CSCI-101 Programming I

Lab 6

Log into cs.bridgewater.edu.

Change your working directory to your **csci101/labs** directory **inside your Github repository.**

Make a directory named **lab6**. Change your working directory to **lab6**.

Create a program in a file named **Lab6.java** in your **lab6** directory. Include in the program the statements necessary to achieve the following.

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

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

3. If **num1** holds a value less then **0** then set **num1** to **0** and if **num2** holds a value less then **0** then set **num2** to **0**.

4. If the value in **num2** is less than the value in **num1**, swap the values in the variables.

5. Print to the screen **"numbers are equal"** if the values in **num1** and **num2** are equal; otherwise print "**not equal**".

6. Print to the screen "**7 or 11**" if **num2** holds the value **7** *or* holds the value **11**.

7. Use a **switch** statement to print to the console **"num1 is one"** if the value in **num1** is **1**, print **"num1 is two"** if the value in **num1** is **2**, and otherwise print **"num1 is other".**

8. Declare a variable named **greaterThan10** and use the **?:** operator to initialize the variable to **true** if the value in **num1** is greater than **10;** otherwise initialize the variable to **false**.

9. Print "**gt 10**" if the value of the variable **greaterThan10** is **true**; otherwise print "**not gt 10**".

10. 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**.

11. Ask the user to enter the names of two cities and read them into variables named **city1** and **city2**.

12. Print to the screen **"cities are equal"** if the names of the cities in **city1** and **city2** are the same; otherwise print **"cities not equal"**.

13. Ask the user to enter their middle initial and read the value into a variable whose type is **char** and whose name is **middleInitial**.

14. Print to the console **"Got an E"** if the value in **middleInitial** is the letter **E;** otherwise print **"Not an E**".

15. 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 user enters **0**, print to the screen **"Odd count: "** followed by the number of values entered by the user that were odd.

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

When finished, push your Lab6.java file to GitHub.