

2011-01-17 04:30:05 +0000  
-----

Bug report id:

LANG-662  
-----

Bug report url:

<https://issues.apache.org/jira/browse/LANG-662>  
-----

Root cause in triggering tests:

- org.apache.commons.lang3.math.FractionTest::testReducedFactory\_int\_int  
--> junit.framework.AssertionFailedError: expected:<-1073741824> but  
was:<-2147483648>
- org.apache.commons.lang3.math.FractionTest::testReduce  
--> junit.framework.AssertionFailedError: expected:<-1073741824> but  
was:<-2147483648>

-----

List of modified sources:

- org.apache.commons.lang3.math.Fraction

-----

**!=<**

LHBs related with !=<:

**Bug19**

diff -r

/tmp/Compress\_19b/src/main/java/org/apache/commons/compress/archivers/zip/Zip64ExtendedInformationExtraField.java

/tmp/Compress\_19f/src/main/java/org/apache/commons/compress/archivers/zip/Zip64ExtendedInformationExtraField.java

259c259

```
<      if (rawCentralDirectoryData.length != expectedLength) {  
---  
>      if (rawCentralDirectoryData.length < expectedLength) {
```

Summary for Bug: Compress-19

---

Revision ID (fixed version):  
e860d2f3eb16d84e146a8a700d9dbd3af01df4ba

---

Revision date (fixed version):  
2013-05-26 17:36:35 +0000

---

Bug report id:  
COMPRESS-228

---

Bug report url:  
<https://issues.apache.org/jira/browse/COMPRESS-228>

---

Root cause in triggering tests:

-  
org.apache.commons.compress.archivers.zip.ZipFileTest::testExcessDataInZip64ExtraField  
--> java.util.zip.ZipException: central directory zip64 extended information extra field's  
length doesn't match central directory data. Expected length 16 but is 28

---

List of modified sources:

- org.apache.commons.compress.archivers.zip.Zip64ExtendedInformationExtraField

---

==/<

LHBs related with ==/<:

**Bug21**

diff -r

/tmp/Compress\_21b/src/main/java/org/apache/commons/compress/archivers/sevenz/SevenZOutputFile.java

/tmp/Compress\_21f/src/main/java/org/apache/commons/compress/archivers/sevenz/SevenZOutputFile.java

639,640c639

<       --shift;

<       if (shift == 0) {

---

>       if (--shift < 0) {

**646c645**

<       if (length > 0 && shift > 0) {

---

>       if (shift != 7) {

Summary for Bug: Compress-21

---

Revision ID (fixed version):

5c2d32b322fa797cf428b35c4c5998173d6403d5

---

Revision date (fixed version):

2013-12-20 12:13:11 +0000

---

Bug report id:

COMPRESS-252

---

Bug report url:

<https://issues.apache.org/jira/browse/COMPRESS-252>

---

Root cause in triggering tests:

-  
org.apache.commons.compress.archivers.sevenz.SevenZOutputFileTest::testSevenEmptyFiles  
--> java.io.IOException: Unknown property 128  
-  
org.apache.commons.compress.archivers.sevenz.SevenZOutputFileTest::testEightFilesSomeNotEmpty  
--> java.io.IOException: Badly terminated header  
-  
org.apache.commons.compress.archivers.sevenz.SevenZOutputFileTest::testSixEmptyFiles  
--> java.io.IOException: Badly terminated header  
-  
org.apache.commons.compress.archivers.sevenz.SevenZOutputFileTest::testEightEmptyFiles  
--> java.io.IOException: Unknown property 192  
-  
org.apache.commons.compress.archivers.sevenz.SevenZOutputFileTest::testNineEmptyFiles  
--> java.lang.ArrayIndexOutOfBoundsException: 0  
-  
org.apache.commons.compress.archivers.sevenz.SevenZOutputFileTest::testSixFilesSomeNotEmpty  
--> java.io.IOException: Badly terminated header  
-  
org.apache.commons.compress.archivers.sevenz.SevenZOutputFileTest::testNineFilesSomeNotEmpty  
--> java.io.IOException: Unknown property 128  
-  
org.apache.commons.compress.archivers.sevenz.SevenZOutputFileTest::testSevenFilesSomeNotEmpty  
--> java.io.IOException: Unknown property 128

---

List of modified sources:

- org.apache.commons.compress.archivers.sevenz.SevenZOutputFile

---

+ -1

LHBs related with + -1:

### Bug168

```
diff -r /tmp/Closure_168b/src/com/google/javascript/jscomp/TypedScopeCreator.java
/tmp/Closure_168f/src/com/google/javascript/jscomp/TypedScopeCreator.java
1996c1996
<     if (t.getScopeDepth() <= 2) {
---
>     if (t.getScopeDepth() <= 1) {
```

Summary for Bug: Closure-168

---

Revision ID (fixed version):  
b675d1da9d5f8b36849db4943f580969105901a4

---

Revision date (fixed version):  
2012-08-10 19:49:41 +0000

---

Bug report id:  
726

---

Bug report url:  
<https://storage.googleapis.com/google-code-archive/v2/code.google.com/closure-compiler/issues/issue-726.json>

---

Root cause in triggering tests:  
- com.google.javascript.jscomp.TypeCheckTest::testIssue726  
--> junit.framework.AssertionFailedError: expected a warning

---

List of modified sources:  
- com.google.javascript.jscomp.TypedScopeCreator

---

### Bug3

```
diff -r /tmp/Codec_3b/src/java/org/apache/commons/codec/language/DoubleMetaphone.java
/tmp/Codec_3f/src/java/org/apache/commons/codec/language/DoubleMetaphone.java
455c455
<         } else if (contains(value, index + 1, 4, "IER")) {
---
>         } else if (contains(value, index + 1, 3, "IER")) {
```

## Summary of configuration for Project: Codec

---

Script dir: /defects4j/framework  
Base dir: /defects4j  
Major root: /defects4j/major  
Repo dir: /defects4j/project\_repos

---

Project ID: Codec  
Program: commons-codec  
Build file: /defects4j/framework/projects/Codec/Codec.build.xml

---

Vcs: Vcs::Git  
Repository: /defects4j/project\_repos/commons-codec.git  
Commit db: /defects4j/framework/projects/Codec/active-bugs.csv  
Number of bugs: 18

---

## Summary for Bug: Codec-3

---

Revision ID (fixed version):  
a5dfe5cbc95d7f3ce0b4829756690c2cb8439f4c

---

Revision date (fixed version):  
2009-08-02 22:45:30 +0000

---

Bug report id:  
CODEC-84

---

Bug report url:  
<https://issues.apache.org/jira/browse/CODEC-84>

---

Root cause in triggering tests:

-

org.apache.commons.codec.language.DoubleMetaphone2Test::testDoubleMetaphoneAlternate

--> junit.framework.ComparisonFailure: Test [19]=Angier expected:<AN[J]R> but was:<AN[K]R>

---

List of modified sources:

