

24. Swap Nodes in Pairs

[link](#)

每一次循环实际上操作三个节点, pre, current, next

```
class Solution {
    public ListNode swapPairs(ListNode head) {
        ListNode start = new ListNode(0, head);
        ListNode previousNode = start;
        ListNode tmp, current;
        while(previousNode.next != null && previousNode.next.next != null){
            current = previousNode.next;
            tmp = current.next ;
            current.next = current.next.next;
            tmp.next = current;
            previousNode.next = tmp;
            previousNode = previousNode.next.next;
        }
        return start.next;
    }
}
```

递归的方法值得学习

```
public class Solution {
    public ListNode swapPairs(ListNode head) {
        if ((head == null) || (head.next == null))
            return head;
        ListNode n = head.next;
        head.next = swapPairs(head.next.next);
        n.next = head;
        return n;
    }
}
```