

129. Sum Root to Leaf Numbers

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思路

1. 分情讨论: 空节点; 叶子节点; 一般节点 (包括只有左孩子, 只有右孩子, 两个孩子都有)
2. recursive解法, 以参数传递方式保存前面的值

Python Code

```
# Definition for a binary tree node.
# class TreeNode(object):
#     def __init__(self, x):
#         self.val = x
#         self.left = None
#         self.right = None

class Solution(object):
    def sumNumbers(self, root):
        """
        :type root: TreeNode
        :rtype: int
        """
        self.res = 0
        def sumRootLeaf(root, s):
            if root:
                if not root.right and not root.left:
                    self.res += s*10 + root.val
                    sumRootLeaf(root.left, s*10 + root.val)
                    sumRootLeaf(root.right, s*10 + root.val)

        sumRootLeaf(root, 0)
        return self.res
```

总结

时间复杂度 $O(n)$, 空间复杂度 $O(h)$