PROBLEM

Add two numbers represented by linked lists 🔖

Medium   Accuracy: 34.52%   Submissions: 249K+   Points: 4

Given two numbers, **num1** and **num2**, represented by linked lists of size **n** and **m** respectively. The task is to return a linked list that represents the sum of these two numbers.

For example, the number **190** will be represented by the linked list, **1->9->0->null,** similarly **25** by **2->5->null.** Sum of these two numbers is 190 + 25 = **215,** which will be represented by **2->1->5->null.** You are required to return the head of the linked list **2->1->5->null.**

Note: There can be leading zeros in the input lists, but there should not be any leading zeros in the output list.

Example 1:

```
Input:
n = 2
num1 = 45 (4->5->null)
m = 3
num2 = 345 (3->4->5->null)
Output:
```

```
Output:
3->9->0->null
Explanation:
For the given two linked list (4 5) and (3 4 5), after adding the two linked list resultant linked list
will be (3 9 0).
```

Example 2:

```
Input:
n = 4
num1 = 0063 (0->0->6->3->null)
m = 2
num2 = 07 (0->7->null)
Output:
7->0->null
Explanation:
For the given two linked list (0 0 6 3) and (0 7), after adding the two linked list resultant linked list
will be (7 0).
```

Your Task:

The task is to complete the function **addTwoLists()** which has node reference of both the linked lists and returns the head of the sum list.

Expected Time Complexity: O(n+m)
Expected Auxiliary Space: O(max(n,m)) for the resultant list.

Constraints:
$1 <= n, m <= 10^4$

CODE

```
''' Node for linked list:

class Node:
    def __init__(self, data):
        self.data = data
        self.next = None

'''
class Solution:
    #Function to add two numbers represented by linked list.
    def addTwoLists(self, num1, num2):
        a=''
        while num1:
            a+=str(num1.data)
            num1=num1.next
        b=''
        while num2:
            b+=str(num2.data)
            num2=num2.next


        k=str(int(a)+int(b))
        i=1
        ans=Node(int(k[0]))
        res=ans
        while i<len(k):
            ans.next=Node(int(k[i]))
            i+=1
            ans=ans.next
        return res
        # code here
        # return head of sum list
```