CSCI-101 Programming I
Lab 4

Note: As you develop this program, save your file, compile, and test your code frequently..

Change your working directory to your **labs** directory. Inside your **labs** directory create a directory named **lab4**.

In your **lab4** directory create a program in a file named **WhileLoops.java**. Include in the program the statements necessary to achieve the following.

1. Ask the user to enter two integers. Read the integers from the keyboard and store the values in variables named **lowerBound** and **upperBound**.

2. If **lowerBound** is greater than **upperBound**, swap the values in **lowerBound** and **upperBound** using a third variable.

3. Print to the screen **"Bounds: "** followed by the value in **lowerBound** and the value in **upperBound**, separated by a comma.

4. Print to the screen, on a single line, the integers between **lowerBound** and **upperBound** (inclusively).

5. Print to the screen, on a single line, the integers between **lowerBound** and **upperBound** (exclusively).

6. Print to the screen, on a single line, the integers between **lowerBound** and **upperBound** (inclusively) that are even.

7. Print to the screen, on a single line, the integers between **lowerBound** and **upperBound** (inclusively) that are odd.

8. Print to the screen, on a single line, the integers between **lowerBound** and **upperBound** (inclusively) that are divisible by 11.

9. Print to the screen **"Number of integers that are between the bounds: "** followed by the number of integers between **lowerBound** and **upperBound** (inclusively).

10. Print to the screen **"Number of integers that are divisible by 11: "** followed by the number of integers between **lowerBound** and **upperBound** (inclusively) that are divisible by 11.

11. Print to the screen **"Sum of integers that are between the bounds: "** followed by the sum of the integers between **lowerBound** and **upperBound** (inclusively).

12. Print to the screen **"Mean average of integers that are between the bounds: "** followed by the mean average of the integers between **lowerBound** and **upperBound** (inclusively).