

# 143. Reorder List

[link](#)

经典快慢指针, 先找到终点, 然后把后面的反转, 最后再把后面的插入前面的.

```
if(head == null ) return;
ListNode fast = head, slow = head, slowNext = null, fastNext = null;
while(fast !=null && fast.next != null){
    slow = slow.next;
    fast = fast.next.next;
}
fast = slow.next;
slow.next = null;
slow = null;
while(fast != null){
    fastNext = fast.next;
    fast.next = slow;
    slow = fast;
    fast = fastNext;
}
fast = slow;
slow = head;
while(fast != null){
    slowNext = slow.next;
    fastNext = fast.next;
    slow.next = fast;
    fast.next = slowNext;
    slow = slowNext;
    fast = fastNext;
}
}
```