```python
# Copyright © 2020 AlgoExpert, LLC. All rights reserved.

# Average case: when the tree is balanced
# O(n) time | O(h) space - where n is the number of nodes in
# the Binary Tree and h is the height of the Binary Tree
def nodeDepths(root, depth=0):
    if root is None:
        return 0
    return depth + nodeDepths(root.left, depth + 1) + nodeDepths(root.right, depth + 1)


# This is the class of the input binary tree.
class BinaryTree:
    def __init__(self, value):
        self.value = value
        self.left = None
        self.right = None

```