

Description Solution Discuss (999+) Submissions

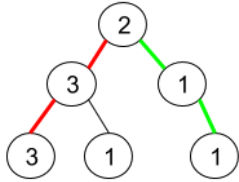
1457. Pseudo-Palindromic Paths in a Binary Tree

Medium 2361 80 Add to List Share

Given a binary tree where node values are digits from 1 to 9. A path in the binary tree is said to be **pseudo-palindromic** if at least one permutation of the node values in the path is a palindrome.

Return the number of **pseudo-palindromic** paths going from the root node to leaf nodes.

Example 1:

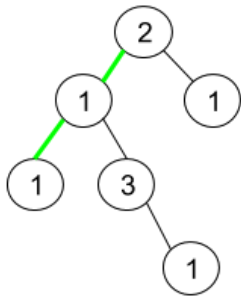


Input: root = [2,3,1,3,1,null,1]

Output: 2

Explanation: The figure above represents the given binary tree. There are three paths going from the root node to leaf nodes: the red path [2,3,3], the green path [2,1,1], and the path [2,3,1]. Among these paths only red path and green path are pseudo-palindromic paths since the red path [2,3,3] can be rearranged in [3,2,3] (palindrome) and the green path [2,1,1] can be rearranged in [1,2,1] (palindrome).

Example 2:



Input: root = [2,1,1,1,3,null,null,null,null,1]

Output: 1

Explanation: The figure above represents the given binary tree. There are three paths going from the root node to leaf nodes: the green path [2,1,1], the path [2,1,3,1], and the path [2,1]. Among these paths only the green path is pseudo-palindromic since [2,1,1] can be rearranged in [1,2,1] (palindrome).

Example 3:

Input: root = [9]

Output: 1

Constraints:

- The number of nodes in the tree is in the range $[1, 10^5]$.
- $1 \leq \text{Node.val} \leq 9$

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```
1  /**
2   * Definition for a binary tree node.
3   * struct TreeNode {
4   *     int val;
5   *     TreeNode *left;
6   *     TreeNode *right;
7   *     TreeNode() : val(0), left(nullptr), right(nullptr) {}
8   *     TreeNode(int x) : val(x), left(nullptr), right(nullptr) {}
9   *     TreeNode(int x, TreeNode *left, TreeNode *right) : val(x), left(left), right(right) {}
10  * };
11  */
12  class Solution {
13  public:
14      int pseudoPalindromicPaths (TreeNode* root) {
15
16      }
17  };
```

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