25. Reverse Nodes in k-Group

题目描述:https://leetcode.com/problems/reverse-nodes-in-k-group/

> 给定一个链表，按照k各为一组，逆序。
> 例如:
>
> ```
> 给定:  1->2->3->4->5->NULL k = 3
> 返回:  3->2->1->4->5->NULL
> ```

解题思路:

通俗。。

代码:

```
/**
 * Definition for singly-linked list.
 * struct ListNode {
 *     int val;
 *     ListNode *next;
 *     ListNode(int x) : val(x), next(NULL) {}
 * };
 */
class Solution {
public:
    ListNode* reverse(ListNode* head, ListNode* last) {
        ListNode* fakeHead = last;
        ListNode* pre = fakeHead;
        ListNode* cur = head;
        while(cur != last) {
            ListNode* t = cur->next;
            cur->next = pre;
            pre = cur;
            cur = t;
        }
        return pre;
    }
    ListNode* reverseKGroup(ListNode* head, int k) {
        if(head == NULL) return NULL;
        ListNode* fakeHead = new ListNode(-1);
        fakeHead->next = head;
        ListNode* cur = head;
```

```
        ListNode* pre = fakeHead;
        int c = 0;
        while(cur) {
            c++;
            if(c % k == 0) {
                ListNode* last = cur->next;
                ListNode* t = pre->next;
                // cout << pre->val << " " << t->val << " " << cur->val << " " <<
last->val << endl;
                pre->next = reverse(t, last);
                // cout << pre->val << " " << pre->next->val << " " << last->val <
< endl;
                pre = t;
                cur = last;
            }
            else {
                cur = cur->next;
            }
        }
        return fakeHead->next;
    }
};
```