

剑指offer第16题

```
1 package niuke;
2
3 import java.util.ArrayList;
4 import java.util.Collections;
5 import java.util.List;
6
7
8
9 /**
10 * @author tfxidian E-mail: tfxidian@163.com
11 * @version 创建时间: 2018年10月12日 上午10:51:37
12 * 类说明
13 */
14 public class MergeList {
15
16     public static class ListNode {
17         int val;
18         ListNode next = null;
19
20         ListNode(int val) {
21             this.val = val;
22         }
23     }
24     public static void main(String[] args) {
25         ListNode [] listNode = new ListNode[6];
26         for (int i = 0; i < 6; i++) {
27             listNode[i] = new ListNode(100+i);
28         }
29         for (int i = 0; i < listNode.length-1; i++) {
30             listNode[i].next = listNode[i+1];
31         }
32
33         ListNode [] listNode2 = new ListNode[6];
34         for (int i = 0; i < 6; i++) {
35             listNode2[i] = new ListNode(i+7);
36         }
37         for (int i = 0; i < listNode2.length-1; i++) {
38             listNode2[i].next = listNode2[i+1];
39         }
40
41         ListNode node = Merge(listNode[0], listNode2[0]);
42     }
```

```
43     }
44
45     public static ListNode Merge(ListNode list1,ListNode list2) {
46
47         if (list1 ==null) {
48             return list2;
49         }
50         if (list2 == null) {
51             return list1;
52         }
53         List<Integer> aList = new ArrayList<Integer>();
54         ListNode node = list1;
55
56         while (node!=null) {
57             aList.add(node.val);
58
59             node = node.next;
60         }
61
62         node = list2;
63         while (node!=null) {
64             aList.add(node.val);
65
66             node = node.next;
67         }
68
69         int len = aList.size();
70         Collections.sort(aList);
71         ListNode listNode2[] = new ListNode[len];
72         for (int i = 0; i < len; i++) {
73             listNode2[i] = new ListNode(aList.get(i));
74         }
75         for (int i = 0; i < listNode2.length-1; i++) {
76             listNode2[i].next = listNode2[i+1];
77         }
78
79         node = listNode2[0];
80         while (node!=null) {
81             aList.add(node.val);
82
83             node = node.next;
84         }
85
86         return listNode2[0];
87     }
88
89
90 }
91
92
```

