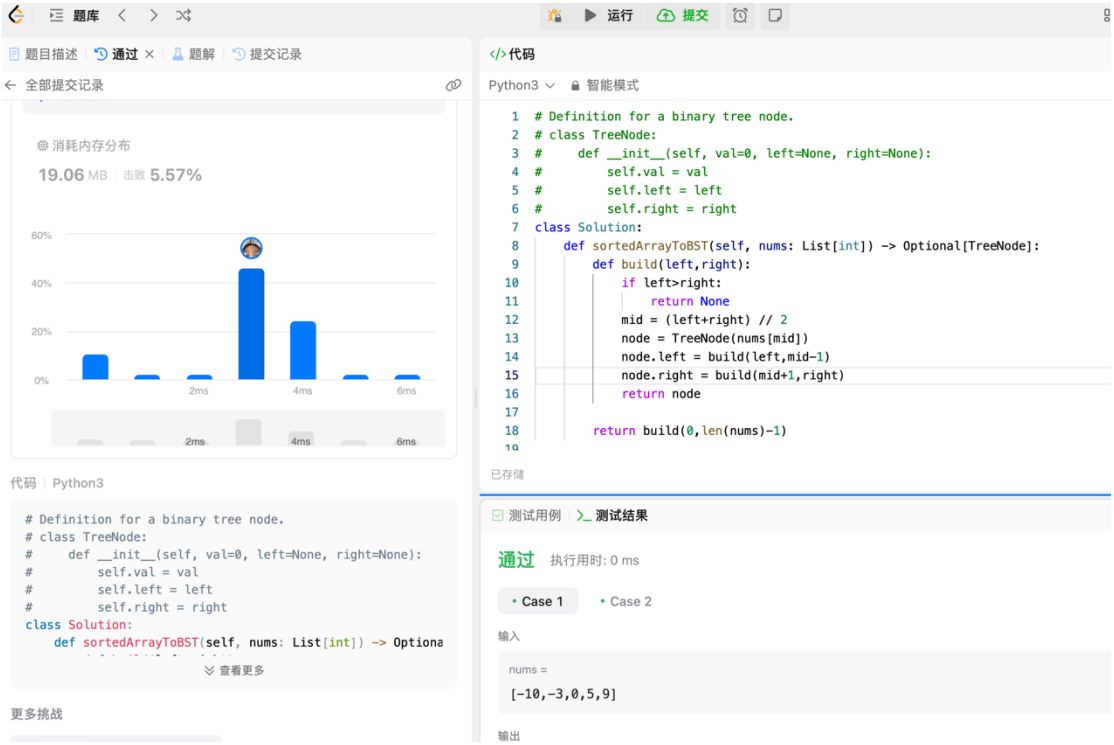
Assignment #8: 树为主
Updated 1704 GMT+8 Apr 8, 2025
2025 spring, Complied by 李振硕、信息管理系

1. 题目
LC108.将有序数组转换为二叉树
dfs, https://leetcode.cn/problems/convert-sorted-array-to-binary-search-tree/
思路：
代码：

