

CSCI-101 Programming I

Lab 5

Change your working directory to your **labs** directory. Inside your **labs** directory create a directory named **lab5**.

In your **lab5** directory create a program in a file named **Exam1.java**. Include in the program the statements necessary to achieve the following.

1. Write a statement that creates 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 than **0** then set **num1** to **0** and if **num2** holds a value less than **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 "**one**" if the value in **num1** is **1**, print "**two**" if the value in **num1** is **2**, and otherwise print "**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. 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**.
10. Ask the user to enter the names of two cities and read them into variables named **city1** and **city2**.
11. Print to the screen "**cities are equal**" if the names of the cities in **city1** and **city2** are the same.
12. Ask the user to enter their middle initial and read the value into a variable whose type is **char** and whose name is **middleInitial**.
13. Print to the console "**Got an E**" if the value in **middleInitial** is the letter **E**.
14. Use a **do-while** loop to continuously ask the user to enter an integer, read the value into a variable named **input** and print the value to the console. When the user enters **0**, exit from the loop.