104. Maximum Depth of Binary Tree

104 Maximum Depth of Binary Tree

• Depth-first Search + Tree

Description

Given a binary tree, find its maximum depth.

The maximum depth is the number of nodes along the longest path from the root node down to the farthest leaf node.

For example:

Given binary tree [3,9,20,null,null,15,7],

```
3
/\
9 20
/\
15 7
```

return its depth = 3.

1. Thought line

2. Depth-first Search + Tree

```
/**
 * Definition for a binary tree node.
 * struct TreeNode {
 * int val;
 * TreeNode *left;
 * TreeNode *right;
 * TreeNode (int x) : val(x), left(NULL), right(NULL) {}
 * };
 */

class Solution {
 public:
    int maxDepth(TreeNode* root) {
        if (root==nullptr) return 0;
        return 1+max(maxDepth(root->left),maxDepth(root->right));
    }
};
```