

CeilInBinarySearchTree.java

```

1  package TreesTesting;
2
3  public class CeilInBinarySearchTree {
4      public static Node getCeil(Node root, int key) {
5  1      if (root == null) {
6          return null;
7      }
8
9  1      if (root.data == key) {
10 1         return root;
11     }
12
13 2     if (root.data < key) {
14 1         return getCeil(root.right, key);
15     }
16
17     Node result = getCeil(root.left, key);
18
19 2     return result == null ? root : result;
20 }
21 }

```

Mutations

5 1. negated conditional → KILLED

9 1. negated conditional → KILLED

10 1. replaced return value with null for
TreesTesting/CeilInBinarySearchTree::getCeil → KILLED

13 1. changed conditional boundary → SURVIVED
2. negated conditional → KILLED

14 1. replaced return value with null for
TreesTesting/CeilInBinarySearchTree::getCeil → KILLED

19 1. negated conditional → KILLED
2. replaced return value with null for
TreesTesting/CeilInBinarySearchTree::getCeil → 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

- TreesTesting.AllTreeTesting.[engine:junit-jupiter]/[class:TreesTesting.AllTreeTesting]/[method:testCeilInBinarySearchTree()] (8 ms)
- TreesTesting.AllTreeTesting.[engine:junit-jupiter]/[class:TreesTesting.AllTreeTesting]/[method:build()] (31 ms)

Report generated by [PIT](#) 1.6.8