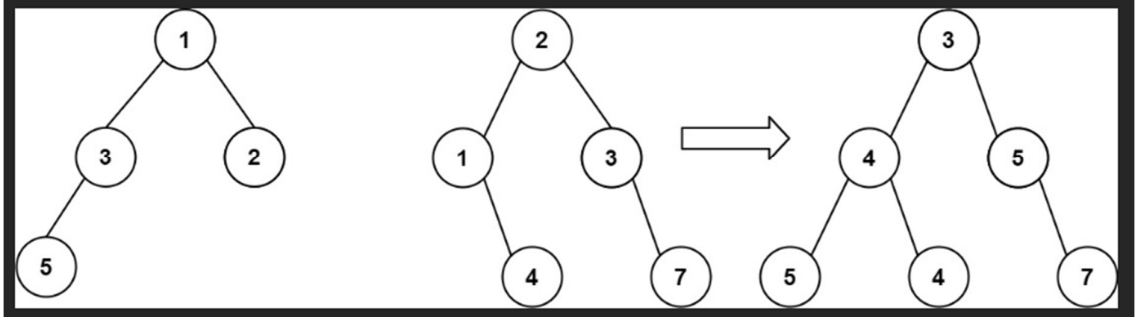
```c
#include <stdlib.h>

// Definition for a binary tree node.

struct TreeNode* mergeTrees(struct TreeNode* root1, struct TreeNode* root2) {
    if (root1 == NULL) return root2;
    if (root2 == NULL) return root1;

    // Merge the current nodes
    struct TreeNode* merged = (struct TreeNode*)malloc(sizeof(struct TreeNode));
    merged->val = root1->val + root2->val;

    // Recur for left subtree
    merged->left = mergeTrees(root1->left, root2->left);

    // Recur for right subtree
    merged->right = mergeTrees(root1->right, root2->right);

    return merged;
```

}

Example 1:



> **Input:** root1 = [1,3,2,5], root2 = [2,1,3,null,4,null,7]
> **Output:** [3,4,5,5,4,null,7]

Example 2:

> **Input:** root1 = [1], root2 = [1,2]
> **Output:** [2,2]