/\*\*

\* Definition for singly-linked list.

\* struct ListNode {

\* int val;

\* ListNode \*next;

\* ListNode(int x) : val(x), next(NULL) {}

\* };

\*/

class Solution {

public:

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

int sum = 0;

ListNode\* dummy = new ListNode(0), \*cur = dummy;

while(l1 || l2) {

int val1 = l1 ? l1->val : 0;

int val2 = l2 ? l2->val : 0;

sum += val1 + val2;

cur->next = new ListNode(sum % 10);

sum /= 10;

cur = cur->next;

l1 = l1 ? l1->next : l1;

l2 = l2 ? l2->next : l2;

}

if(sum)

cur->next = new ListNode(sum);

cur = dummy->next;

delete dummy;

return cur;

}

};