104. Maximum Depth of Binary Tree

Easy

Example 1
Input: root = [3,9,20,null,null,15,7]
Output: 3

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.

```
from typing import Optional
    1
    2
      class TreeNode:
    3
           def __init__(self, val=0, left=None, right=None):
    4
               self.val = val
    5
               self.left = left
    6
               self.right = right
    7
    8
       class Solution:
    9
           def maxDepth(self, root:Optional[TreeNode]) -> int:
    10
               if not root:
    11
                   return 0
    12
    13
               left value = self.maxDepth(root.left)
    14
               right value = self.maxDepth(root.right)
    15
    16
               return max(left value, right value) + 1
                                                                                   20
    17
                                            if not root:
                                                      return 0
                                                       root = 9
                                                                                 root = 20
None
                             None
 if not root:
                              if not root:
                                        return 0
           return 0
                                                       root = 20
root = 9
                                                                                      root = 9
                                                       left value = self.maxDepth(root.left)
 left value = self.maxDepth(root.left)
                                                                                      root = 20
 right_value = self.maxDepth(root.right)
                                                        right value = self.maxDepth(root.right)
 return max(left value, right value) + 1
                                                       return max(left value, right value) + 1
root = 3
                               root = 9
left value = self.maxDepth(root.left)
                               root = 20
 right_value = self.maxDepth(root.right)
 return max(left_value, right_value) + 1
```