- org.apache.commons.codec.language.DoubleMetaphone

---

## Bug19

diff -r

/tmp/lang\_19b/src/main/java/org/apache/commons/lang3/text/translate/NumericEntityUnescaper.java

/tmp/lang\_19f/src/main/java/org/apache/commons/lang3/text/translate/NumericEntityUnescaper.java



```

40c40
<      if(input.charAt(index) == '&' && index < seqEnd - 1 && input.charAt(index + 1)
== '#') {
---
>      if(input.charAt(index) == '&' && index < seqEnd - 2 && input.charAt(index + 1)
== '#') {
49a50,52
>          if(start == seqEnd) {
>              return 0;
>          }
54c57,59
<      while(input.charAt(end) != ';')
---
>      while(end < seqEnd && ( (input.charAt(end) >= '0' && input.charAt(end) <= '9')
||
>          (input.charAt(end) >= 'a' && input.charAt(end) <= 'f') ||
>          (input.charAt(end) >= 'A' && input.charAt(end) <= 'F') ) )
78a84
>      boolean semiNext = (end != seqEnd) && (input.charAt(end) == ';');
80c86
<      return 2 + (end - start) + (isHex ? 1 : 0) + 1;
---
>      return 2 + (end - start) + (isHex ? 1 : 0) + (semiNext ? 1 : 0);

```

Summary for Bug: Lang-19

---

Revision ID (fixed version):

0b3a8a3128890f710700d04e38df48b883d11d91

---

Revision date (fixed version):

2011-07-03 07:55:33 +0000

---

Bug report id:

LANG-710

---

Bug report url:

<https://issues.apache.org/jira/browse/LANG-710>

---

Root cause in triggering tests:

```

-
org.apache.commons.lang3.text.translate.NumericEntityUnescaperTest::testUnfinishedEntity
--> java.lang.StringIndexOutOfBoundsException: String index out of range: 19
- org.apache.commons.lang3.text.translate.NumericEntityUnescaperTest::testOutOfBounds
--> java.lang.StringIndexOutOfBoundsException: String index out of range: 7

```

---

List of modified sources:

- org.apache.commons.lang3.text.translate.NumericEntityUnescaper

---

### Bug61

```
diff -r /tmp/lang_61b/src/java/org/apache/commons/lang/text/StrBuilder.java
/tmp/lang_61f/src/java/org/apache/commons/lang/text/StrBuilder.java
1776c1776
<     int len = thisBuf.length - strLen;
---
>     int len = size - strLen + 1;
```

Summary for Bug: Lang-61

-----  
Revision ID (fixed version):

88c76d207f642831ca899e144159424aaa60cf8e  
-----

Revision date (fixed version):

2006-10-31 22:15:00 +0000  
-----

Bug report id:

LANG-294  
-----

Bug report url:

<https://issues.apache.org/jira/browse/LANG-294>  
-----

Root cause in triggering tests:

- org.apache.commons.lang.text.StrBuilderTest::testIndexOfLang294  
--> junit.framework.AssertionFailedError: expected:<-1> but was:<6>
  - org.apache.commons.lang.text.StrBuilderTest::testLang294  
--> java.lang.ArrayIndexOutOfBoundsException
- 

List of modified sources:

- org.apache.commons.lang.text.StrBuilder
- 

### Bug29

```
diff -r /tmp/Cli_29b/src/java/org/apache/commons/cli/Util.java
/tmp/Cli_29f/src/java/org/apache/commons/cli/Util.java
65,68d64
<     if (str.startsWith("\""))
<     {
<         str = str.substring(1, str.length());
<     }
70c66
<     if (str.endsWith("\""))
---
```

```

>     if (length > 1 && str.startsWith("\"") && str.endsWith("\"") && str.substring(1,
length - 1).indexOf("\"") == -1)
72c68
<         str = str.substring(0, length - 1);
---
>         str = str.substring(1, length - 1);

```

Summary for Bug: Cli-29

Revision ID (fixed version):  
20002f7f4e971349a1c95dd3b05846c5b824b65c

Revision date (fixed version):  
2010-06-16 08:35:18 +0000

Bug report id:  
CLI-185

Bug report url:  
<https://issues.apache.org/jira/browse/CLI-185>

Root cause in triggering tests:  
- org.apache.commons.cli.UtilTest::testStripLeadingAndTrailingQuotes  
--> junit.framework.ComparisonFailure: expected:<foo "bar["> but was:<foo "bar[]>

List of modified sources:  
- org.apache.commons.cli.Util

## Bug47

```
diff -r /tmp/Closure_47b/src/com/google/debugging/sourcemap/SourceMapConsumerV3.java
/tmp/Closure_47f/src/com/google/debugging/sourcemap/SourceMapConsumerV3.java
489,490c489,490
```

```

<     .setLineNumber(entry.getSourceLine())
<     .setColumnPosition(entry.getSourceColumn());
---
>     .setLineNumber(entry.getSourceLine() + 1)
>     .setColumnPosition(entry.getSourceColumn() + 1);

```

```
diff -r /tmp/Closure_47b/src/com/google/javascript/jscomp/SourceMap.java
/tmp/Closure_47f/src/com/google/javascript/jscomp/SourceMap.java
```

```

137a138,142
>     int lineBaseOffset = 1;
>     if (generator instanceof SourceMapGeneratorV1
>         || generator instanceof SourceMapGeneratorV2) {
>         lineBaseOffset = 0;
>     }
141c146
<     new FilePosition(node.getLineno(), node.getCharno()),

```

---

> **new FilePosition(node.getLineno() - lineBaseOffset, node.getCharno()),**

Summary for Bug: Closure-47

-----  
Revision ID (fixed version):

aedce35970673f20696d5721acba13e986cc764c

-----  
Revision date (fixed version):

2011-11-14 23:03:35 +0000

-----  
Bug report id:

575

-----  
Bug report url:

<https://storage.googleapis.com/google-code-archive/v2/code.google.com/closure-compiler/issues/issue-575.json>

-----  
Root cause in triggering tests:

