104. Maximum Depth of Binary Tree

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• 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));
    }
};
```