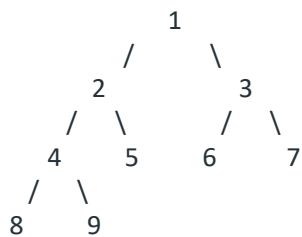**Question #27**
Difficulty :Easy   Category :Tree

Sum of Node Depths

The distance between a node in a Binary Tree and the tree's root is called the node's depth. Write a function that takes in a Binary Tree and returns the sum of its nodes' depths. Each BinaryTree node has an integer value , a left child node, and a right child node. Children nodes can either be BinaryTree nodes themselves or None / null .

Sample Input

```
Tree.        =

              1
           /     \
          2        3
        /  \      /  \
       4    5    6    7
      / \
     8   9
```

Sample Output

16

```
// The depth of the node with value 2 is 1.
// The depth of the node with value 3 is 1.
// The depth of the node with value 4 is 2.
// The depth of the node with value 5 is 2.
// Etc..
// Summing all of these depths yields 16
```

Good luck!

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