-  
com.google.debugging.sourcemap.SourceMapGeneratorV3Test::testParseSourceMetaMap  
--> junit.framework.AssertionFailedError: expected:<5> but was:<4>  
- com.google.debugging.sourcemap.SourceMapGeneratorV3Test::testGoldenOutput0a  
--> junit.framework.ComparisonFailure: expected:<...t":1,  
- com.google.debugging.sourcemap.SourceMapGeneratorV3Test::testMultilineMapping  
--> junit.framework.AssertionFailedError: expected:<10> but was:<9>  
-  
com.google.debugging.sourcemap.SourceMapGeneratorV3Test::testMultiFunctionMapping  
--> junit.framework.AssertionFailedError: expected:<10> but was:<9>  
-  
com.google.debugging.sourcemap.SourceMapGeneratorV3Test::testLiteralMappingsGoldenOutput  
--> junit.framework.ComparisonFailure: expected:<...t":1,  
- com.google.debugging.sourcemap.SourceMapGeneratorV3Test::testMultilineMapping2  
--> junit.framework.AssertionFailedError: expected:<10> but was:<9>  
-  
com.google.debugging.sourcemap.SourceMapGeneratorV3Test::testBasicMappingGoldenOutput  
--> junit.framework.ComparisonFailure: expected:<...t":1,  
- com.google.debugging.sourcemap.SourceMapGeneratorV3Test::testSourceMapMerging  
--> junit.framework.AssertionFailedError: expected:<5> but was:<4>  
- com.google.debugging.sourcemap.SourceMapGeneratorV3Test::testLiteralMappings  
--> junit.framework.AssertionFailedError: expected:<10> but was:<9>  
- com.google.debugging.sourcemap.SourceMapGeneratorV3Test::testBasicMapping1  
--> junit.framework.AssertionFailedError: expected:<10> but was:<9>  
- com.google.debugging.sourcemap.SourceMapGeneratorV3Test::testBasicMapping2  
--> junit.framework.AssertionFailedError: expected:<10> but was:<9>  
- com.google.debugging.sourcemap.SourceMapGeneratorV3Test::testGoldenOutput1

```
--> junit.framework.ComparisonFailure: expected:<...t":1,
- com.google.debugging.sourcemap.SourceMapGeneratorV3Test::testGoldenOutput2
--> junit.framework.ComparisonFailure: expected:<...t":1,
- com.google.debugging.sourcemap.SourceMapGeneratorV3Test::testGoldenOutput3
--> junit.framework.ComparisonFailure: expected:<...t":1,
- com.google.debugging.sourcemap.SourceMapGeneratorV3Test::testGoldenOutput4
--> junit.framework.ComparisonFailure: expected:<...t":1,
- com.google.debugging.sourcemap.SourceMapGeneratorV3Test::testGoldenOutput5
--> junit.framework.ComparisonFailure: expected:<...
```

---

List of modified sources:

- com.google.debugging.sourcemap.SourceMapConsumerV3
- com.google.javascript.jscomp.SourceMap

---

## Bug24

diff -r

```
/tmp/Compress_24b/src/main/java/org/apache/commons/compress/archivers/tar/TarUtils.jav
a
/tmp/Compress_24f/src/main/java/org/apache/commons/compress/archivers/tar/TarUtils.java
129,136c129
<     if (trailer == 0 || trailer == ' '){
<         end--;
<     } else {
<         throw new IllegalArgumentException(
<             exceptionMessage(buffer, offset, length, end-1, trailer));
<     }
<     trailer = buffer[end - 1];
<     while (start < end - 1 && (trailer == 0 || trailer == ' ')) {
---
>     while (start < end && (trailer == 0 || trailer == ' ')) {
138a132,135
>     }
>     if (start == end) {
>         throw new IllegalArgumentException(
>             exceptionMessage(buffer, offset, length, start, trailer));
```

Summary for Bug: Compress-24

---

Revision ID (fixed version):

8da377299d085b4ce1f15dbc0732232ea32e601d

---

Revision date (fixed version):

2014-02-21 05:20:08 +0000

---

Bug report id:

COMPRESS-262

---

Bug report url:

<https://issues.apache.org/jira/browse/COMPRESS-262>

---

Root cause in triggering tests:

- org.apache.commons.compress.archivers.tar.TarUtilsTest::testParseOctal  
--> java.lang.IllegalArgumentException: Invalid byte 55 at offset 11 in '777777777777'  
len=12

---

List of modified sources:

- org.apache.commons.compress.archivers.tar.TarUtils

---

## Incorrect types

List of LHBs related with incorrect types:

### Bug29

```
diff -r /tmp/lang_29b/src/main/java/org/apache/commons/lang3/SystemUtils.java  
/tmp/lang_29f/src/main/java/org/apache/commons/lang3/SystemUtils.java  
1672c1672
```

```
<  static float toJavaVersionInt(String version) {  
---  
>  static int toJavaVersionInt(String version) {
```

Summary for Bug: Lang-29

---

Revision ID (fixed version):

982e295053663787bb0396b81a8956c3c87dc25b

---

Revision date (fixed version):

2010-05-28 16:33:23 +0000

---

Bug report id:

LANG-624

---

Bug report url:

<https://issues.apache.org/jira/browse/LANG-624>

---

Root cause in triggering tests:

- org.apache.commons.lang3.SystemUtilsTest::testJavaVersionAsInt  
--> junit.framework.AssertionFailedError: expected:<0> but was:<0.0>

---

List of modified sources:

- org.apache.commons.lang3.SystemUtils

---

## Bug32

diff -r

/tmp/Compress\_32b/src/main/java/org/apache/commons/compress/archivers/tar/TarArchiveInputStream.java

/tmp/Compress\_32f/src/main/java/org/apache/commons/compress/archivers/tar/TarArchiveInputStream.java

501c501

< currEntry.setGroupId(Integer.parseInt(val));

---

> currEntry.setGroupId(Long.parseLong(val));

505c505

< currEntry.setUserId(Integer.parseInt(val));

---

> currEntry.setUserId(Long.parseLong(val));

Summary for Bug: Compress-32

-----  
Revision ID (fixed version):

3c4a09bf28e7cd600b919b8c799fbbfd19a94c0b

-----  
Revision date (fixed version):

2015-05-08 19:11:27 +0000

-----  
Bug report id:

COMPRESS-314

-----  
Bug report url:

<https://issues.apache.org/jira/browse/COMPRESS-314>

-----  
Root cause in triggering tests:

-

org.apache.commons.compress.archivers.tar.TarArchiveInputStreamTest::shouldReadBigGi  
d

--> java.lang.NumberFormatException: For input string: "4294967294"

-----  
List of modified sources:

- org.apache.commons.compress.archivers.tar.TarArchiveInputStream

## Incorrect functions

List of LHBs related with incorrect functions:

## Bug10

```
diff -r /tmp/Closure_10b/src/com/google/javascript/jscomp/NodeUtil.java
/tmp/Closure_10f/src/com/google/javascript/jscomp/NodeUtil.java
1417c1417
<     return allResultsMatch(n, MAY_BE_STRING_PREDICATE);
---
>     return anyResultsMatch(n, MAY_BE_STRING_PREDICATE);
```

Summary for Bug: Closure-10

-----  
Revision ID (fixed version):  
0884a4cbef1c82153ef306477a12af0480385a35  
-----

Revision date (fixed version):  
2012-09-21 17:50:43 +0000  
-----

Bug report id:  
821  
-----

Bug report url:  
<https://storage.googleapis.com/google-code-archive/v2/code.google.com/closure-compiler/issues/issue-821.json>  
-----

Root cause in triggering tests:  
- com.google.javascript.jscomp.PeepholeFoldConstantsTest::testIssue821  
--> junit.framework.AssertionFailedError:  
-----

