CSCI-101 Programming 1

Week of Sep 11 - Lab 4

INSTRUCTIONS

Log into <u>cs.bridgewater.edu</u> and navigate to your **labs** directory. Make a directory named **lab4** and change your working directory to **lab4**.

Let's Code

Create a class named **Lab4** and include in the class the following:

A method named **increment** that has an integer parameter named **x** and returns one plus the value in **x**.

A method named **average** that has 2 integers as parameters and returns the mean average of the two integers as a decimal number.

A method named **getFirstChar** that has a String parameter and returns the first character in the String.

A method named **sameFirstChars** that has two String parameters and returns **true** if both strings start with the same character; otherwise returns **false**.

A method named main that does the following:

- Asks the user to enter an integer, reads the integer from the keyboard and stores the value in a variable named **input1**.
- Increments the value in **input1** by calling the **increment** method and storing the value returned by the method in **inputPlusOne**.
- Prints to the screen "input plus one: " followed by the value in inputPlus1.
- Asks the user to enter two integers values, reads the values from the keyboard, and stores them in variables named **input2** and **input3**.
- Computes the mean average of the values in **input2** and **input3** by calling the **average** method and storing the result in a variable named **meanAverage**.
- Prints to the screen "mean average: " followed by the value in meanAverage.
- Asks the user to enter a String, reads the String from the keyboard and stores the value in a variable named **input4**.
- Gets the first character in **input4** by calling **getFirstChar** and stores the value returned by the method in a variable named **firstChar**.
- Prints "first character: " followed by the value in the firstChar.
- Asks the user to enter two Strings, reads the values from the keyboard and stores the values in variables named **input5** and **input6**.
- Determines if the Strings in input5 and input6 start with the same character by calling sameFirstChars, and stores the result in a variable named hasSameFirstChars.
- Prints "has same first chars: " followed by the value in hasSameFirstChars.

After you've written the program, compile the program and test it until you are confident that it is correct. If it is not correct, try to debug the code, resave, recompile, and retest.

Once you are confident that the program works properly, use git commands to update your GitHub repository. Confirm your files on GitHub by inspecting the repository on <u>GitHub.com</u>.