LEETCODE SOLUTIONS - YOGESH MUNEES

2. Add Two Numbers

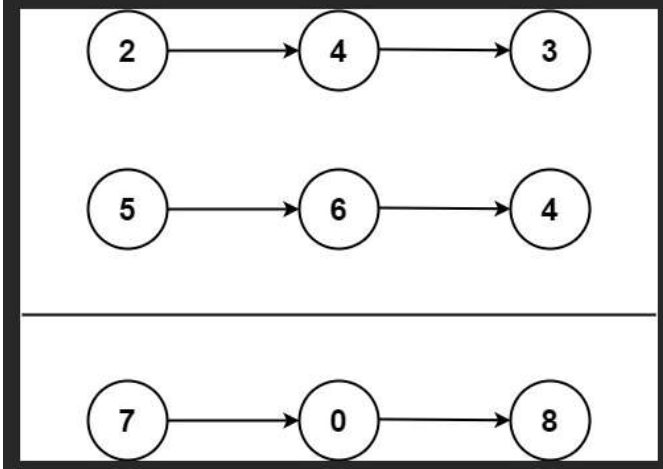
Medium 27.3K 5.3K

Companies

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.
```

Solution:

```
class Solution {
public:
    ListNode* addTwoNumbers(ListNode* l1, ListNode* l2) {
        ListNode* j=l2;
        ListNode *answer=new ListNode();
        ListNode* ptr=answer;
        int digit,carry=0;
        for(ListNode* i=l1;i!=NULL;i=i->next){
            if(j!=NULL){
                digit=j->val+i->val+carry;
                j=j->next;
            }
            else{
                digit=i->val+carry;
```

```
            }
            ListNode* value;
            if(digit>=10){
                value=new ListNode(digit-10);
                carry=1;
            }else{
                value=new ListNode(digit);
                carry=0;
            }
            answer->next=value;
            answer=answer->next;
        }
        if(j!=NULL){
            ListNode* value;
            for(;j!=NULL;j=j->next){
            digit=j->val+carry;
            if(digit>=10){
                digit-=10;
                carry=1;
            }
            else{
                carry=0;
            }
            value=new ListNode(digit);
            answer->next=value;
            answer=answer->next;
            }

        }
        if(carry!=0){
            ListNode *value=new ListNode(carry);
            answer->next=value;
            answer=answer->next;
        }
        return ptr->next;
    }
};
```