```c
/**
 * Definition for singly-linked list.
 * struct ListNode {
 *     int val;
 *     struct ListNode *next;
 * };
 */
struct ListNode* reverse(struct ListNode* node);
struct ListNode* reverseList(struct ListNode* head) {
    if(head == NULL) return NULL;

    return reverse(head);
}
struct ListNode* reverse(struct ListNode *node) {
    if(node->next == NULL) {
        return node;
    }

    struct ListNode* newHead = reverse(node->next);
    node->next->next = node;
    node->next = NULL;

    return newHead;
}
```