

CU-Assignments/assignment5 - x Maximum Depth of Binary Tree - x +

leetcode.com/problems/maximum-depth-of-binary-tree/submissions/1569265808/

Problem List < > Run Submit

Description Editorial Solutions Submissions

104. Maximum Depth of Binary Tree

Easy Topics Companies

Solved

Given the **root** of a binary tree, return its **maximum depth**.

A binary tree's **maximum depth** is the number of nodes along the longest path from the root node down to the farthest leaf node.

Example 1:

```
graph TD; 3((3)) --- 9((9)); 3 --- 20((20)); 20 --- 15((15)); 20 --- 7((7))
```

Input: root = [3,9,20,null,null,15,7]
Output: 3

13.4K 159 273 Online

Code Accepted x

All Submissions

Accepted 39 / 39 testcases passed
Aman submitted at Mar 10, 2025 21:19

Runtime 0 ms | Beats 100.00%
Memory 18.96 MB | Beats 75.88%

Testcase Test Result

Accepted Runtime: 0 ms

Case 1 Case 2

Input root =

CU-Assignments/assignment5 - x Validate Binary Search Tree - Le - x +

leetcode.com/problems/validate-binary-search-tree/submissions/1569269116/

Problem List < > Run Submit

Description Accepted x Editorial Solutions Submissions

All Submissions

Accepted 86 / 86 testcases passed
Aman submitted at Mar 10, 2025 21:22

Runtime 0 ms | Beats 100.00%
Memory 21.91 MB | Beats 48.51%

Code C++

```
/**
 * Definition for a binary tree node.
 * struct TreeNode {
 *     int val;
 *     TreeNode *left;
 *     TreeNode *right;
 *     TreeNode() : val(0), left(nullptr), right(nullptr) {}
 *     TreeNode(int x) : val(x), left(nullptr), right(nullptr) {}
 *     TreeNode(int x, TreeNode *left, TreeNode *right) : val(x), left(left), right(right) {}
 * };
 */
#include <limits.h>
class Solution {
public:
    bool validate(TreeNode* node, long minVal, long maxVal) {
        if (!node) return true;
        if (node->val <= minVal || node->val >= maxVal) return false;
        return validate(node->left, minVal, node->val) && validate(node->right, node->val, maxVal);
    }
};
```

Testcase Test Result

Accepted Runtime: 0 ms

Case 1 Case 2

Input root =

CU-Assignments/assignment5 - x Binary Tree Level Order Traversal - x

leetcode.com/problems/binary-tree-level-order-traversal/description/

Problem List < > Run Submit

Description | Editorial | Solutions | Submissions

102. Binary Tree Level Order Traversal

Medium Topics Companies Hint

Solved

Given the `root` of a binary tree, return the *level order traversal* of its nodes' values. (i.e., from left to right, level by level).

Example 1:

```

graph TD
    3((3)) --> 9((9))
    3 --> 20((20))
    20 --> 15((15))
    20 --> 7((7))
  
```

Input: `root = [3,9,20,null,null,15,7]`
Output: `[[3],[9,20],[15,7]]`

16K 123 184 Online

Accepted 35 / 35 testcases passed
 Aman submitted at Mar 03, 2025 10:49

Runtime: 4 ms | Beats 14.56%
 Memory: 17.36 MB | Beats 6.21%

Testcase Test Result

Case 1 Case 2 Case 3 +

root =
 [3,9,20,null,null,15,7]

Type here to search

CU-Assignments/assignment5 - x Kth Smallest Element in a BST - x

leetcode.com/problems/kth-smallest-element-in-a-bst/submissions/1569279967/

Problem List < > Run Submit

Description | Accepted x | Editorial | Solutions | Submissions

Kth Smallest Element in a BST

Accepted 93 / 93 testcases passed
 Aman submitted at Mar 10, 2025 21:32

Runtime: 0 ms | Beats 100.00%
 Memory: 24.47 MB | Beats 43.18%

Code C++

```

/**
 * Definition for a binary tree node.
 * struct TreeNode {
 *     int val;
 *     TreeNode *left;
 *     TreeNode *right;
 *     TreeNode() : val(0), left(nullptr), right(nullptr) {}
 *     TreeNode(int x) : val(x), left(nullptr), right(nullptr) {}
 *     TreeNode(int x, TreeNode *left, TreeNode *right) : val(x), left(left), right(right) {}
 * };
 */
#include <stack>
class Solution {
public:
    int kthSmallest(TreeNode* root, int k) {
        stack<TreeNode*> st;
        TreeNode* current = root;
        int count = 0;
        while (current != nullptr || !st.empty()) {

```

Accepted Runtime: 0 ms

Case 1 Case 2

Input

root =

Type here to search

CU-Assignments/assignment5 - x Populating Next Right Pointers - x +

leetcode.com/problems/populating-next-right-pointers-in-each-node/submissions/1569282473/

Problem List < > x Run Submit x Premium

Description Accepted x Editorial Solutions Submissions

All Submissions

Accepted 59 / 59 testcases passed
Aman submitted at Mar 10, 2025 21:34

Runtime 7 ms | Beats 97.74%
Memory 18.97 MB | Beats 76.93%

Analyze Complexity

Code C++

```
/*  
 * Definition for a Node.  
 * class Node {  
 * public:  
 *     int val;  
 *     Node* left;  
 *     Node* right;  
 *     Node* next;  
 * }
```

```
10 Node() : val(0), left(NULL), right(NULL), next(NULL) {}  
11  
12 Node(int _val) : val(_val), left(NULL), right(NULL), next(NULL) {}  
13  
14 Node(int _val, Node* _left, Node* _right, Node* _next)  
15 : val(_val), left(_left), right(_right), next(_next) {}  
16  
17  
18  
19 class Solution {  
20 public:  
21     Node* connect(Node* root)  
22     {  
23         if (!root)  
24             return nullptr; //If no node is present in the tree  
25  
26         Node* leftmost = root; // Begin from the first level if root exists in the tree  
27         while (leftmost->left) //Since left child of the root exists in a perfect binary tree  
28         {  
29             Node* curr = leftmost;
```

Testcase Test Result

Accepted Runtime: 0 ms

Case 1 Case 2

Input

root =

CU-Assignments/assignment5 - x Sum of Left Leaves - LeetCode x +

leetcode.com/problems/sum-of-left-leaves/description/

Problem List < > x Run Submit x Premium

Description Editorial Solutions Submissions

404. Sum of Left Leaves Solved

Easy Topics Companies

Given the `root` of a binary tree, return the *sum of all left leaves*.

A **leaf** is a node with no children. A **left leaf** is a leaf that is the left child of another node.

Example 1:

```
graph TD  
    3((3)) --- 9((9))  
    3 --- 20((20))  
    20 --- 15((15))  
    20 --- 7((7))
```

Input: root = [3,9,20,null,null,15,7]
Output: 24

27 Online

Accepted 100 / 100 testcases passed
Aman submitted at Mar 05, 2025 16:01

Runtime 0 ms | Beats 100.00%
Memory 16.25 MB | Beats 23.61%

Analyze Complexity

Testcase Test Result

Case 1 Case 2 +

root =

[3,9,20,null,null,15,7]