List of modified sources:  
- com.google.javascript.jscomp.NodeUtil  
-----

## False/True

### LHBs related with False/True : 1

#### Bug40

```
diff -r /tmp/Closure_40b/src/com/google/javascript/jscomp/NameAnalyzer.java
/tmp/Closure_40f/src/com/google/javascript/jscomp/NameAnalyzer.java
635,636c635
<     JsName name = getName(ns.name, false);
<     if (name != null) {
---
>     JsName name = getName(ns.name, true);
639d637
<     }
```

Summary for Bug: Closure-40



Revision ID (fixed version):  
6ebc0c3d7d4da7d2cf95f53d4ea790e89d3abc7a

---

Revision date (fixed version):  
2012-02-02 16:47:26 +0000

---

Bug report id:  
284

---

Bug report url:  
<https://storage.googleapis.com/google-code-archive/v2/code.google.com/closure-compiler/issues/issue-284.json>

---

Root cause in triggering tests:  
- com.google.javascript.jscomp.IntegrationTest::testIssue284  
--> java.lang.RuntimeException: java.lang.RuntimeException: INTERNAL COMPILER ERROR.  
- com.google.javascript.jscomp.NameAnalyzerTest::testIssue284  
--> junit.framework.AssertionFailedError:

---

List of modified sources:  
- com.google.javascript.jscomp.NameAnalyzer

---

### Bug70

```
diff -r /tmp/Closure_70b/src/com/google/javascript/jscomp/TypedScopeCreator.java  
/tmp/Closure_70f/src/com/google/javascript/jscomp/TypedScopeCreator.java  
1745c1745  
<         jsDocParameter.getJSType(), true);  
---  
>         jsDocParameter.getJSType(), false);
```

Summary for Bug: Closure-70

---

Revision ID (fixed version):  
ec4a34c2bd87ba54fa8770affdeeea4f3c42089b

---

Revision date (fixed version):  
2011-05-20 19:48:47 +0000

---

Bug report id:  
433

---

Bug report url:  
<https://storage.googleapis.com/google-code-archive/v2/code.google.com/closure-compiler/issues/issue-433.json>

---

Root cause in triggering tests:

```
- com.google.javascript.jscomp.LooseTypeCheckTest::testDuplicateLocalVarDecl
--> junit.framework.AssertionFailedError: expected:<2> but was:<1>
- com.google.javascript.jscomp.LooseTypeCheckTest::testFunctionArguments13
--> junit.framework.AssertionFailedError: expected a warning
- com.google.javascript.jscomp.TypeCheckTest::testScoping12
--> junit.framework.AssertionFailedError: expected a warning
- com.google.javascript.jscomp.TypeCheckTest::testDuplicateLocalVarDecl
--> junit.framework.AssertionFailedError: unexpected warning(s) :
JSC_DUP_VAR_DECLARATION. variable x redefined with type string, original definition at
[testcode] :2 with type number at [testcode] line 2 : 42 expected:<2> but was:<1>
- com.google.javascript.jscomp.TypeCheckTest::testFunctionArguments13
--> junit.framework.AssertionFailedError: expected a warning
```

-----

List of modified sources:

```
- com.google.javascript.jscomp.TypedScopeCreator
```

-----

### Bug86

```
diff -r /tmp/Closure_86b/src/com/google/javascript/jscomp/NodeUtil.java
/tmp/Closure_86f/src/com/google/javascript/jscomp/NodeUtil.java
2465c2465
```

```
<      return true;
```

```
---
```

```
>      return false;
```

Summary for Bug: Closure-86

-----

Revision ID (fixed version):

0907b6618a60b2de23c8f7ec2217a37dc5e9a091

-----

Revision date (fixed version):

2010-12-18 00:47:28 +0000

-----

Bug report id:

303

-----

Bug report url:

<https://storage.googleapis.com/google-code-archive/v2/code.google.com/closure-compiler/issues/issue-303.json>

-----

Root cause in triggering tests:

```
- com.google.javascript.jscomp.NodeUtilTest::testLocalValue1
--> junit.framework.AssertionFailedError
- com.google.javascript.jscomp.PureFunctionIdentifierTest::testLocalizedSideEffects8
--> junit.framework.AssertionFailedError: expected:<[A]> but was:<[A, f]>
- com.google.javascript.jscomp.PureFunctionIdentifierTest::testLocalizedSideEffects9
--> junit.framework.AssertionFailedError: expected:<[A]> but was:<[A, f]>
- com.google.javascript.jscomp.PureFunctionIdentifierTest::testAnnotationInExterns_new4
```

```
--> junit.framework.AssertionFailedError: expected:<[externObjSEThis]> but
was:<[externObjSEThis, NEW STRING externObjSEThisMethod]>
- com.google.javascript.jscomp.PureFunctionIdentifierTest::testAnnotationInExterns_new6
--> junit.framework.AssertionFailedError: expected:<[externObjSEThis]> but
was:<[externObjSEThis, NEW STRING externObjSEThisMethod, f]>
- com.google.javascript.jscomp.PureFunctionIdentifierTest::testIssue303b
--> junit.framework.AssertionFailedError: expected:<[]> but was:<[NEW STRING
setLocation]>
- com.google.javascript.jscomp.PureFunctionIdentifierTest::testIssue303
--> junit.framework.AssertionFailedError: expected:<[]> but was:<[NEW STRING
setLocation]>
```

---

List of modified sources:

```
- com.google.javascript.jscomp.NodeUtil
```

---

### Bug7

```
diff -r /tmp/Codec_7b/src/java/org/apache/commons/codec/binary/Base64.java
/tmp/Codec_7f/src/java/org/apache/commons/codec/binary/Base64.java
670c670
```

```
<    return StringUtils.newStringUtf8(encodeBase64(binaryData, true));
```

```
---
```

```
>    return StringUtils.newStringUtf8(encodeBase64(binaryData, false));
```

Summary of configuration for Project: Codec

---

```
Script dir: /defects4j/framework
Base dir: /defects4j
Major root: /defects4j/major
Repo dir: /defects4j/project_repos
```

---

```
Project ID: Codec
Program: commons-codec
Build file: /defects4j/framework/projects/Codec/Codec.build.xml
```

---

```
Vcs: Vcs::Git
Repository: /defects4j/project_repos/commons-codec.git
Commit db: /defects4j/framework/projects/Codec/active-bugs.csv
Number of bugs: 18
```

---

Summary for Bug: Codec-7

---

```
Revision ID (fixed version):
954d995c5603b616c3c4a9ffb1823f36dd7ebcb0
```

---

```
Revision date (fixed version):
2011-01-23 05:52:42 +0000
```

---

Bug report id:  
CODEC-99

---

Bug report url:  
<https://issues.apache.org/jira/browse/CODEC-99>

---

Root cause in triggering tests:

