2265. Count Nodes Equal to Average of Subtree

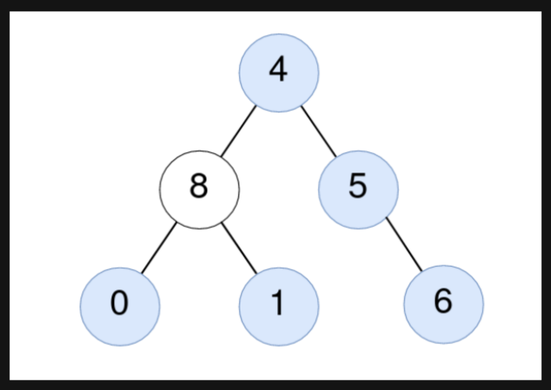
Description

Given the `root` of a binary tree, return *the number of nodes where the value of the node is equal to the* ***average*** *of the values in its* ***subtree*** .

Note:

- The **average** of `n` elements is the **sum** of the `n` elements divided by `n` and **rounded down** to the nearest integer.
- A **subtree** of `root` is a tree consisting of `root` and all of its descendants.

Example 1:




```
Input: root = [4,8,5,0,1,null,6]
Output: 5
Explanation:
For the node with value 4: The average of its subtree is (4 + 8 + 5 + 0 + 1 + 6) / 6 = 24 / 6 = 4.
For the node with value 5: The average of its subtree is (5 + 6) / 2 = 11 / 2 = 5.
For the node with value 0: The average of its subtree is 0 / 1 = 0.
For the node with value 1: The average of its subtree is 1 / 1 = 1.
For the node with value 6: The average of its subtree is 6 / 1 = 6.
```

Example 2:


```
Input: root = [1]
Output: 1
Explanation: For the node with value 1: The average of its subtree is 1 / 1 = 1.
```

Constraints:

- The number of nodes in the tree is in the range `[1, 1000]` .
- `0 <= Node.val <= 1000`