

Solution 1Solution 2

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 // Average: O(log(n)) time | O(log(n)) space
4 // Worst: O(n) time | O(n) space
5 function findClosestValueInBst(tree, target) {
6   return findClosestValueInBstHelper(tree, target, Infinity);
7 }
8
9 function findClosestValueInBstHelper(tree, target, closest) {
10   if (tree === null) return closest;
11   if (Math.abs(target - closest) > Math.abs(target - tree.value)) {
12     closest = tree.value;
13   }
14   if (target < tree.value) {
15     return findClosestValueInBstHelper(tree.left, target, closest);
16   } else if (target > tree.value) {
17     return findClosestValueInBstHelper(tree.right, target, closest);
18   } else {
19     return closest;
20   }
21 }
22
23 exports.findClosestValueInBst = findClosestValueInBst;
24
```

Solution 1Solution 2Solution 3

```
1 function findClosestValueInBst(tree, target) {
2   // Write your code here.
3 }
4
5 // Do not edit the line below.
6 exports.findClosestValueInBst = findClosestValueInBst;
7
```

Run or submit code when you're ready.