- org.apache.commons.codec.binary.Base64Test::testByteToStringVariations  
--> junit.framework.ComparisonFailure: byteToString static Hello World  
expected:<SGVsbG8gV29ybGQ=[])> but was:<SGVsbG8gV29ybGQ=[
  - org.apache.commons.codec.binary.Base64Test::testRfc4648Section10Encode  
--> junit.framework.ComparisonFailure: expected:<Zg==[])> but was:<Zg==[
- 

List of modified sources:

- org.apache.commons.codec.binary.Base64
- 

## Break/Continue

LHBs related with Break/Continue : 1

### Bug28

```
diff -r /tmp/Cli_28b/src/java/org/apache/commons/cli/Parser.java  
/tmp/Cli_28f/src/java/org/apache/commons/cli/Parser.java  
290c290
```

```
<          break;  
---  
>          continue;
```

Summary for Bug: Cli-28

---

Revision ID (fixed version):  
3433f467554985a6bd9bf530a4810376be6fe250

---

Revision date (fixed version):  
2010-06-16 00:00:14 +0000

---

Bug report id:  
CLI-201

---

Bug report url:  
<https://issues.apache.org/jira/browse/CLI-201>

---

Root cause in triggering tests:

- org.apache.commons.cli.ValueTest::testPropertyOptionFlags

--> junit.framework.AssertionFailedError

---

List of modified sources:

- org.apache.commons.cli.Parser

---

## Same lines of code in different places

LHBs related with same lines of code in different places:

### Bug13

diff -r /tmp/Closure\_13b/src/com/google/javascript/jscomp/PeepholeOptimizationsPass.java  
/tmp/Closure\_13f/src/com/google/javascript/jscomp/PeepholeOptimizationsPass.java

**126d125**

**<     traverse(c);**

**127a127**

**>     traverse(c);**

Summary for Bug: Closure-13

---

Revision ID (fixed version):

d6d733f461ee5ba26e9326c1c7609f1f00d6d2db

---

Revision date (fixed version):

2012-08-02 17:53:06 +0000

---

Bug report id:

787

---

Bug report url:

<https://storage.googleapis.com/google-code-archive/v2/code.google.com/closure-compiler/issues/issue-787.json>

---

Root cause in triggering tests:

- com.google.javascript.jscomp.IntegrationTest::testIssue787

--> junit.framework.AssertionFailedError:

---

List of modified sources:

- com.google.javascript.jscomp.PeepholeOptimizationsPass

### Bug19

diff -r /tmp/Cli\_19b/src/java/org/apache/commons/cli/PosixParser.java  
/tmp/Cli\_19f/src/java/org/apache/commons/cli/PosixParser.java

**232d231**

**<       tokens.add(token);**

**237d235**

<        **tokens.add(token);**

**238a237,238**

>

>        **tokens.add(token);**

Summary for Bug: Cli-19

---

Revision ID (fixed version):

b1331806960001da95424315b6103d755107b519

---

Revision date (fixed version):

2008-07-28 08:43:28 +0000

---

Bug report id:

CLI-164

---

Bug report url:

<https://issues.apache.org/jira/browse/CLI-164>

---

Root cause in triggering tests:

- org.apache.commons.cli.PosixParserTest::testUnrecognizedOption2  
--> junit.framework.AssertionFailedError: UnrecognizedOptionException wasn't thrown

---

List of modified sources:

- org.apache.commons.cli.PosixParser
- 

## **Bug68**

diff -r /tmp/Closure\_68b/src/com/google/javascript/jscomp/parsing/JsDocInfoParser.java

/tmp/Closure\_68f/src/com/google/javascript/jscomp/parsing/JsDocInfoParser.java

867a868

>            }

870d870

<            }

1708a1709

>    restoreLookAhead(token);

1760a1762

>    restoreLookAhead(token);

Summary for Bug: Closure-68

---

Revision ID (fixed version):

9d5a6e3082dd99f6c44df1b3526b9e83b79aa7da

---

Revision date (fixed version):

2011-06-03 23:42:43 +0000

---

Bug report id:

477

---

Bug report url:

<https://storage.googleapis.com/google-code-archive/v2/code.google.com/closure-compiler/issues/issue-477.json>

---

Root cause in triggering tests:

- com.google.javascript.jscomp.parsing.JsDocInfoParserTest::testIssue477  
--> junit.framework.AssertionFailedError: extra warning: Unexpected end of file
- 

List of modified sources:

- com.google.javascript.jscomp.parsing.JsDocInfoParser
- 

### Bug102

diff -r /tmp/Closure\_102b/src/com/google/javascript/jscomp/Normalize.java  
/tmp/Closure\_102f/src/com/google/javascript/jscomp/Normalize.java  
88a89

```
> removeDuplicateDeclarations(root);  
94d94  
< removeDuplicateDeclarations(root);
```

Summary for Bug: Closure-102

---

Revision ID (fixed version):

d48c365ba8251057a71a2e2b7aabff640209e31b

---

Revision date (fixed version):

2010-02-26 15:11:05 +0000

---

Bug report id:

115

---

Bug report url:

<https://storage.googleapis.com/google-code-archive/v2/code.google.com/closure-compiler/issues/issue-115.json>

---

Root cause in triggering tests:

- com.google.javascript.jscomp.CompilerRunnerTest::testIssue115  
--> junit.framework.AssertionFailedError:
- 

List of modified sources:

- com.google.javascript.jscomp.Normalize
- 

### Bug41

diff -r

/tmp/Compress\_41b/src/main/java/org/apache/commons/compress/archivers/zip/ZipArchiveI

```
nputStream.java
/tmp/Compress_41f/src/main/java/org/apache/commons/compress/archivers/zip/ZipArchiveI
nputStream.java
246a247
>         return null;
249c250
<         return null;
---
>         throw new ZipException(String.format("Unexpected record signature: 0X%X",
sig.getValue()));
```

#### Summary for Bug: Compress-41

---

Revision ID (fixed version):  
f015344879f1bc3505bc616fc7ae517cf9f60838

---

Revision date (fixed version):  
2016-12-09 23:01:42 +0100

---

Bug report id:  
COMPRESS-367

---

Bug report url:  
<https://issues.apache.org/jira/browse/COMPRESS-367>

---

Root cause in triggering tests:

- org.apache.commons.compress.archivers.ZipTestCase::testListAllFilesWithNestedArchive  
--> junit.framework.AssertionFailedError: expected:<1> but was:<0>
- org.apache.commons.compress.archivers.zip.ZipArchiveInputStreamTest::testThrowOnInvalidEntry  
--> junit.framework.AssertionFailedError: IOException expected

---

List of modified sources:

- org.apache.commons.compress.archivers.zip.ZipArchiveInputStream

---

## Null checking

List of LHBS related to null checking:

**Bug12**



diff -r /tmp/lang\_12b/src/main/java/org/apache/commons/lang3/RandomStringUtils.java

/tmp/lang\_12f/src/main/java/org/apache/commons/lang3/RandomStringUtils.java

229a230,232

```
>     if (chars != null && chars.length == 0) {  
>         throw new IllegalArgumentException("The chars array must not be empty");  
>     }
```

