Add Two Numbers

Question: You are given two linked lists representing two non-negative numbers. 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.

Input: (2 -> 4 -> 3) + (5 -> 6 -> 4)

Output: 7 -> 0 -> 8

Solutions:

```python
class ListNode:
    def __init__(self, x):
        self.val = x
        self.next = None


class Solution:
    def addTwoNumbers(l1, l2):
        dummy = ListNode(0)
        current, carry = dummy, 0

        while l1 or l2:
            val = carry
            if l1:
                val += l1.val
                l1 = l1.next
            if l2:
                val += l2.val
                l2 = l2.next
```

```python
            carry, val = val / 10, val % 10
            current.next = ListNode(val)
            current = current.next


        if carry == 1:
            current.next = ListNode(1)


        return dummy.next


if __name__ == '__main__':
    a, a.next, a.next.next = ListNode(2), ListNode(4), ListNode(3)
    b, b.next, b.next.next = ListNode(5), ListNode(6), ListNode(4)
    result = Solution.addTwoNumbers(a, b)
    print ("{0} -> {1} -> {2}".format(int(result.val), int(result.next.val),
int(result.next.next.val)))
```