class Solution {

public:

ListNode\* addTwoNumbers(ListNode\* l1, ListNode\* l2) {

struct ListNode\* result = new ListNode((l1->val+l2->val)%10);

int carry = (l1->val+l2->val)/10;

l1 = l1->next;

l2 = l2->next;

ListNode\* tail = result;

while(l1!=nullptr || l2!=nullptr){

if(l1!=nullptr && l2!=nullptr){

tail->next = new ListNode((l1->val+l2->val+carry)%10);

carry = (l1->val+l2->val+carry)/10;

tail = tail->next;

l1 = l1->next;

l2 = l2->next;

} else if(l1!=nullptr && l2==nullptr){

tail->next = new ListNode((l1->val+carry)%10);

carry = (l1->val+carry)/10;

tail = tail->next;

l1 = l1->next;

} else if(l1==nullptr && l2!=nullptr){

tail->next = new ListNode((l2->val+carry)%10);

carry = (l2->val+carry)/10;

tail = tail->next;

l2 = l2->next;

}

}

if(carry) tail->next = new ListNode(carry);

return result;

}

};