231a235,237

```
>         if (chars != null) {  
>             end = chars.length;  
>         } else {
```

237a244

```
>     }
```

Summary for Bug: Lang-12

---

Revision ID (fixed version):

c9d786a4fe2639581047d878a64bab6fb24f1ab3

---

Revision date (fixed version):

2012-06-09 14:58:34 +0000

---

Bug report id:

LANG-805

---

Bug report url:

<https://issues.apache.org/jira/browse/LANG-805>

---

Root cause in triggering tests:

- org.apache.commons.lang3.RandomStringUtilsTest::testExceptions  
--> java.lang.ArrayIndexOutOfBoundsException: 1171399597
- org.apache.commons.lang3.RandomStringUtilsTest::testLANG805  
--> java.lang.ArrayIndexOutOfBoundsException: 1859709389

---

List of modified sources:

- org.apache.commons.lang3.RandomStringUtils
- 

### Bug19!!!!!!

diff -r /tmp/chart\_19b/source/org/jfree/chart/plot/CategoryPlot.java

/tmp/chart\_19f/source/org/jfree/chart/plot/CategoryPlot.java

697a698,700

```
>     if (axis == null) {  
>         throw new IllegalArgumentException("Null 'axis' argument.");  
>     }
```

972a976,978

```
>     if (axis == null) {  
>         throw new IllegalArgumentException("Null 'axis' argument.");  
>     }
```

-

#### Summary for Bug: Chart-19

---

Revision ID (fixed version):  
434

---

Revision date (fixed version):  
2007-10-25 05:56:24 -0700

---

Bug report id:  
UNKNOWN

---

Bug report url:  
UNKNOWN

---

Root cause in triggering tests:

- org.jfree.chart.plot.junit.CategoryPlotTests::testGetRangeAxisIndex  
--> junit.framework.AssertionFailedError
- org.jfree.chart.plot.junit.CategoryPlotTests::testGetDomainAxisIndex  
--> junit.framework.AssertionFailedError

---

List of modified sources:

- org.jfree.chart.plot.CategoryPlot

---

#### Bug26

```
diff -r /tmp/chart_26b/source/org/jfree/chart/axis/Axis.java
/tmp/chart_26f/source/org/jfree/chart/axis/Axis.java
1191a1192
>         if (owner != null) {
1196a1198
>         }
```

#### Summary for Bug: Chart-26

---

Revision ID (fixed version):  
103

---

Revision date (fixed version):  
2007-07-06 04:03:52 -0700

---

Bug report id:  
UNKNOWN

---

Bug report url:  
UNKNOWN

---

Root cause in triggering tests:

- org.jfree.chart.junit.AreaChartTests::testDrawWithNullInfo  
--> junit.framework.AssertionFailedError
- org.jfree.chart.junit.BarChart3DTests::testDrawWithNullInfo  
--> junit.framework.AssertionFailedError
- org.jfree.chart.junit.BarChartTests::testDrawWithNullInfo  
--> junit.framework.AssertionFailedError
- org.jfree.chart.junit.GanttChartTests::testDrawWithNullInfo  
--> junit.framework.AssertionFailedError
- org.jfree.chart.junit.GanttChartTests::testDrawWithNullInfo2  
--> junit.framework.AssertionFailedError
- org.jfree.chart.junit.LineChart3DTests::testDrawWithNullInfo  
--> junit.framework.AssertionFailedError
- org.jfree.chart.junit.LineChartTests::testDrawWithNullInfo  
--> junit.framework.AssertionFailedError
- org.jfree.chart.junit.StackedAreaChartTests::testDrawWithNullInfo  
--> junit.framework.AssertionFailedError
- org.jfree.chart.junit.StackedBarChart3DTests::testDrawWithNullInfo  
--> junit.framework.AssertionFailedError
- org.jfree.chart.junit.StackedBarChartTests::testDrawWithNullInfo  
--> junit.framework.AssertionFailedError
- org.jfree.chart.junit.WaterfallChartTests::testDrawWithNullInfo  
--> junit.framework.AssertionFailedError
- org.jfree.chart.plot.junit.CategoryPlotTests::test1654215  
--> junit.framework.AssertionFailedError
- org.jfree.chart.plot.junit.CategoryPlotTests::testSerialization3  
--> junit.framework.AssertionFailedError
- org.jfree.chart.plot.junit.CategoryPlotTests::testSerialization4  
--> junit.framework.AssertionFailedError
- org.jfree.chart.renderer.category.junit.BoxAndWhiskerRendererTests::testDrawWithNullInfo  
--> junit.framework.AssertionFailedError
- org.jfree.chart.renderer.category.junit.GroupedStackedBarRendererTests::testDrawWithNullInfo  
--> junit.framework.AssertionFailedError
- org.jfree.chart.renderer.category.junit.IntervalBarRendererTests::testDrawWithNullInfo  
--> junit.framework.AssertionFailedError
- org.jfree.chart.renderer.category.junit.LayeredBarRendererTests::testDrawWithNullInfo  
--> junit.framework.AssertionFailedError
- org.jfree.chart.renderer.category.junit.LevelRendererTests::testDrawWithNullInfo  
--> junit.framework.AssertionFailedError
- org.jfree.chart.renderer.category.junit.MinMaxCategoryRendererTests::testDrawWithNullInfo  
--> junit.framework.AssertionFailedError
- org.jfree.chart.renderer.category.junit.StatisticalBarRendererTests::testDrawWithNullInfo  
--> junit.framework.AssertionFailedError

-  
org.jfree.chart.renderer.category.junit.StatisticalLineAndShapeRendererTests::testDrawWith  
NullInfo  
--> junit.framework.AssertionFailedError

---

List of modified sources:  
- org.jfree.chart.axis.Axis

---

### Bug2

```
diff -r /tmp/Closure_2b/src/com/google/javascript/jscomp/TypeCheck.java  
/tmp/Closure_2f/src/com/google/javascript/jscomp/TypeCheck.java  
1571a1572  
>   if (implicitProto == null) {  
1573a1575,1576  
>     currentPropertyNames = ImmutableSet.of();  
>   } else {  
1574a1578  
>   }
```

Summary for Bug: Closure-2

---

Revision ID (fixed version):  
d1cfe67977d8f3aaa85ec20c262171da394d5977

---

Revision date (fixed version):  
2012-12-22 00:16:42 +0000

---

Bug report id:  
884

---

Bug report url:  
<https://storage.googleapis.com/google-code-archive/v2/code.google.com/closure-compiler/issues/issue-884.json>

---

Root cause in triggering tests:  
-  
com.google.javascript.jscomp.TypeCheckTest::testBadInterfaceExtendsNonExistentInterface  
s  
--> java.lang.NullPointerException

