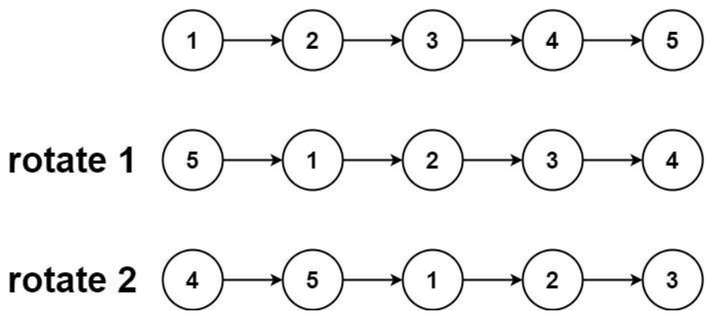
61. Rotate List

Medium 4872 1263 Add to List Share

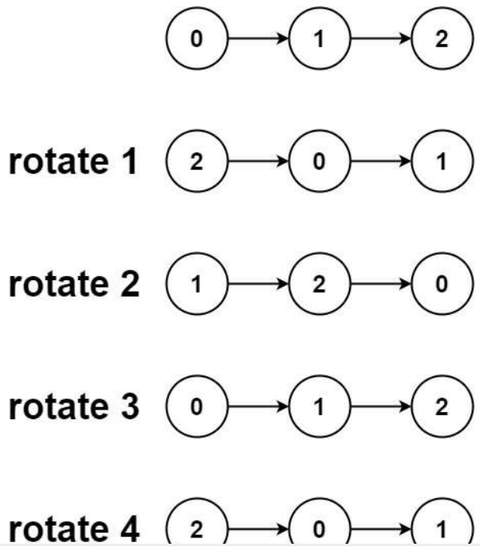
Given the `head` of a linked list, rotate the list to the right by `k` places.

Example 1:




```
Input: head = [1,2,3,4,5], k = 2
Output: [4,5,1,2,3]
```

Example 2:



Java Autocomplete

```
 *     ListNode(int val, ListNode next) { this.val = val;
this.next = next; }
 * }
 */
class Solution {

    public ListNode rotateRight( ListNode head, int k ) {

        if (head == null || head.next == null)
            return head;
        else if (k == 0)
            return head;

        ListNode tempNode = head;
        int listSizeCounter = 0;

        while (tempNode != null) {
            listSizeCounter++;
            tempNode = tempNode.next;
        }

        k = k % listSizeCounter;

        if(k == 0)
            return head;

        tempNode = head;

        for (int i = 0; i < listSizeCounter - k - 1; i++)
            tempNode = tempNode.next;

        ListNode reverseStart = tempNode.next;

        tempNode.next = null;
        tempNode = reverseStart;

        while (tempNode != null && tempNode.next != null) {
            tempNode = tempNode.next;
        }


        tempNode.next = head;
        head = reverseStart;
```