



Sum Root to Leaf Numbers

Problem

Submissions

Leaderboard

Discussions

You are given the root of a binary tree containing digits from 0 to 9 only. Each root-to-leaf path in the tree represents a number. For example, the root-to-leaf path 1 -> 2 -> 3 represents the number 123. Return the total sum of all root-to-leaf numbers. Test cases are generated so that the answer will fit in a 32-bit integer. A leaf node is a node with no children.

Example 1:

Input: root = [1,2,3]

Output: 25

Explanation:

The root-to-leaf path 1->2 represents the number 12.

The root-to-leaf path 1->3 represents the number 13.

Therefore, sum = 12 + 13 = 25.

Example 2:

Input: root = [4,9,0,5,1]

Output: 1026

Explanation:

The root-to-leaf path 4->9->5 represents the number 495.

The root-to-leaf path 4->9->1 represents the number 491.

The root-to-leaf path 4->0 represents the number 40.

Therefore, sum = 495 + 491 + 40 = 1026.

Input Format

You use one of the following templates to write your code.

C template:

```
/** * Definition for a binary tree node. */
```

```
struct TreeNode {  
    int val;  
    struct TreeNode *left;
```

```

struct TreeNode *right,

};

int sumNumbers(struct TreeNode* root){

}

```

C++ template:

```

/**
 * Definition for a binary tree node.
 */
struct TreeNode {
    int val;
    TreeNode *left;
    TreeNode *right;
    TreeNode() : val(0), left(nullptr), right(nullptr) {}
    TreeNode(int x) : val(x), left(nullptr), right(nullptr) {}
    TreeNode(int x, TreeNode *left, TreeNode *right) : val(x), left(left),
right(right) {}
};

int sumNumbers(TreeNode* root) {

}

```

Constraints

The number of nodes in the tree is in the range [1, 1000].

0 <= Node.val <= 9

The depth of the tree will not exceed 10.

Output Format

nothing, just complete the above function

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Contest ends in **2 hours**

Submissions: 0

Max Score: 2

Difficulty: Medium

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C



```

1 ▼ #include <stdio.h>
2 #include <string.h>
3 #include <math.h>

```

```
4 #include <stdlib.h>
5
6 int main() {
7
8     /* Enter your code here. Read input from STDIN. Print output to STDOUT */
9     return 0;
10 }
11
```

Line: 1 Col: 1

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