

Multiply two linked lists

Difficulty: **Easy** Accuracy: **46.33%** Submissions: **84K+** Points: **2**

Given elements as nodes of the two singly linked lists. The task is to multiply these two linked lists, say L1 and L2.

Note: The output could be large take modulo 10^9+7 .

Examples :

Input: LinkedList L1 : 3->2 , LinkedList L2 : 2

Output: 64

Explanation:



x



Multiplication of 32 and 2 gives 64.

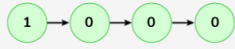
Input: LinkedList L1: 1->0->0 , LinkedList L2 : 1->0

Output: 1000

Explanation:



×



Multiplication of 100 and 10 gives 1000.

Expected Time Complexity: $O(\max(n,m))$

Expected Auxilliary Space: $O(1)$

where n is the size of $L1$ and m is the size of $L2$

Constraints:

1 ≤ number of nodes ≤ 10⁵

$$1 \leq \text{node} \rightarrow \text{data} \leq 10^3$$
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