

```
1 /**
2  * Prints a given string, backward. Then prints the middle character in the string.
3  * The program expects to get one command-line argument: A string.
4  * Use the string functions str.length() and str.charAt( i ) . You can read
5  * about them by consulting the String class API (search the Internet for " java 16
6  * string "). The
7  * program can be implemented using either a for loop that goes backward, or a
8  * while loop that
9  * goes backward. Implement the program using a for loop. Then write a second
10 * implementation
11 */
12 public class Reverse {
13     public static void main (String[] args){
14         String stringToCheck = args[0].toString();
15         String reversedString = "";
16         String middleChar = "";
17
18         for (int i = stringToCheck.length() - 1; i >= 0; i--) {
19             reversedString = reversedString + stringToCheck.charAt(i);
20         }
21
22         if (stringToCheck.length() % 2 == 0) {
23             middleChar = middleChar + stringToCheck.charAt((stringToCheck.length() /
24 2) - 1);
25         } else {
26             middleChar = middleChar + stringToCheck.charAt((stringToCheck.length() /
27 2));
28         }
29
30         System.out.println(reversedString);
31         String message = "The middle character is " + middleChar;
32         System.out.println(message);
33     }
34 }
```