剑指 Offer 24. 反转链表

题目描述

定义一个函数,输入一个链表的头节点,反转该链表并输出反转后链表的头节点。

示例:

输入: 1->2->3->4->5->NULL 输出: 5->4->3->2->1->NULL

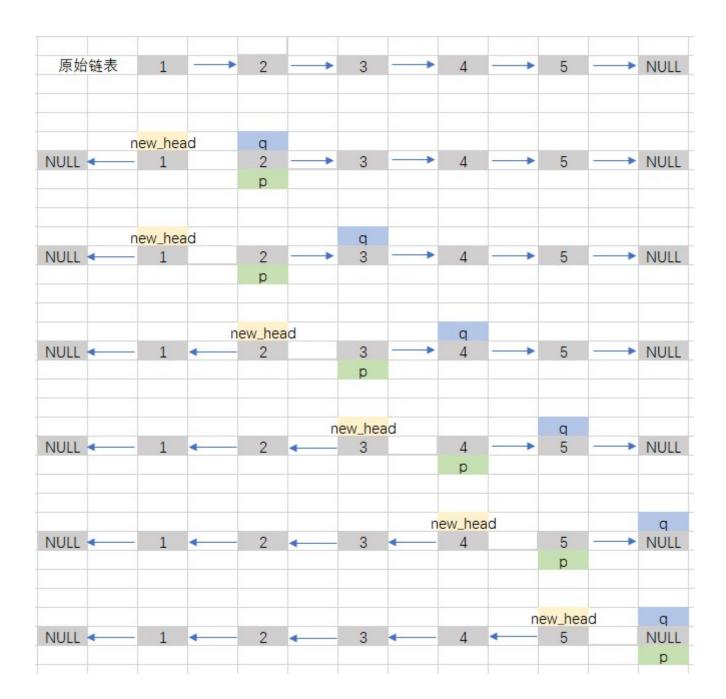
限制:

0 <= 节点个数 <= 5000

解析

方法1:

• 双指针



代码实现

CPP

```
* Definition for singly-linked list.
 * struct ListNode {
       int val;
       ListNode *next;
       ListNode(int x) : val(x), next(NULL) {}
 * };
 */
class Solution {
public:
    ListNode* reverseList(ListNode* head) {
        if (head == NULL | head->next == NULL)
            return head;
        ListNode* p = head->next;
        ListNode* q = head->next;
        ListNode* new_head = head;
        new_head->next = NULL;
        while(q != NULL)
        {
            q = q \rightarrow next;
            p->next = new_head;
            new_head = p;
            p = q;
        return new_head;
    }
};
```