Solution 1 Solution 2

Run Code

Our Solution(s)

Run Code

e Your Solutions

Solution 1 Solution 2 Solution 3

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
   #include <cmath>
4 #include <float.h>
 5 using namespace std;
7 class BST {
8 public:
9
     int value;
     BST *left;
10
     BST *right;
11
12
13
     BST(int val);
14
     BST &insert(int val);
15 };
16
17 int findClosestValueInBst(BST *tree, int target);
18 int findClosestValueInBstHelper(BST *tree, int target, double closest)
19
20 // Average: O(log(n)) time | O(log(n)) space
21 // Worst: O(n) time | O(n) space
22 int findClosestValueInBst(BST *tree, int target) {
23
    return findClosestValueInBstHelper(tree, target, DBL_MAX);
24 }
25
26 int findClosestValueInBstHelper(BST *tree, int target, double closest)
27
     if (abs(target - closest) > abs(target - tree->value)) {
28
      closest = tree->value;
29
30
     if (target < tree->value && tree->left != NULL) {
31
       return findClosestValueInBstHelper(tree->left, target, closest);
     } else if (target > tree->value && tree->right != NULL) {
33
       return findClosestValueInBstHelper(tree->right, target, closest);
```

```
1 class BST {
 2 public:
     int value;
    BST *left;
    BST *right;
     BST(int val);
     BST &insert(int val);
9 };
10
11 int findClosestValueInBst(BST *tree, int target) {
12
     // Write your code here.
13
     return -1;
14 }
15
```

\_\_\_\_

--

Run or submit code when you're ready.

MATERIAL STATES

RETURNED I MEDICAL

De region de Miller III. De region de Miller III. Capita de Miller III.