---

List of modified sources:  
- com.google.javascript.jscomp.TypeCheck

---

### Bug33

```
diff -r /tmp/lang_33b/src/main/java/org/apache/commons/lang3/ClassUtils.java  
/tmp/lang_33f/src/main/java/org/apache/commons/lang3/ClassUtils.java
```

910c910

```
<      classes[i] = array[i].getClass();  
---  
>      classes[i] = array[i] == null ? null : array[i].getClass();
```

Summary for Bug: Lang-33

---

Revision ID (fixed version):

0603aef594fa60126c2d45f2ab164eee39f7b44c

---

Revision date (fixed version):

2010-02-05 21:31:38 +0000

---

Bug report id:

LANG-587

---

Bug report url:

<https://issues.apache.org/jira/browse/LANG-587>

---

Root cause in triggering tests:

- org.apache.commons.lang3.ClassUtilsTest::testToClass\_object  
--> java.lang.NullPointerException
- 

List of modified sources:

- org.apache.commons.lang3.ClassUtils
- 

### Bug39

```
diff -r /tmp/lang_39b/src/java/org/apache/commons/lang3/StringUtils.java  
/tmp/lang_39f/src/java/org/apache/commons/lang3/StringUtils.java  
3675a3676,3678
```

```
>      if (searchList[i] == null || replacementList[i] == null) {  
>          continue;  
>      }
```

Summary for Bug: Lang-39

---

Revision ID (fixed version):

cb40e35f5e0990fad4c5278964fcc24e112dde8c

---

Revision date (fixed version):

2009-12-14 07:51:05 +0000

---

Bug report id:

LANG-552

---

Bug report url:

<https://issues.apache.org/jira/browse/LANG-552>

---

Root cause in triggering tests:

- org.apache.commons.lang3.StringUtilsTest::testReplace\_StringStringArrayStringArray  
--> java.lang.NullPointerException
- 

List of modified sources:

- org.apache.commons.lang3.StringUtils
- 

### Bug47

```
diff -r /tmp/lang_47b/src/java/org/apache/commons/lang/text/StrBuilder.java  
/tmp/lang_47f/src/java/org/apache/commons/lang/text/StrBuilder.java  
1185a1186,1188
```

```
>         if (str == null) {  
>             str = "";  
>         }
```

```
1229a1233,1235
```

```
>         if (str == null) {  
>             str = "";  
>         }
```

Summary for Bug: Lang-47

---

Revision ID (fixed version):

d5e343049c2610c31ddacb24f0d173942f6d5ac9

---

Revision date (fixed version):

2008-02-13 05:44:46 +0000

---

Bug report id:

LANG-412

---

Bug report url:

<https://issues.apache.org/jira/browse/LANG-412>

---

Root cause in triggering tests:

- org.apache.commons.lang.text.StrBuilderTest::testLang412Left  
--> java.lang.NullPointerException
  - org.apache.commons.lang.text.StrBuilderTest::testLang412Right  
--> java.lang.NullPointerException
- 

List of modified sources:

- org.apache.commons.lang.text.StrBuilder
- 

### Bug20

```
diff -r
/tmp/Closure_20b/src/com/google/javascript/jscomp/PeepholeSubstituteAlternateSyntax.java
/tmp/Closure_20f/src/com/google/javascript/jscomp/PeepholeSubstituteAlternateSyntax.java
220c220,221
<    if (value != null) {
---
>    if (value != null && value.getNext() == null &&
>        NodeUtil.isImmutableValue(value)) {
```

Summary for Bug: Closure-20

---

Revision ID (fixed version):

ebf229b05f4ee71bc05d70830f5dd5683271d661

---

Revision date (fixed version):

2012-06-21 22:45:36 +0000

---

Bug report id:

759

---

Bug report url:

<https://storage.googleapis.com/google-code-archive/v2/code.google.com/closure-compiler/issues/issue-759.json>

---

Root cause in triggering tests:

-  
com.google.javascript.jscomp.PeepholeSubstituteAlternateSyntaxTest::testSimpleFunctionCall  
--> junit.framework.AssertionFailedError:

---

List of modified sources:

- com.google.javascript.jscomp.PeepholeSubstituteAlternateSyntax

---

### Bug36

```
diff -r /tmp/Closure_36b/src/com/google/javascript/jscomp/InlineVariables.java
/tmp/Closure_36f/src/com/google/javascript/jscomp/InlineVariables.java
574a575,577
>    if (convention.getSingletonGetterClassName(callNode) != null) {
>        return false;
>    }
```

Summary for Bug: Closure-36

---

Revision ID (fixed version):

be397ee0d0be2aad8f71d12f097b17563866445a

---

Revision date (fixed version):

2012-02-29 05:56:20 +0000

---

Bug report id:  
668

---

Bug report url:  
<https://storage.googleapis.com/google-code-archive/v2/code.google.com/closure-compiler/issues/issue-668.json>

---

Root cause in triggering tests:  
- com.google.javascript.jscomp.IntegrationTest::testSingletonGetter1  
--> junit.framework.AssertionFailedError:

---

List of modified sources:  
- com.google.javascript.jscomp.InlineVariables

---

### Bug50

```
diff -r
/tmp/Closure_50b/src/com/google/javascript/jscomp/PeepholeReplaceKnownMethods.java
/tmp/Closure_50f/src/com/google/javascript/jscomp/PeepholeReplaceKnownMethods.java
376c376
<     if (!NodeUtil.isImmutableValue(right)) {
---
>     if (right.getNext() != null || !NodeUtil.isImmutableValue(right)) {
388a389,390
>     if (right != null && right.getType() == Token.STRING
>         && ",".equals(right.getString())) {
389a392,394
>     n.removeChild(right);
>     reportCodeChange();
> }
```

Summary for Bug: Closure-50

---

Revision ID (fixed version):  
c3b630fc9c2a1c4eb7cb718f8d324bfb306cb9df

---

Revision date (fixed version):  
2011-10-28 19:55:05 +0000

---

Bug report id:  
558

---

Bug report url:  
<https://storage.googleapis.com/google-code-archive/v2/code.google.com/closure-compiler/issues/issue-558.json>

---



Root cause in triggering tests:

- com.google.javascript.jscomp.PeepholeReplaceKnownMethodsTest::testStringJoinAdd  
--> junit.framework.AssertionFailedError:
- com.google.javascript.jscomp.PeepholeReplaceKnownMethodsTest::testNoStringJoin  
--> junit.framework.AssertionFailedError:

---

List of modified sources:

- com.google.javascript.jscomp.PeepholeReplaceKnownMethods
- 

### Bug34

```
diff -r /tmp/lang_34b/src/main/java/org/apache/commons/lang3/builder/ToStringStyle.java  
/tmp/lang_34f/src/main/java/org/apache/commons/lang3/builder/ToStringStyle.java  
148c148
```

```
<    return REGISTRY.get() != null ? REGISTRY.get() : Collections.<Object,  
Object>emptyMap();
```

```
---
```

```
>    return REGISTRY.get();
```

```
164c164
```

```
<    return m.containsKey(value);
```

```
---
```

```
>    return m != null && m.containsKey(value);
```

