# 1. Add Two Numbers

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 contain a single digit. Add the two numbers and return it as a linked list.

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

```
Input: (2 \rightarrow 4 \rightarrow 3) + (5 \rightarrow 6 \rightarrow 4)
```

Output:  $7 \rightarrow 0 \rightarrow 8$ 

# 2. Add Two Numbers II

You are given two **non-empty** linked lists representing two non-negative integers. The most significant digit comes first and each of their nodes contain a single digit. Add the two numbers and return it as a linked list.

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

### Follow up:

What if you cannot modify the input lists? In other words, reversing the lists is not allowed.

## **Example:**

```
Input: (7 -> 2 -> 4 -> 3) + (5 -> 6 -> 4)
Output: 7 -> 8 -> 0 -> 7
```

## 3. Remove Nth Node From End of List

Given a linked list, remove the  $n^{th}$  node from the end of list and return its head.

For example,

```
Given linked list: 1->2->3->4->5, and n=2.

After removing the second node from the end, the linked list becomes 1->2->3->5.
```

#### Note:

Given *n* will always be valid.

Try to do this in one pass.