

61 Rotate List

Given a list, rotate the list to the right by k places, where k is non-negative.

Example:

```
Given 1->2->3->4->5->NULL and k = 2,  
  
return 4->5->1->2->3->NULL.
```

【思路】

可以遍历链表得到链表长度，首尾相接形成环形链表。 k 可以大于链表的长度，所以需要取模。

```
/**  
 * Definition for singly-linked list.  
 * struct ListNode {  
 *     int val;  
 *     ListNode *next;  
 *     ListNode(int x) : val(x), next(NULL) {}  
 * };  
 */  
class Solution {  
public:  
    ListNode* rotateRight(ListNode* head, int k) {  
        if(head==NULL) return head;  
        ListNode* node = head;  
        int cnt=1;  
        while(node->next){  
            node = node->next;  
            cnt++;  
        }  
        if(cnt!=0) k = k%cnt;  
        node->next = head;  
        for(int i =0;i<cnt-k;i++){  
            node = node->next;  
        }  
        ListNode* n_head = node->next;  
        node->next = NULL;  
        return n_head;  
    }  
};
```