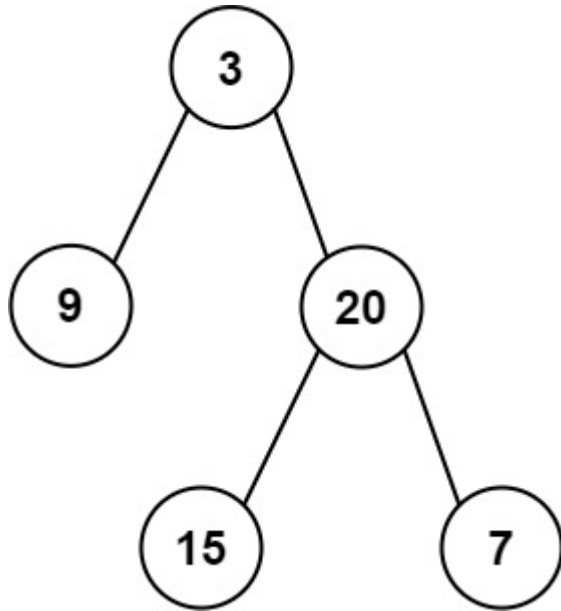


637. Average of Levels in Binary Tree

Given the `root` of a binary tree, return *the average value of the nodes on each level in the form of an array*. Answers within `10-5` of the actual answer will be accepted.



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

Output: [3.00000,14.50000,11.00000]

Explanation: The average value of nodes on level 0 is 3, on level 1 is 14.5, and on level 2 is 11.

Hence return [3, 14.5, 11].

```
def averageOfLevels(self, root: TreeNode) -> List[float]:
    stack = [root]
    res = []

    while True:
        if len(stack)==0:
            break

        length = len(stack)
        tempSum = 0
        for i in range(length):
            temp = stack.pop(0)
            tempSum = tempSum+temp.val
            if temp.left!=None:
                stack.append(temp.left)
            if temp.right!=None:
```

```
        stack.append(temp.right)
    res.append(tempSum/length)
    return res
```