**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;

    }

}