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1  /*Author: Bochen (mddboc@foxmail.com)
2  Last Modified: Tue Apr 10 22:28:44 CST 2018*/
3
4  /*You are given two non-empty linked lists representing two non-negative integers.
5  The digits are stored in reverse order and each of their nodes contain a single
6  digit. Add the two numbers and return it as a linked list.
7
8  You may assume the two numbers do not contain any leading zero, except the
9  number 0 itself.
10
11 Example
12
13 Input: (2 -> 4 -> 3) + (5 -> 6 -> 4)
14 Output: 7 -> 0 -> 8
15 Explanation: 342 + 465 = 807.*/
16
17 import java.lang.System;
18 import java.util.*;
19 import java.lang.Math;
20 import java.util.HashMap;
21
22 class ListNode
23 {
24     int val;
25     ListNode next;
26
27     ListNode(int x)
28     {
29         val = x;
30     }
31 }
32
33 public class Main
34 {
35     public static void main(String[] args)
36     {
37         ListNode l1 = new ListNode(2);
38         l1.next = new ListNode(4);
39         l1.next.next = new ListNode(3);
40
41         ListNode l2 = new ListNode(5);
42         l2.next = new ListNode(6);
43         l2.next.next = new ListNode(4);
44
45         Solution solution = new Solution();
46
47         ListNode receive = solution.addTwoNumbers(l1, l2);
48
49         System.out.println("haha");
50     }
51 }
52
53
54
55
56
57
58 class Solution {
59     public ListNode addTwoNumbers(ListNode l1, ListNode l2) {
60
61         if ( l1 == null || l2 == null )
62         {
63             return (l1 == null ? l2 : l1);
64         }
65
66         int additionBit = 0;
67         int currentSum = 0;
68         ListNode head = new ListNode(0);
69         ListNode pointer = head;
70     }
```

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71     while ( l1 != null && l2 != null )
72     {
73         currentSum = l1.val + l2.val + additionBit;
74
75         pointer.next = new ListNode(currentSum % 10);
76         additionBit = currentSum / 10;
77
78         pointer = pointer.next;
79         l1 = l1.next;
80         l2 = l2.next;
81     }
82
83     ListNode l = (l1 == null) ? l2 : l1;
84     while (l != null)
85     {
86         currentSum = l.val + additionBit;
87
88         pointer.next = new ListNode(currentSum % 10);
89         additionBit = currentSum / 10;
90
91         pointer = pointer.next;
92         l = l.next;
93     }
94
95     if (additionBit!=0)
96     {
97         pointer.next = new ListNode(additionBit);
98     }
99
100    return head.next;
101    }
102 }
103
104
105

```