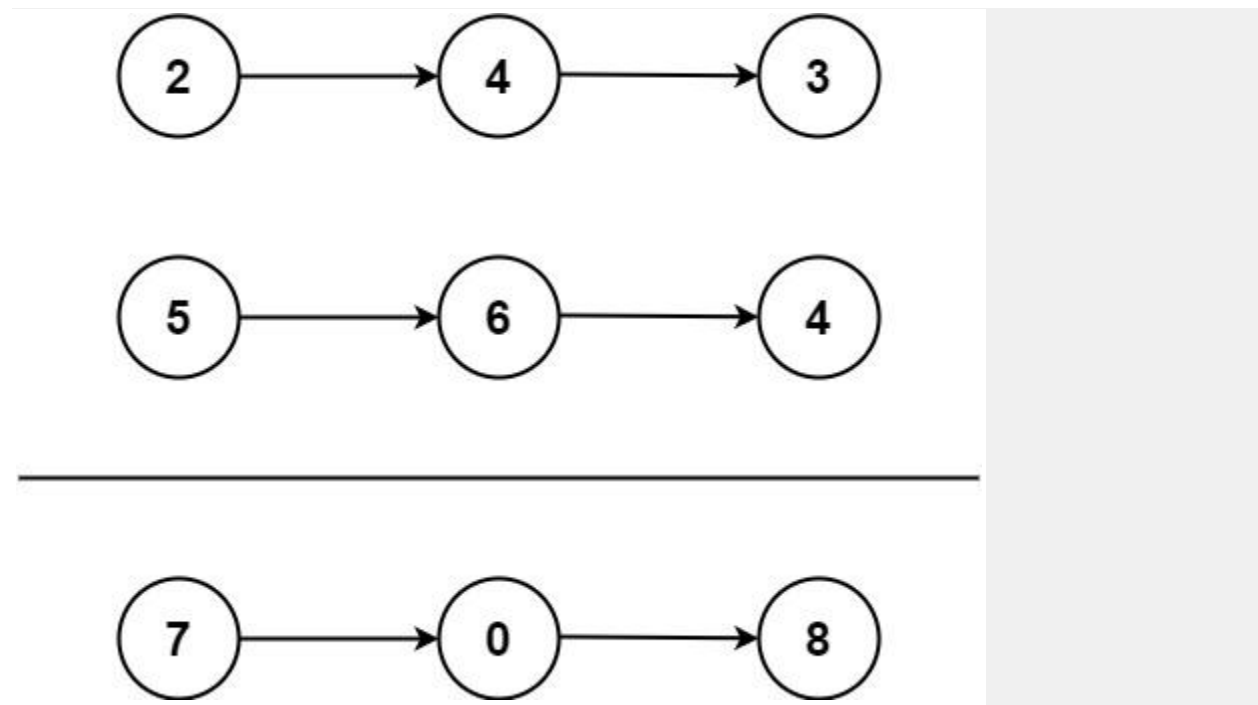


You are given two non-empty linked lists representing two non-negative integers. The digits are stored in reverse order, and each of their nodes contains a single digit. Add the two numbers and return the sum as a linked list.

You may assume the two numbers do not contain any leading zero, except the number 0 itself.

Example 1:



Input: l1 = [2,4,3], l2 = [5,6,4]

Output: [7,0,8]

Explanation: $342 + 465 = 807$.

Example 2:

Input: l1 = [0], l2 = [0]

Output: [0]

Example 3:

Input: l1 = [9,9,9,9,9,9,9], l2 = [9,9,9,9]

Output: [8,9,9,9,0,0,0,1]

Constraints:

- The number of nodes in each linked list is in the range [1, 100].
- $0 \leq \text{Node.val} \leq 9$
- It is guaranteed that the list represents a number that does not have leading zeros.

Solution:

```
class Solution {
    public ListNode addTwoNumbers(ListNode l1, ListNode l2) {
        int carry=0;
        ListNode head=new ListNode(0);
        ListNode p1=l1,p2=l2,p3=head;
        while(p1!=null||p2!=null){
            if(p1!=null){
                carry+=p1.val;
                p1=p1.next;
            }
            if(p2!=null){
                carry+=p2.val;
                p2=p2.next;
            }
            p3.next=new ListNode(carry%10);
            p3=p3.next;
            carry/=10;
        }
        if(carry==1)
            p3.next=new ListNode(1);
        return head.next;
    }
}
```