KthSmallest.java

```
1   package com.example.array;
2
3   public class KthSmallest {
4       public int count(int[] nums, int mid) {
5           int cnt = 0;
6
7   2       for (int i = 0; i < nums.length; i++)
8   2           if (nums[i] <= mid)
9   1               cnt++;
10
11  1       return cnt;
12      }
13
14      public int kthSmallest(int[] nums, int k) {
15          int low = Integer.MAX_VALUE;
16          int high = Integer.MIN_VALUE;
17  2       for (int i = 0; i < nums.length; i++) {
18              low = Math.min(low, nums[i]);
19              high = Math.max(high, nums[i]);
20          }
21  2       while (low < high) {
22  3           int mid = low + (high - low) / 2;
23
24  2           if (count(nums, mid) < k)
25  1               low = mid + 1;
26
27              else
28                  high = mid;
29          }
30
31  1       return low;
32      }
33  }
```

Mutations

7	1. changed conditional boundary → KILLED 2. negated conditional → KILLED
8	1. changed conditional boundary → KILLED 2. negated conditional → KILLED
9	1. Changed increment from 1 to -1 → KILLED
11	1. replaced int return with 0 for com/example/array/KthSmallest::count → KILLED
17	1. negated conditional → KILLED 2. changed conditional boundary → KILLED
21	1. negated conditional → KILLED 2. changed conditional boundary → TIMED_OUT
22	1. Replaced integer division with multiplication → TIMED_OUT

	2. Replaced integer addition with subtraction → TIMED_OUT 3. Replaced integer subtraction with addition → TIMED_OUT
24	1. negated conditional → KILLED 2. changed conditional boundary → KILLED
25	1. Replaced integer addition with subtraction → TIMED_OUT
31	1. replaced int return with 0 for com/example/array/KthSmallest::kthSmallest → 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.array.KthSmallestTest.testSort(com.example.array.KthSmallestTest) (0 ms)

Report generated by PIT 1.15.0