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1: #include<stdio.h>
2: #include<stdlib.h>
3: struct node{
4:     int v;
5:     struct node *next;
6: };
7: // head points to first noed of the linkedlist
8: struct node *head;
9: // inserts value at the front of LinkedList head
10: void insertAtBegin(int value){
11:     struct node *temp = (struct node*)malloc(sizeof(struct node));
12:     temp->v = value;
13:     if(head==NULL){
14:         temp->next = NULL;
15:         head = temp;
16:         return;
17:     }
18:     temp->next = head;
19:     head = temp;
20: }
21: // display linkedlist
22: void displayLL(struct node* head){
23:     struct node *temp = head;
24:     while(temp!=NULL){
25:         printf("%d->",temp->v);
26:         temp = temp->next;
27:     }
28:     printf("NULL \n\n");
29: }
30: struct node* reverseLLK(struct node* head, int k) {
31:
32:     if(head==NULL || head->next==NULL)    return head;
33:
34:     struct node* p;    //previous
35:     struct node* c;    //current
36:     struct node* n;    //next
37:     struct node* h;
38:     int i = 1;
39:     h = head;

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40:     c = head;
41:     p = NULL;
42:     n = c->next;
43:
44:     while (n != NULL) {
45:         c->next = p;
46:         p = c;
47:         c = n;
48:         n = n->next;
49:         ++i;
50:         if (i == k)
51:             break;
52:     }
53:
54:     c->next = p;
55:     h->next = reverseLLK(n, k);
56:
57:     return c;
58: }
59: int main(){
60:
61:     for(int i=1;i<=12;++i){
62:         insertAtBegin(i);
63:     }
64:
65:     printf("LinkedList:\n");
66:     displayLL(head);
67:
68:     head = reverseLLK(head,4);
69:
70:     printf("LinkedList after Reverse:\n");
71:     displayLL(head);
72:
73: }

```