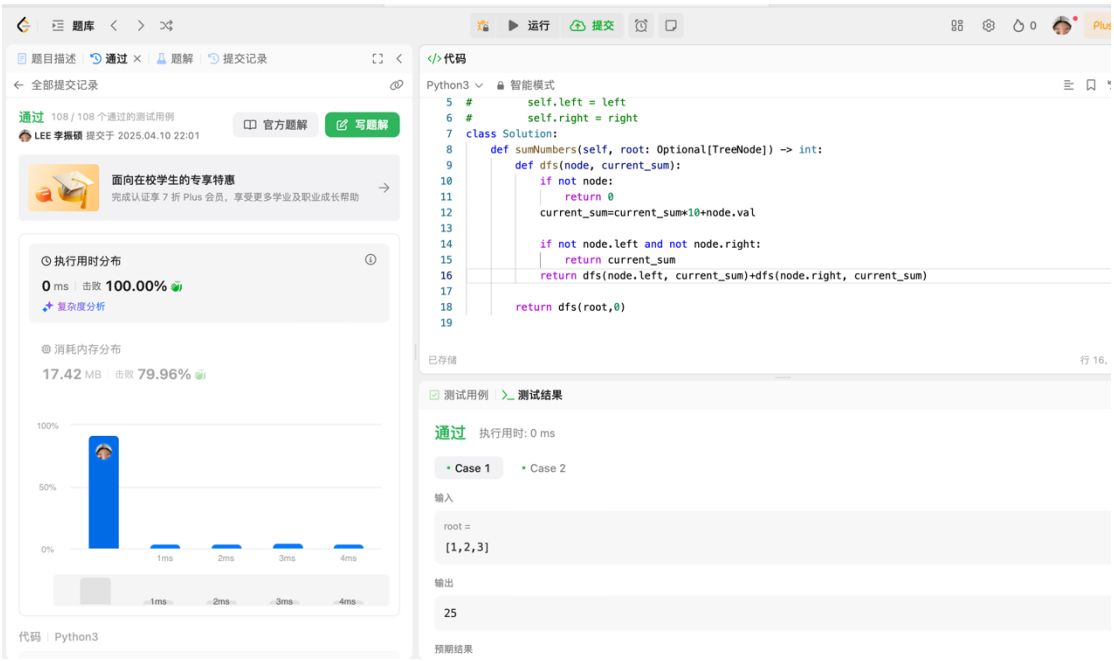


M27928:遍历树
adjacency list, dfs,
http://cs101.openjudge.cn/practice/27928/
思路：

代码：
```python
```
代码运行截图 <mark>（至少包含有"Accepted"）</mark>

LC129.求根节点到叶节点数字之和
dfs, https://leetcode.cn/problems/sum-root-to-leaf-numbers/
思路：

代码：



M22158:根据二叉树前中序序列建树

tree, http://cs101.openjudge.cn/practice/22158/

思路：

代码：

M24729:括号嵌套树

dfs, stack, http://cs101.openjudge.cn/practice/24729/

思路：

代码：

#48910707提交状态 查看 提交 统计 提问

状态: Accepted

源代码

```
class Node:
    def __init__(self, val):
        self.val = val
        self.children = []

def parse_tree(s):
    stack = []
    i = 0
    root = None

    while i < len(s):
        if s[i].isalpha():
            node = Node(s[i])
            if stack:
                stack[-1].children.append(node)
            else:
                root = node
            stack.append(node)
            i += 1
        elif s[i] == '(':
            i += 1
        elif s[i] == ',':
            stack.pop()
            i += 1
        elif s[i] == ')':
            stack.pop()
            i += 1
        else:
            i += 1  # ignore unexpected

    return root

def preorder(node, res):
    if not node:
        return
    res.append(node.val)
    for child in node.children:
        preorder(child, res)

def postorder(node, res):
    if not node:
        return
    for child in node.children:
        postorder(child, res)
    res.append(node.val)

s = input().strip()
root = parse_tree(s)

pre_res = []
post_res = []
preorder(root, pre_res)
postorder(root, post_res)

print(''.join(pre_res))
print(''.join(post_res))
```

基本信息

#:	48910707
题目:	24729
提交人:	24n2300093007
内存:	3624kB
时间:	22ms
语言:	Python3
提交时间:	2025-04-14 19:38:09

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LC3510.移除最小数对使数组有序 II
doubly-linked list + heap,
https://leetcode.cn/problems/minimum-pair-removal-to-sort-array-ii/
思路：
代码：

2. 学习总结和收获
这次作业我觉得非常难，会做的只有一道题，需要复习 tree 结构。遍历树和移除最小数对使数组有序 II 这两道题看了答案但是还没明白。。想复习完 tree 结构再补