```
3
2
3
    Output:
4
5
6
    Move sheet from A to C
    Move sheet from A to B
8
    Move sheet from C to B
    Move sheet from A to C
10 Move sheet from B to A
   Move sheet from B to C
11
12 Move sheet from A to C
```

## 18. Use linked list to implement palindrome

Please make a palindrome. (word that reads the same when you reverse it). The input consist of several lines ending with EOF. Each line contains a non-empty string of upper case and lower case English letters ('A'-'Z' and 'a'-'z'). The length of the string is less than or equal to 100,000.

Note: You must use linked lists; otherwise, no points will be given.

## **Test Case**

Please test your program with Input, and then check the answers with Output.

Listing 18: Use linked list to implement palindrome

```
Input:
Aawweeaa
Abba
asdfghj
Output:
aawweeaaeewwaa
abbabba
asdfghjhgfdsa
```

## 19. Palindrome

Given a string with length of n, reverse every M letters in the string using a stack. For example, given a string "cardogbug" and if M = 3, the first three letters are reversed to "rac", the next three letters are reversed to "god", and the last three letters are