

```

1  package Assign_3;
2
3  import BasicIO.*;
4
5  public class TestPalindrome {
6
7      private ASCIIDataFile data;
8      private ASCIIDisplayer out;
9
10     /** The constructor opens the displayer and performs the test of palindrome.*/
11
12     public TestPalindrome ( ) {
13
14         boolean check;
15         String sequence = "";
16         CharacterSequence result; // strings for testing
17
18         data = new ASCIIDataFile();
19         out = new ASCIIDisplayer();
20
21         for (; ;) {
22
23             sequence = sequence + data.readString();
24
25             if (data.isEOF()) break;
26
27         }
28
29         result = new ConCharacterSequence(sequence);
30
31         out.writeString(result.toString());
32         out.newLine();
33
34         result = result.trimAll(); //removes all spaces
35         out.writeString(result.toString());
36         out.newLine();
37
38         result = result.toLowerCase(); //convert to lowercase
39         out.writeString(result.toString());
40         out.newLine();
41
42         check = result.isPalindrome();
43         if (check == true) {
44
45             out.writeBoolean(check);
46             out.newLine();
47             out.writeString("This sequence is a palindrome.");
48         }
49         else {
50
51             out.writeBoolean(check);
52             out.newLine();
53             out.writeString("This sequence is not a palindrome.");
54         }
55
56         data.close();
57         out.close();
58
59     }; // constructor
60
61

```

```
62     public static void main ( String[] args ) { TestPalindrome t = new TestPalindrome(); };
63
64
65 } // TestPalindrome
66 //Xinan Wang No.5535802
```