MERGE TWO BINARY TREES

LEETCODE PROGRAM BATCH-3

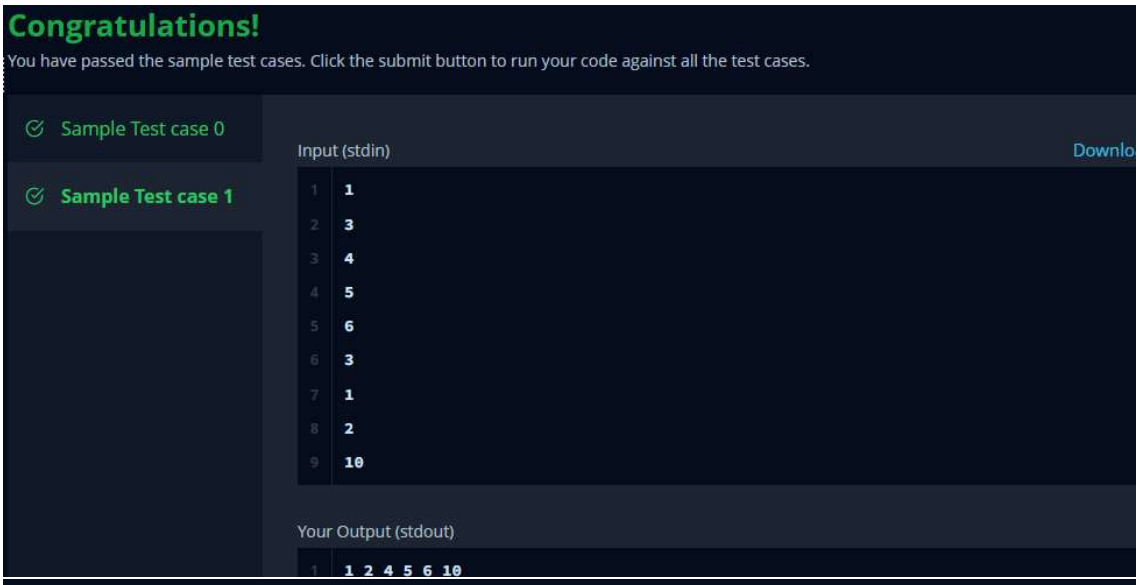
```
if (root1 == NULL)
        return root2;
    if (root2 == NULL)
        return root1;

    struct TreeNode* merged = (struct TreeNode*)malloc(sizeof(struct TreeNode));
    merged->val = root1->val + root2->val;
    merged->left = mergeTrees(root1->left, root2->left);
    merged->right = mergeTrees(root1->right, root2->right);

    return merged;
```

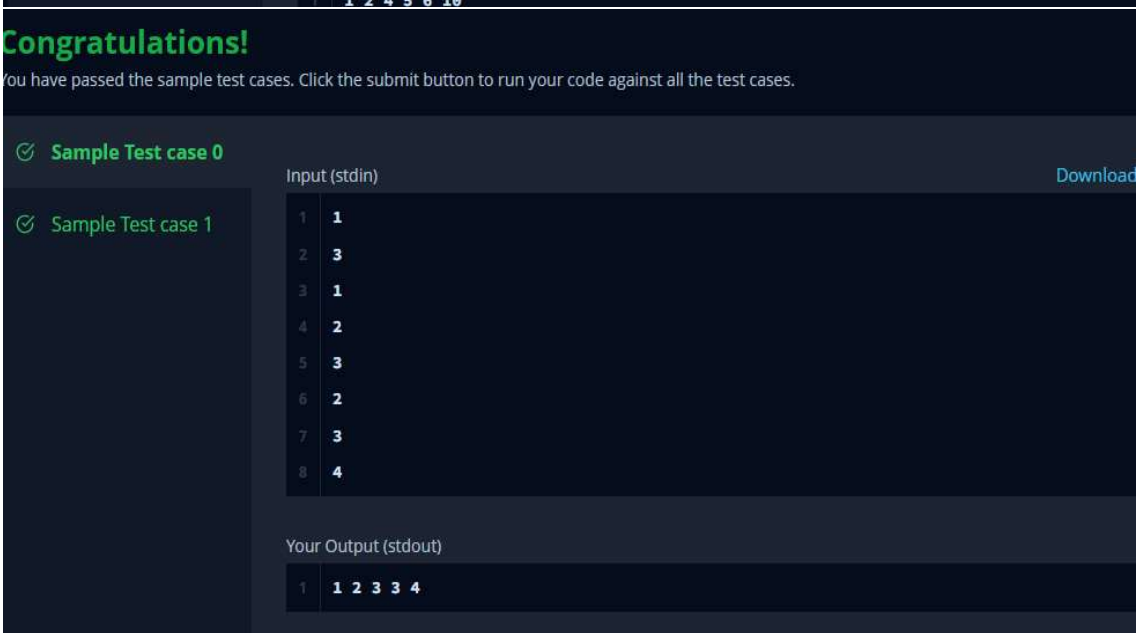
Merge TWO SORTED LINKED LISTS CODE

HACKERRANK PROGRAM BATCH-3

```
if (head1 == NULL) return head2;
    if (head2 == NULL) return head1;

    struct SinglyLinkedListNode* mergedHead = NULL;

    if (head1->data <= head2->data) {
        mergedHead = head1;
        head1 = head1->next;
    } else {
        mergedHead = head2;
        head2 = head2->next;
    }
```

```
struct SinglyLinkedListNode* current = mergedHead;

while (head1 && head2) {
    if (head1->data <= head2->data) {
        current->next = head1;
        head1 = head1->next;
    } else {
        current->next = head2;
        head2 = head2->next;
    }
    current = current->next;
}

if (head1) {
    current->next = head1;
} else {
    current->next = head2;
}

return mergedHead;
```


Congratulations!
You have passed the sample test cases. Click the submit button to run your code against all the test cases.
Sample Test case 0
Sample Test case 1
Input (stdin)
Downlo
1
3
4
5
6
3
1
2
10
Your Output (stdout)
1 2 4 5 6 10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Sample Test case 0
Sample Test case 1
Input (stdin)
Download
1
3
1
2
3
2
3
4
Your Output (stdout)
1 2 3 3 4