

92. Reverse Linked List II

Description

Hints

Submissions

Discuss

Solution

Pick One

Reverse a linked list from position m to n . Do it in one-pass.

Note: $1 \leq m \leq n \leq$ length of list.

Example:

Input: 1->2->3->4->5->NULL, $m = 2$, $n = 4$
Output: 1->4->3->2->5->NULL

Seen this question in a real interview before?



```
public class ListNode{
    int val;
    ListNode next;
    public ListNode(int val) {
        this.val = val;
    }
}

public ListNode reverseBetween(ListNode head, int m, int n) {
    if (m == n) {
        return head;
    }

    ListNode preHead = new ListNode(0);
    preHead.next = head;
    //找到第m个节点
    ListNode firstTail = preHead;
    int k = m - 1;
    while (k -- > 0) {
        firstTail = firstTail.next;
    }

    ListNode secondTail = firstTail.next;

    ListNode tmpHead = null;
    ListNode tmpNext = null;
    ListNode node = firstTail.next;
    k = n - m + 1;
    while (k -- > 0) { //第n个节点和第m个节点之间的反转
        tmpHead = node;
        node = node.next;
        tmpHead.next = tmpNext;
        tmpNext = tmpHead;
    }
    //将三部分连接
    firstTail.next = tmpHead;
    secondTail.next = node;

    return preHead.next;
}
```