BinarySearch.java

```
1   package com.example.binarySearch;
2
3   public class BinarySearch {
4       public int binarySearch(int[] nums, int target) {
5           int n = nums.length; // size of the array.
6   1       int low = 0, high = n - 1;
7
8   2       while (low <= high) {
9   2           int mid = (low + high) / 2;
10  1           if (nums[mid] == target)
11  1               return mid;
12  2           else if (target > nums[mid])
13  1               low = mid + 1;
14              else
15  1               high = mid - 1;
16          }
17  1       return -1;
18      }
19
20  }
```

Mutations

6	1. Replaced integer subtraction with addition → KILLED
8	1. changed conditional boundary → KILLED 2. negated conditional → KILLED
9	1. Replaced integer division with multiplication → KILLED 2. Replaced integer addition with subtraction → KILLED
10	1. negated conditional → KILLED
11	1. replaced int return with 0 for com/example/binarySearch/BinarySearch::binarySearch → KILLED
12	1. negated conditional → KILLED 2. changed conditional boundary → SURVIVED
13	1. Replaced integer addition with subtraction → TIMED_OUT
15	1. Replaced integer subtraction with addition → TIMED_OUT
17	1. replaced int return with 0 for com/example/binarySearch/BinarySearch::binarySearch → KILLED

Active mutators

- CONDITIONALS_BOUNDARY
- EMPTY_RETURNS
- FALSE_RETURNS
- INCREMENTS
- INVERT_NEGS
- MATH
- NEGATE_CONDITIONALS
- NULL_RETURNS
- PRIMITIVE_RETURNS
- TRUE_RETURNS

- VOID_METHOD_CALLS

Tests examined

- com.example.binarySearch.BinarySearchTest.testSearch(com.example.binarySearch.BinarySearchTest) (0 ms)

Report generated by PIT 1.15.0