Recitation 7 Practice 1

Follow the directions below.

1. Make a directory named **r7** in your **csci101** directory.
2. In your **csci101/r7** directory, create a program in a file named **Practice1.java** that satisfies the Program Requirements shown below.

Program Requirements

1. Print to the screen the string **Recitation 7 Practice 1.**
2. Print to the screen the string **----------**.

3. Declare a 2-dimensional array named **matrix1** that has 3 rows and 3 columns.
4. Using nested for-loops, print the elements of each row of **matrix1** on a separate line, with spaces between each element.

5. Using nested for-loops, set each element in **matrix1** to -1.
6. Using nested for-each loops, print the elements of each row of **matrix1** on a separate line, with spaces between each element.

7. Populate **matrix1** with values read from the keyboard.
8. Print the contest of **matrix1** to the screen with each row on a separate line.

9. Compute the mean average of the elements in **matrix1** and store the result in a variable named **mean**. Print **Mean:** followed by the value held in the variable named **mean**.

10. Compute the smallest value in **arr1** and store the result in a variable named **smallest**. Print to the screen **Smallest:** followed by the value held in the variable **smallest**.

11. Compute the largest value in **arr1** and store the result in a variable named **largest**. Print to the screen **Largest:** followed by the value held in the variable **largest**.

12. Declare an array named **smallestElements** that can hold 3 integers.
13. Populate **smallestElements** with the smallest values in each row of **matrix1**. (i.e. the first element in **smallestElements** should be the smallest element in the first row of **matrix1**, the second element in **smallestElements** should be the smallest element in the second row of **matrix1**, and third element in **smallestElements** should be the smallest element in the third row of **matrix1**)
14. Print to the screen, on a single line, the contents of **smallestElements**

15. Declare an array named **largestElements** that can hold 3 integers.
16. Populate **largestElements** with the largest values in each row of **matrix1.**
17. Print to the screen, on a single line, the contents of **largestElements**.

18. Declare an array named **meanValues** that can hold 3 integers.
19. Populate **meanValues** with the mean averages of the elements in each row of **matrix1**.
20. Print to the screen, on a single line, the contents of **meanValues**.