

## 4. Merge Two Sorted Lists

Merge two sorted linked lists and return it as a new sorted list.

Example: Input: l1 = 1->2->4, l2 = 1->3->4

Output: 1->1->2->3->4->4

### Code

```
class Solution {
    public ListNode mergeTwoLists(ListNode l1, ListNode l2) {
        ListNode prehead = new ListNode(-1);
        ListNode cur = prehead;

        while (l1 != null && l2 != null) {
            if (l1.val <= l2.val) {
                cur.next = l1;
                l1 = l1.next;
            } else {
                cur.next = l2;
                l2 = l2.next;
            }
            cur = cur.next;
        }

        cur.next = l1 == null ? l2 : l1;
        return prehead.next;
    }
}
```