Maximum Depth of Binary 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.

*Instances:*

|  |  |  |
| --- | --- | --- |
|  | | maximum depth = 0 |
|  | | maximum depth = 1 |
|  |  | maximum depth = 2 |
|  | | maximum depth = 2 |

*Code – Recursive:*

*/\*\**

*\* 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 == NULL) {*

*return 0;*

*}*

*return max(maxDepth(root->left),maxDepth(root->right)) + 1;*

*}*

*};*