剑指offer第3题

```java
package niuke;
import java.util.ArrayList;
import java.util.List;
/**
* @author tfxidian E-mail: tfxidian@163.com
* @version 创建时间：2018年10月8日 下午8:45:58
* 类说明
*/
public class ReverseArrayList {

    public static class ListNode {
        int val;
        ListNode next = null;

        ListNode(int val) {
            this.val = val;
        }
    }


    public static void main(String[] args) {

        ListNode [] tempNode = new ListNode[5];
        for (int i = 0; i < 5; i++) {
            tempNode[i] = new ListNode(i);
        }

        for (int i = 0; i < 4; i++) {
            tempNode[i].next = tempNode[i+1];
        }
        ListNode node = tempNode[0];
        while (node.next!=null) {
            node = node.next;
        }
        List<Integer> aList = new ArrayList<Integer>();

        aList = printListFromTailToHead(tempNode[0]);
        System.out.println(aList);
    }

    public static ArrayList<Integer> printListFromTailToHead(ListNode
listNode) {
```

```java
        ArrayList <Integer> arrayList = new ArrayList<Integer>();
        ListNode node = listNode;
        while (node!=null) {
            arrayList.add(node.val);
            node = node.next;
        }
        ArrayList<Integer> arr2List = new ArrayList<Integer>();
        System.out.println(arrayList.size());
        for(int i=arrayList.size()-1;i>=0;i--){
            arr2List.add(arrayList.get(i));
        }
        System.out.println(arrayList);
        System.out.println(arr2List);
        return arr2List;

    }

}
```