

```
1 /*
2  Question 6
3  Creator: Wahid Bawa
4  Purpose: To add a reverse method which would reverse the contents of a Linked List
5 */
6 public class LList {
7     private LNode head, tail;
8
9     public LList() {
10         head = null;
11         tail = null;
12     }
13
14     public void add(int val) {
15         LNode tmp = new LNode(val, tail, null);
16         if (tail != null) {
17             tail.setNext(tmp);
18         }
19         if (head == null) {
20             head = tmp;
21         }
22         tail = tmp;
23     }
24
25     public String toString() { // displays the parts of the Linked List
26         String ans = "";
27         LNode tmp = head;
28         while (tmp != null) {
29             ans += tmp.getVal() + (tmp.getNext() == null ? "" : "-");
30             tmp = tmp.getNext();
31         }
32         return ans;
33     }
34
35     public void reverse() { // reverses the order of the nodes
36         LNode tmp, nextTmp;
37         tmp = head;
38         while (tmp != null) {
39             nextTmp = tmp.getNext(); // this is the temp variable for the next node, this is for keeping track of this node after we lose it
40             tmp.setNext(tmp.getPrev());
41             tmp.setPrev(nextTmp);
42             tmp = tmp.getPrev();
43         }
44
45         // switch head and tail
46         tmp = head;
47         head = tail;
48         tail = tmp;
49     }
50 }
```