

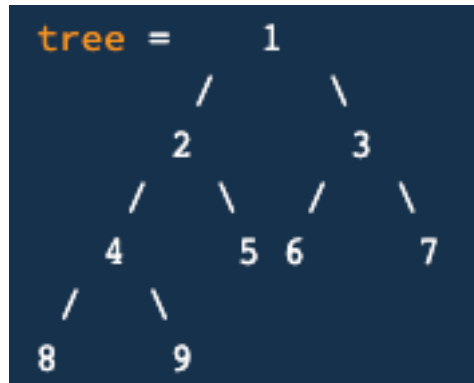
## Nude Death

The distance between a node in a Binary Tree and the tree's root is called the nodes depth.

Write a function that takes in a Binary Tree and returns the sum of its node's depth.

Each Binary Tree node has an integer value, a left child node, and a right child node. Children nodes can either be binary tree nodes themselves or None/Null.

Example:



Solution:

```
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.
```

Optimal space and time complexity:

$O(n)$  time and  $O(n)$  space, where  $n$  is the number of nodes in the Binary Tree.