剑指offer第15题

```
1  package niuke;
2
3  import java.util.ArrayList;
4  import java.util.Collections;
5  import java.util.List;
6
7  /**
8   * @author tfxidian E-mail: tfxidian@163.com
9   * @version 创建时间：2018年10月11日 下午8:19:19
10  * 类说明
11  */
12 public class ReverseListTest {
13
14     public static class ListNode {
15         int val;
16         ListNode next = null;
17
18         ListNode(int val) {
19             this.val = val;
20         }
21     }
22
23     public static void main(String[] args) {
24         ListNode [] listNode = new ListNode[6];
25         for (int i = 0; i < 6; i++) {
26             listNode[i] = new ListNode(i);
27         }
28         for (int i = 0; i < listNode.length-1; i++) {
29             listNode[i].next = listNode[i+1];
30         }
31
32         System.out.println(listNode[0].next.val);
33         ListNode listNode2 = ReverseList(listNode[0]);
34         System.out.println(listNode2.val);
35
36     }
37
38     public static ListNode ReverseList(ListNode head) {
39         ListNode node = head;
40         List<Integer> aList = new ArrayList<Integer>();
41         while (node!=null) {
42             aList.add(node.val);
```

```java
                node = node.next;
            }
        System.out.println(aList);
        Collections.reverse(aList);
        ListNode[] listNode = new ListNode[aList.size()];
        for (int i = 0; i < aList.size(); i++) {
            listNode[i] = new ListNode(aList.get(i));
        }
        for (int i = 0; i < listNode.length-1; i++) {
            listNode[i].next = listNode[i+1];
        }
        return listNode[0];
    }
}
```