Python

Difficulty: **Category:** **Successful Submissions:** 91,007+

Find Closest Value In BST

Write a function that takes in a Binary Search Tree (BST) and a target integer value and returns the closest value to that target value contained in the BST.

You can assume that there will only be one closest value.

Each `BST` node has an integer `value`, a `left` child node, and a `right` child node. A node is said to be a valid `BST` node if and only if it satisfies the BST property: its `value` is strictly greater than the values of every node to its left; its `value` is less than or equal to the values of every node to its right; and its children nodes are either valid `BST` nodes themselves or `None` / `null`.

Sample Input

```
tree =   10
       /     \
      5       15
    /   \   /   \
   2     5 13   22
 /           \
1             14
target = 12
```

Sample Output

```
13
```

Hints

Hint 1

Hint 2

Hint 3

Optimal Space & Time Complexity

Prompt | Your Solutions | Custom Output | •••