

Description Solution Discuss (999+) Submissions

## 25. Reverse Nodes in k-Group

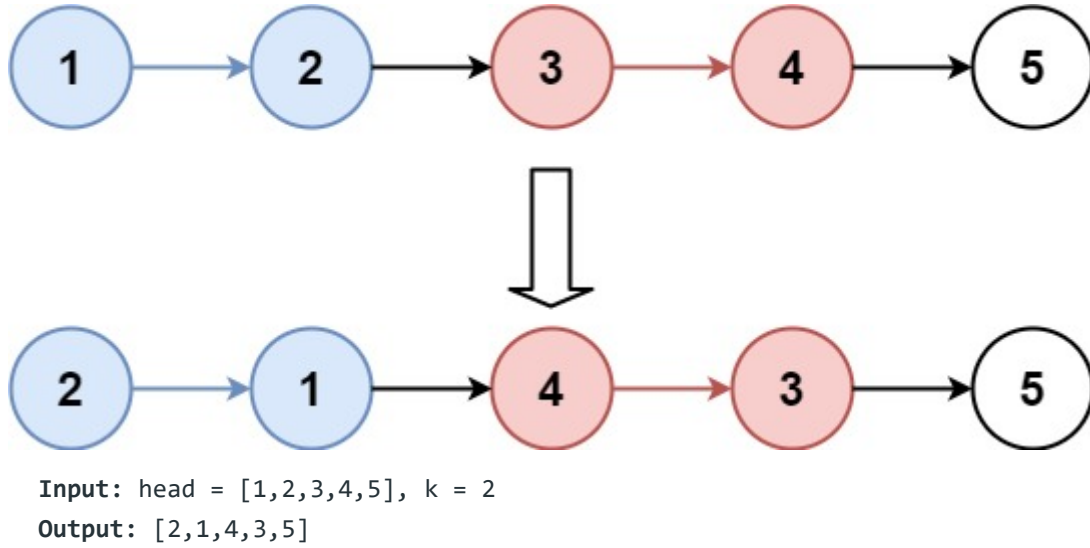
Hard 7934 512 Add to List Share

Given the `head` of a linked list, reverse the nodes of the list `k` at a time, and return *the modified list*.

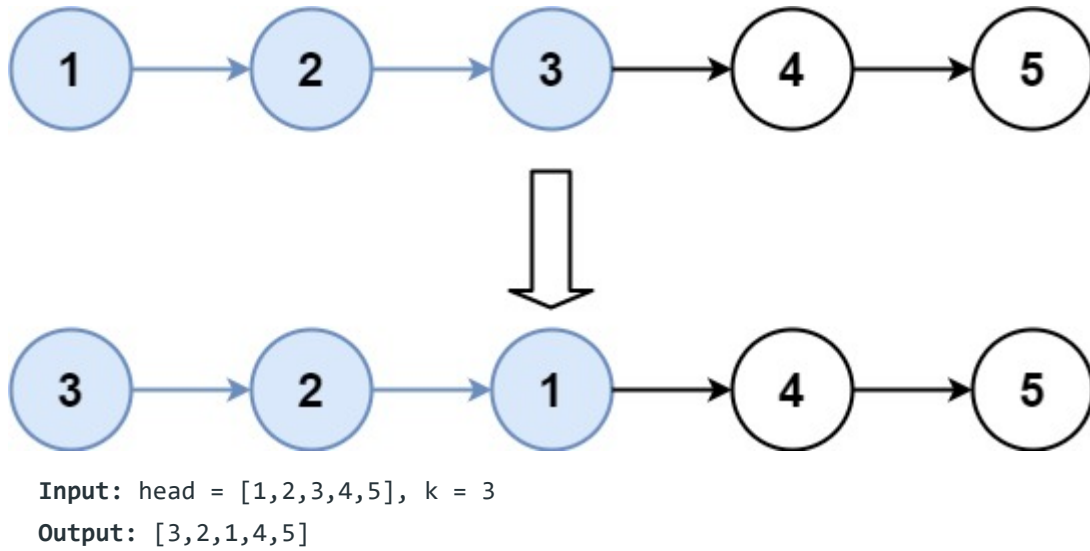
`k` is a positive integer and is less than or equal to the length of the linked list. If the number of nodes is not a multiple of `k` then left-out nodes, in the end, should remain as it is.

You may not alter the values in the list's nodes, only nodes themselves may be changed.

### Example 1:



### Example 2:



### Constraints:

- The number of nodes in the list is `n`.
- $1 \leq k \leq n \leq 5000$
- $0 \leq \text{Node.val} \leq 1000$

**Follow-up:** Can you solve the problem in  $O(1)$  extra memory space?

Accepted 547,256 Submissions 1,051,782

Seen this question in a real interview before?

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Autocomplete

```
1  /**
2   * Definition for singly-linked
3   * list.
4   * struct ListNode {
5   *     int val;
6   *     ListNode *next;
7   *     ListNode() : val(0),
8   *     next(nullptr) {}
9   *     ListNode(int x) : val(x),
10    *     next(nullptr) {}
11    *     ListNode(int x, ListNode
12    *     *next) : val(x), next(next) {}
13    * };
14
15  class Solution {
16  public:
17      ListNode*
18      reverseKGroup(ListNode* head,
19      int k) {
20
21          if(head == nullptr || k
22          == 1){
23              return head;
24          }
25          ListNode* fake = new
26          ListNode(0);
27          fake->next = head;
28
29          ListNode* pre = fake;
30          int i = 0;
31
32          ListNode* p = head;
33          while(p != nullptr){
34              i++;
35              if(i % k == 0){
36                  pre =
37                  reverse(pre, p->next);
38                  p = pre->next;
39              }
40          }
```

Your previous code was restored from your local storage.

Testcase Run Code Result Debugger

Accepted Runtime: 0 ms

Your input

Output

Expected

Console Use Example Testcases

Problems

Pick One

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