# 题目

给定一个二叉树，原地将它展开为一个单链表。

例如，给定二叉树

1

/ \

2 5

/ \ \

3 4 6

将其展开为：

1

\

2

\

3

\

4

\

5

\

6

# 分析

/\*\*

\* 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) {}

\* };

\*/

class Solution {

public:

void flatten(TreeNode\* root) {

if (root == nullptr) return;

flatten(root->left);

flatten(root->right);

if (root->left != nullptr) {

auto pre = root->left;

while (pre->right != nullptr) pre = pre->right;

pre->right = root->right;

root->right = root->left;

root->left = nullptr;

}

root = root->right;

return;

}

};