

Additional Test Cases:

```
@Test
public void testAddition() {

    assertTrue(pluralize("sheep").equals("sheep"));
    assertTrue(pluralize("qunatity").equals("qunatities"));
    assertTrue(pluralize(null).equals(null));
    assertEquals("equipment", pluralize("equipment"));
}
```

```
@Test
public void test2() {
    assertTrue(pluralize("cars").equals("cars"));
}
```

Defects:

expected:<water[]> but was:<water[s]>
expected:<bo[y]s> but was:<bo[ie]s>
expected:<da[y]s> but was:<da[ie]s>
expected:<wi[v]es> but was:<wi[f]es>
Unexpected exceptions
<java.lang.StringIndexOutOfBoundsException>
<java.lang.AssertionError>
<java.lang.NullPointerException>

Discussion:

Line Coverage: 96%

The line that have not been covered is “public class StringUtil” which is the declaration of the class. Since it is a static method this line will not be executed.

Branch Coverage: 76%

The tool shows that “if (c1 == 'y’) in not been covered but one of my use cases is “family” which should cover this.