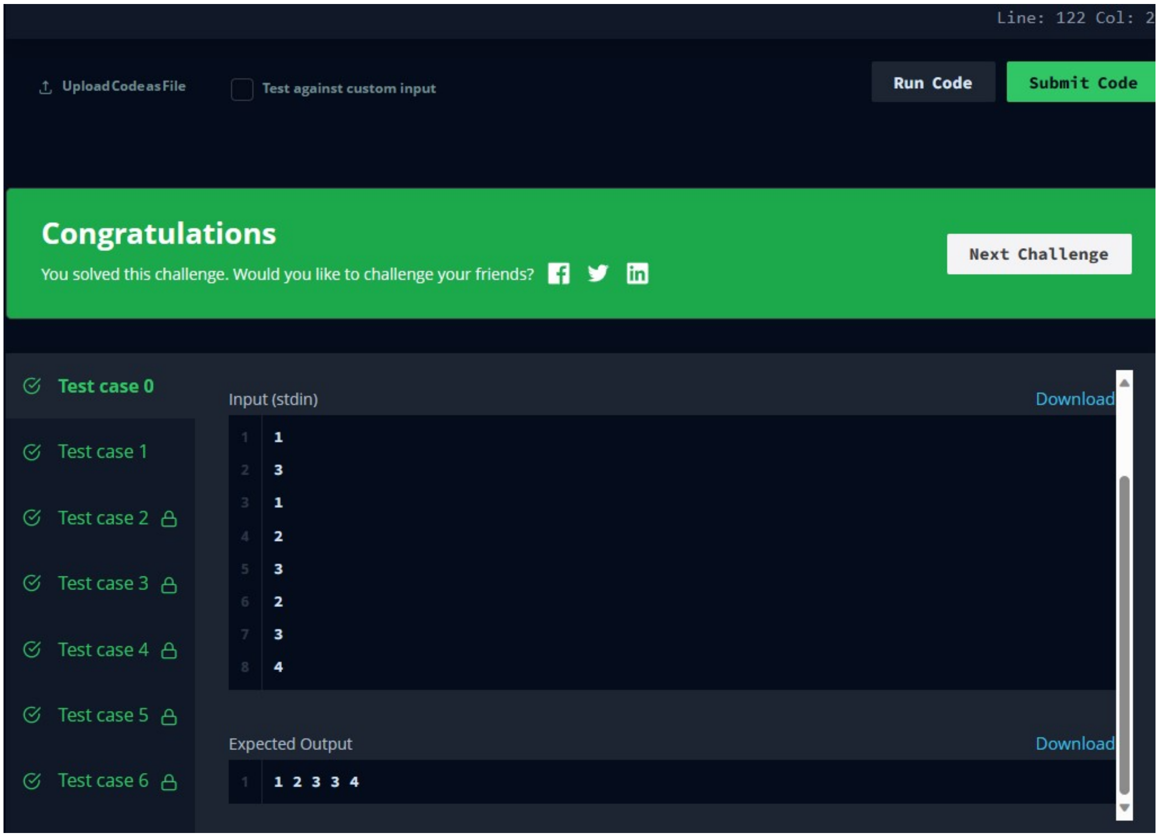
```
SinglyLinkedListNode* mergeLists(SinglyLinkedListNode* head1, SinglyLinkedListNode* head2) {
    SinglyLinkedListNode *head3 = NULL, *t1 = head1, *t2 = head2, *t3 = NULL;

    while (t1 != NULL && t2 != NULL) {
        SinglyLinkedListNode* newNode = malloc(sizeof(SinglyLinkedListNode));

        if (t1->data < t2->data) {
            newNode->data = t1->data;
            t1 = t1->next;
        } else {
            newNode->data = t2->data;
            t2 = t2->next;
        }

        newNode->next = NULL;

        if (head3 == NULL) {
            head3 = newNode;
            t3 = head3;
        } else {
            t3->next = newNode;
            t3 = newNode;
        }
    }
    // If one of the lists is not fully processed, append the remaining elements to the merged list.
    if (t1 != NULL) {
        if (head3 == NULL) {
            head3 = t1;
        } else {
            t3->next = t1;
        }
    }

    if (t2 != NULL) {
        if (head3 == NULL) {
            head3 = t2;
        } else {
            t3->next = t2;
        }
    }

    return head3;
}
```



Congratulations

You solved this challenge. Would you like to challenge your friends?

Input (stdin)

```
1
3
1
2
3
2
3
4
```

Expected Output

```
1 2 3 3 4
```