Summary for Bug: Lang-34

---

Revision ID (fixed version):

496525b0d626dd5049528cdef61d71681154b660

---

Revision date (fixed version):

2010-02-04 21:57:58 +0000

---

Bug report id:

LANG-586

---

Bug report url:

<https://issues.apache.org/jira/browse/LANG-586>

---

Root cause in triggering tests:

- org.apache.commons.lang3.builder.ToStringBuilderTest::testObjectCycle  
--> junit.framework.AssertionFailedError: Expected: <null> but was: {}
- org.apache.commons.lang3.builder.ToStringBuilderTest::testReflectionHierarchy  
--> junit.framework.AssertionFailedError: Expected: <null> but was: {}
- org.apache.commons.lang3.builder.ToStringBuilderTest::testSelfInstanceTwoVarsReflection  
ObjectCycle  
--> junit.framework.AssertionFailedError: Expected: <null> but was: {}
- org.apache.commons.lang3.builder.ToStringBuilderTest::testReflectionArrayCycle  
--> junit.framework.AssertionFailedError: Expected: <null> but was: {}

[illegible]

--> junit.framework.AssertionFailedError: Expected: <null> but was: {}

---

List of modified sources:

- org.apache.commons.lang3.builder.ToStringStyle

---

### Bug105

diff -r /tmp/Closure\_105b/src/com/google/javascript/jscomp/FoldConstants.java

/tmp/Closure\_105f/src/com/google/javascript/jscomp/FoldConstants.java

1477c1477

< StringBuilder sb = new StringBuilder();

---

> StringBuilder sb = null;

1483c1483,1485

< if (sb.length() > 0) {

---

> if (sb == null) {

> sb = new StringBuilder();

> } else {

1488c1490

< if (sb.length() > 0) {

---

> if (sb != null) {

1492c1494

< sb = new StringBuilder();

---

> sb = null;

1500c1502

< if (sb.length() > 0) {

---

> if (sb != null) {

Summary for Bug: Closure-105

---

Revision ID (fixed version):

113a08f59e8116fb11a7d4ceb11d5bb09b74ac3c

---

Revision date (fixed version):

2010-02-09 21:33:10 +0000

---

Bug report id:

106

---

Bug report url:

<https://storage.googleapis.com/google-code-archive/v2/code.google.com/closure-compiler/issues/issue-106.json>

---

Root cause in triggering tests:

- com.google.javascript.jscomp.FoldConstantsTest::testStringJoinAdd  
--> junit.framework.AssertionFailedError:

---

List of modified sources:

- com.google.javascript.jscomp.FoldConstants

---

### Bug15

diff -r /tmp/chart\_15b/source/org/jfree/chart/plot/PiePlot.java  
/tmp/chart\_15f/source/org/jfree/chart/plot/PiePlot.java

1377a1378,1380

```
>     if (this.dataset == null) {  
>         return 0.0;  
>     }
```

2050a2054

```
>     if (this.dataset != null) {  
2052a2057  
>     }
```

Summary for Bug: Chart-15

---

Revision ID (fixed version):

749

---

Revision date (fixed version):

2008-03-19 13:42:01 -0700

---

Bug report id:

UNKNOWN

---

Bug report url:

UNKNOWN

---

Root cause in triggering tests:

- org.jfree.chart.plot.junit.PiePlot3DTests::testDrawWithNullDataset  
--> junit.framework.AssertionFailedError

---

List of modified sources:

- org.jfree.chart.plot.PiePlot

---

List of other LHBs that do not fit the previous points:

### Bug51

```
diff -r /tmp/lang_51b/src/java/org/apache/commons/lang/BooleanUtils.java
/tmp/lang_51f/src/java/org/apache/commons/lang/BooleanUtils.java
681a682
```

```
>         return false;
```

Summary for Bug: Lang-51

-----  
Revision ID (fixed version):

a5589b39e985e64861bd920aa7b13ab32c215b06  
-----

Revision date (fixed version):

2007-10-27 05:07:45 +0000  
-----

Bug report id:

LANG-365  
-----

Bug report url:

<https://issues.apache.org/jira/browse/LANG-365>  
-----

Root cause in triggering tests:

- org.apache.commons.lang.BooleanUtilsTest::test\_toBoolean\_String  
--> java.lang.StringIndexOutOfBoundsException: String index out of range: 3
- 

List of modified sources:

- org.apache.commons.lang.BooleanUtils
- 

### Bug53

```
diff -r /tmp/lang_53b/src/java/org/apache/commons/lang/time/DateUtils.java
/tmp/lang_53f/src/java/org/apache/commons/lang/time/DateUtils.java
642a643
```

```
>     }
```

```
645d645
```

```
<     }
```

```
651a652
```

```
>     }
```

```
654d654
```

```
<     }
```

### Bug3

```
diff -r /tmp/Cli_3b/src/java/org/apache/commons/cli/TypeHandler.java
/tmp/Cli_3f/src/java/org/apache/commons/cli/TypeHandler.java
25d24
```

```
< import org.apache.commons.lang.math.NumberUtils;
```

```
162c161,171
```

```
<         return NumberUtils.createNumber(str);
```

```
---
```

```

>     if( str != null )
>     {
>         if( str.indexOf('.') != -1 )
>         {
>             return Double.valueOf(str);
>         }
>         else
>         {
>             return Long.valueOf(str);
>         }
>     }

```

Summary for Bug: Cli-3

---

Revision ID (fixed version):

d35f2fa7a06457469a617677eeb4c1dc21484006

---

Revision date (fixed version):

2007-05-28 07:54:52 +0000

---

Bug report id:

cli-1

---

Bug report url:

<https://issues.apache.org/jira/browse/CLI-1>

---

Root cause in triggering tests:

- org.apache.commons.cli.PatternOptionBuilderTest::testSimplePattern
- > junit.framework.AssertionFailedError: number flag n expected:<4.5> but was:<4.5>

---

List of modified sources:

- org.apache.commons.cli.TypeHandler

---

### Bug17

```

diff -r /tmp/Cli_17b/src/java/org/apache/commons/cli/PosixParser.java
/tmp/Cli_17f/src/java/org/apache/commons/cli/PosixParser.java
302a303

```

```

>         break;

```

Summary for Bug: Cli-17

---

Revision ID (fixed version):

9c5ce3501938cff01d78b7a1fff10a60abe9e0cf

---

Revision date (fixed version):

2008-07-27 23:38:21 +0000

---

Bug report id:  
CLI-163

---

Bug report url:  
<https://issues.apache.org/jira/browse/CLI-163>

---

Root cause in triggering tests:  
- org.apache.commons.cli.PosixParserTest::testStopBursting  
--> junit.framework.AssertionFailedError: Confirm 1 extra arg: 2

---

List of modified sources:  
- org.apache.commons.cli.PosixParser

---