

MERGE TWO SORTED LISTS

```
class Solution {  
    public ListNode mergeTwoLists(ListNode list1, ListNode list2) {  
  
        ListNode dummy = new ListNode(0);  
        ListNode current = dummy;  
  
        while (list1 != null && list2 != null) {  
            if (list1.val <= list2.val) {  
                current.next = list1;  
                list1 = list1.next;  
            } else {  
                current.next = list2;  
                list2 = list2.next;  
            }  
            current = current.next;  
        }  
  
        // Attach remaining nodes  
        if (list1 != null) {  
            current.next = list1;  
        } else {  
            current.next = list2;  
        }  
  
        return dummy.next;  
    }  
}
```