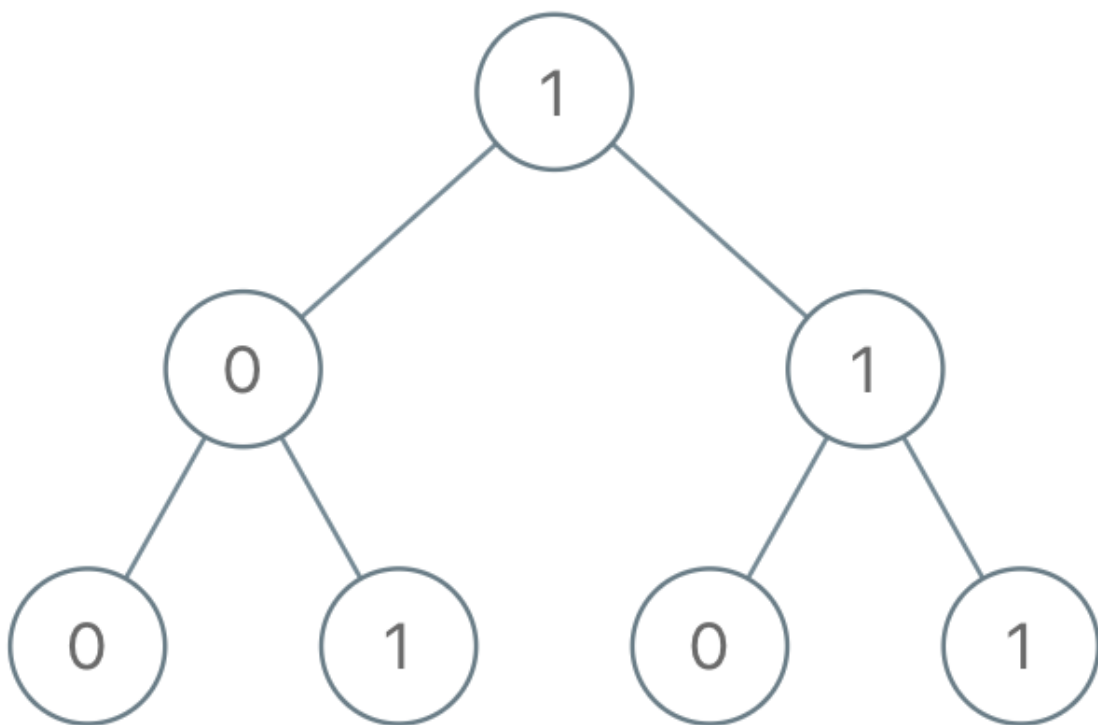


1022. Sum of Root To Leaf Binary Numbers

You are given the `root` of a binary tree where each node has a value `0` or `1`. Each root-to-leaf path represents a binary number starting with the most significant bit. For example, if the path is `0 -> 1 -> 1 -> 0 -> 1`, then this could represent `01101` in binary, which is `13`.

For all leaves in the tree, consider the numbers represented by the path from the root to that leaf.

Return *the sum of these numbers*. The answer is **guaranteed** to fit in a **32-bits** integer.



Input: `root = [1,0,1,0,1,0,1]`

Output: `22`

Explanation: $(100) + (101) + (110) + (111) = 4 + 5 + 6 + 7 = 22$

```
def sumRootToLeaf(self, root: TreeNode) -> int:
    res = [0]
    ssf = ''
    self.helper(root, res, ssf)
    return res[0]

def helper(self, root, res, ssf):
```

```
if root is None:
    return
if root.left is None and root.right is None:
    ssf = ssf+str(root.val)
    temp = int(ssf,2)
    res[0] = res[0]+temp
    return
ssf = ssf+str(root.val)
self.helper(root.left,res,ssf)
self.helper(root.right,res,ssf)
```