

CSCI-101 Programming I

Lab 8

Log into cs.bridgewater.edu. Change your working directory to your **csci101/labs** directory **inside your Github repository**. Make a directory named **lab8** and change your working directory to **lab8**. Create a program in a file named **Lab8.java** in your **lab8** directory. Include in the program the statements necessary to achieve the following.

Declare a Scanner that can be used to read data from the keyboard.

Ask the user to enter 2 positive integers and read them into variables named num1 and num2.

If the value in num1 is less than 0 or greater than 100 then set num1 to the value 0. Print the values of num1 and num2 to the screen.

If the value in num2 is less than the value in num1 swap the values in num1 and num2. Print the values of num1 and num2 to the screen.

Use a for-loop to print to the screen the numbers between num1 and num2.

Print to the screen "is even and negative" if num2 holds a negative value that is even.

Declare a variable named isOdd and use the ?: operator to initialize the variable to true if the value in num1 is odd; otherwise initialize the variable to false.

Print "is odd" if the value of the variable isOdd is true; otherwise print "is even".

Use a while-loop to compute the sum of the values between num1 and num2 (inclusively) and then print "Sum: " followed by the sum of the values between num1 and num2.

Ask the user to enter the names of two colors and read them into variables named color1 and color2.

Print to the screen "colors are equal" if the names of the colors in color1 and color2 are the same; otherwise print "colors not equal".

Create a variable named firstLetter and initialize it to the first character in color1. Print the value in firstLetter to the screen.

Use a switch statement to print to the console "is an A" if the value in firstLetter is an A, print "is a B" if the value in firstLetter is a B, and otherwise print "some other letter".

Use a do-while loop to continuously ask the user to enter an integer. When the user enters 0, exit from the loop. After the program exits the loop, print to the screen "Sum:" followed by the sum of the values entered by the user.

When finished, push your Lab8.java file to GitHub.