Two Sum IV – Input is a BST

Leet Code:

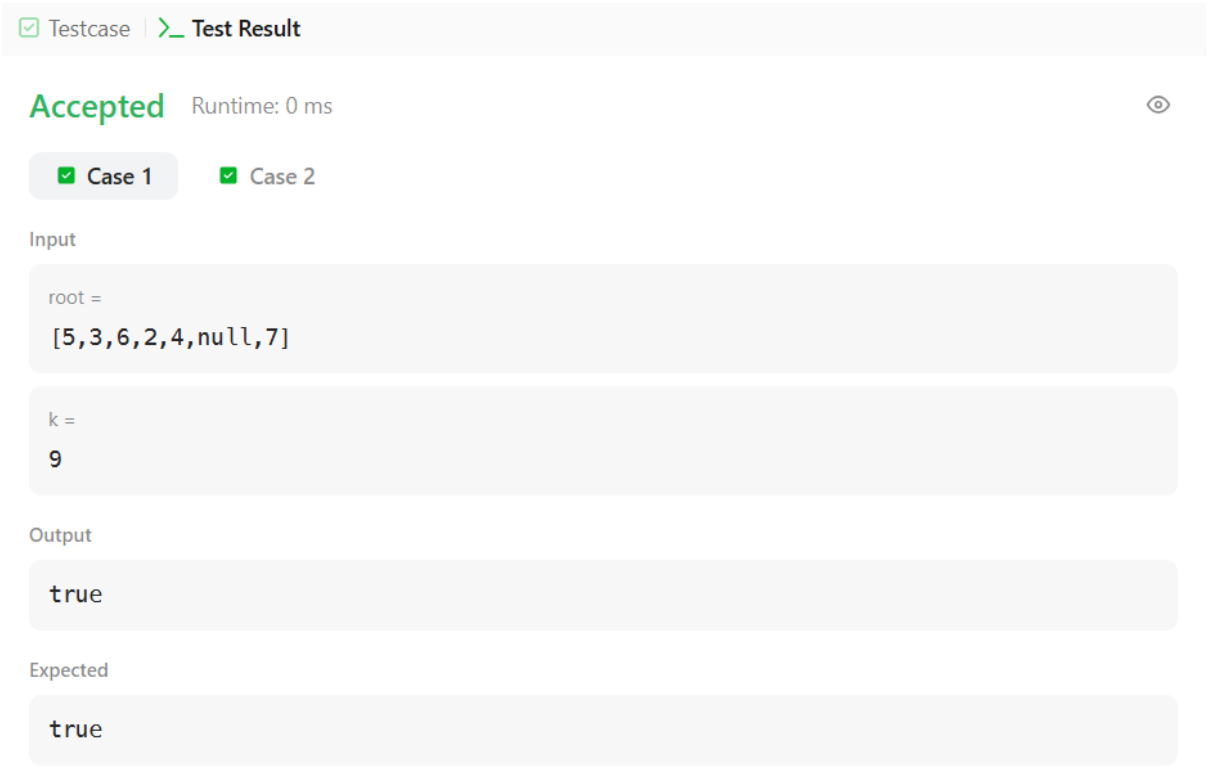
Code

C Auto

```c
/**
 * Definition for a binary tree node.
 * struct TreeNode {
 *     int val;
 *     struct TreeNode *left;
 *     struct TreeNode *right;
 * };
 */
void inorder(struct TreeNode* root, int* arr, int* size) {
    if (root == NULL) return;
    inorder(root->left, arr, size);
    arr[(*size)++] = root->val;
    inorder(root->right, arr, size);
}

bool findTarget(struct TreeNode* root, int k) {
    if (root == NULL) return false;

    int arr[10000];   // BST max nodes
    int size = 0;

    // Step 1: Get inorder traversal (sorted)
    inorder(root, arr, &size);

    // Step 2: Two pointer technique
    int left = 0, right = size - 1;


    while (left < right) {
        int sum = arr[left] + arr[right];

        if (sum == k)
            return true;
        else if (sum < k)
            left++;
        else
            right--;
    }

    return false;
}

```

Output:

Test Case 1:



Test Case 2: