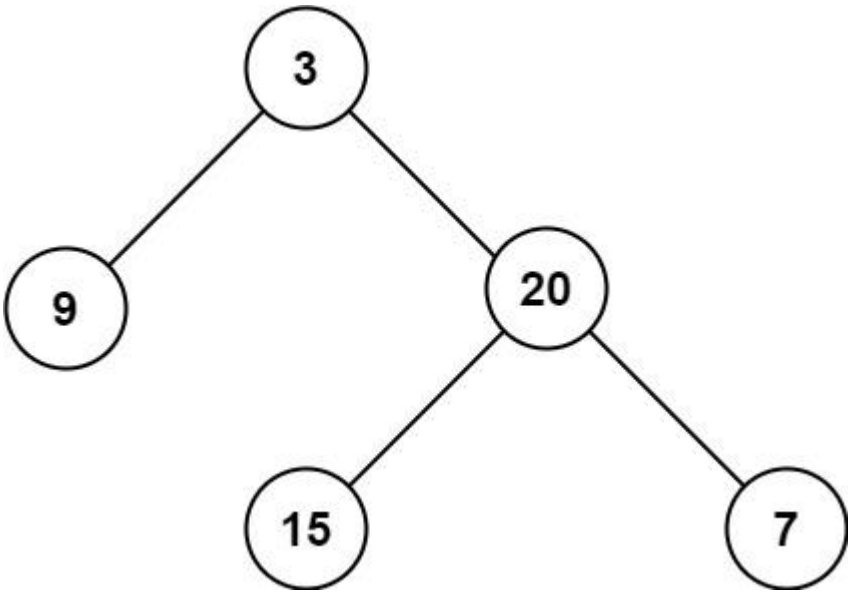
Maximum Depth of Binary Tree

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:




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

Output: 3
```

Example 2:

```
Input: root = [1,null,2]

Output: 2
```

Constraints:

- The number of nodes in the tree is in the range `[0, 10⁴]`.
- `-100 <= Node.val <= 100`

```
/**
 * Definition for a binary tree node.
 * public class TreeNode {
 *     public int val;
 *     public TreeNode left;
 *     public TreeNode right;
 *     public TreeNode(int val=0, TreeNode left=null, TreeNode right=null) {
 *         this.val = val;
 *         this.left = left;
 *         this.right = right;
 *     }
 * }
 */

public class Solution {
    int maxVal = 0;
    public int MaxDepth(TreeNode root) {

        Traverse(root, 1);
        return maxVal;
    }

    void Traverse(TreeNode root, int depth)
    {
        if(root == null)
        {
            return;
        }

        if(depth > maxVal)
        {
            maxVal = depth;
        }

        depth ++;
        Traverse(root.left, depth);
        Traverse(root.right, depth);
    }
}
```