

StandardDeviation.java

```

1  package com.example;
2
3
4  public class StandardDeviation {
5
6      public static double stdDev(double[] data) {
7          double var = 0;
8          double avg = 0;
9          for (int i = 0; i < data.length; i++) {
10             avg += data[i];
11         }
12         avg /= data.length;
13         for (int j = 0; j < data.length; j++) {
14             var += Math.pow((data[j] - avg), 2);
15         }
16         var /= data.length;
17         return Math.sqrt(var);
18     }
19 }

```

Mutations

[9](#) 1. changed conditional boundary → KILLED
 2. negated conditional → KILLED
[10](#) 1. Replaced double addition with subtraction → KILLED
[12](#) 1. Replaced double division with multiplication → KILLED
[13](#) 1. changed conditional boundary → KILLED
 2. negated conditional → KILLED
[14](#) 1. Replaced double subtraction with addition → KILLED
 2. Replaced double addition with subtraction → KILLED
[16](#) 1. Replaced double division with multiplication → KILLED
[17](#) 1. replaced double return with 0.0d for com/example/StandardDeviation::stdDev → KILLED

Active mutators

- BOOLEAN_FALSE_RETURN
- BOOLEAN_TRUE_RETURN
- CONDITIONALS_BOUNDARY_MUTATOR
- EMPTY_RETURN_VALUES
- INCREMENTS_MUTATOR
- INVERT_NEGS_MUTATOR
- MATH_MUTATOR
- NEGATE_CONDITIONALS_MUTATOR
- NULL_RETURN_VALUES
- PRIMITIVE_RETURN_VALS_MUTATOR
- VOID_METHOD_CALL_MUTATOR

Tests examined

- com.example.StandardDeviationTest.test4(com.example.StandardDeviationTest)
(1 ms)
- com.example.StandardDeviationTest.test3(com.example.StandardDeviationTest)
(1 ms)
- com.example.StandardDeviationTest.test2(com.example.StandardDeviationTest)
(0 ms)
- com.example.StandardDeviationTest.test1(com.example.StandardDeviationTest)
(0 ms)

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