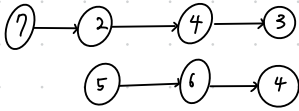


## Add Two Numbers 2

Ex)



Input:  $l_1 = [7, 2, 4, 3]$

$l_2 = [5, 6, 4]$

Output:  $[7, 8, 0, 7]$

Explanation:  $7243 + 564$

Idea: Iterate  $l_1$ ,  $l_2$ , and  $l_1 + l_2$  value.  $O(3n) \rightarrow O(n)$

Algorithm:

$curr = l_1$

$l_1\_digit = ''$

while  $curr$ :

$l_1\_digit += str(curr.val)$

$curr = curr.next$

"same for  $l_2$ "

$sums = str(int(l_1\_digit) + int(l_2\_digit))$

$head = ListNode(a)$

$tail = head$

for  $val$  in  $sums$ :

$new\_node = ListNode(int(val))$

$tail.next = new\_node$

$tail = tail.next$

return  $head.next$