

```

SinglyLinkedListNode* mergeLists(SinglyLinkedListNode* head1, SinglyLinkedListNode* head2) {
    SinglyLinkedListNode* mergedHead =
(SinglyLinkedListNode*)malloc(sizeof(SinglyLinkedListNode));
    SinglyLinkedListNode* tail = mergedHead;
    mergedHead->next = NULL;

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

    // Attach the remaining nodes of the non-empty list
    tail->next = (head1 != NULL) ? head1 : head2;

    // Save and remove the dummy node
    SinglyLinkedListNode* result = mergedHead->next;
    free(mergedHead);

    return result;
}

```

}

Sample Input

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

Sample Output

```
1 2 3 3 4
```

Explanation

The first linked list is: $1 \rightarrow 3 \rightarrow 7 \rightarrow NULL$

The second linked list is: $3 \rightarrow 4 \rightarrow NULL$

Hence, the merged linked list is: $1 \rightarrow 2 \rightarrow 3 \rightarrow 3 \rightarrow 4 \rightarrow NULL$