

## 92. Reverse Linked List II

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题目描述: <https://leetcode.com/problems/reverse-linked-list-ii/>

给定一个链表，然后给定一段 [a,b] 把链表的这一段逆序

例如: [1,2,3,4,5,6,7,8] 给定[2,5]

返回: [1,5,4,3,2,6,7,8]

解题思路:

先找到要逆序的那一段，然后逆序，连回去

代码:

```

/**
 * 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, ListNode * last, ListNode *n){
        ListNode * fakeHead = n, *pre = fakeHead, *now = head;
        while(now != n){
            ListNode * tmp = now->next;
            now->next = pre;
            pre = now;
            now = tmp;
        }
        return pre;
    }
    ListNode* reverseBetween(ListNode* head, int m, int n) {
        ListNode* fakeHead = new ListNode(0);
        fakeHead->next = head;
        ListNode *h = head, *l = head;
        ListNode *p = fakeHead;
        p->next = head;
        int i = 1;
        while(i < m){
            p = h;
            h = h->next;
            i++;
        }
        l = h;
        while(i < n){
            l = l->next;
            i++;
        }
        ListNode *lp = l->next;
        p->next = reverseList(h, l, lp);
        return fakeHead->next;
    }
};

```