1973. Count Nodes Equal to Sum of Descendants Premium

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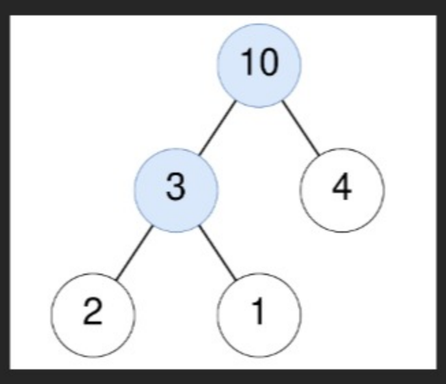
Given the `root` of a binary tree, return *the number of nodes where the value of the node is equal to the **sum** of the values of its descendants.*

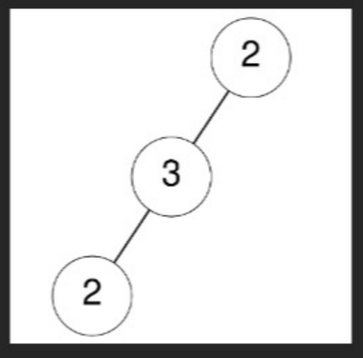
A **descendant** of a node `x` is any node that is on the path from node `x` to some leaf node. The sum is considered to be `0` if the node has no descendants.

Example 1:




```
Input: root = [10,3,4,2,1]
Output: 2
Explanation:
For the node with value 10: The sum of its descendants is 3+4+2+1 = 10.
For the node with value 3: The sum of its descendants is 2+1 = 3.
```

Example 2:




```
Input: root = [2,3,null,2,null]
Output: 0
Explanation:
No node has a value that is equal to the sum of its descendants.
```

Example 3:


```
Input: root = [0]
Output: 1
For the node with value 0: The sum of its descendants is 0 since it has no descendants.
```

Constraints:

- The number of nodes in the tree is in the range `[1, 10^5]`.
- `0 <= Node.val <= 10^5`

Seen this question in a real interview before? 1/5

Yes No

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Hint 1

Can we reuse previously calculated information?

Hint 2

How can we calculate the sum of the current subtree using the sum of the child's subtree?

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