CIT130 – Class 4 - Lab exercise 4 – Chapter 3 – decisions/switch, chapter 4 functions and strings

Date Assigned: 9/19/18

In-class students - Due date: 9/19/18 @ 8:50 PM

Online students - Date Due: 9/19/18 @ 11:59 PM

Total Points: 20

Expected time of completion: Less than 1 hour

Objective: Demonstrate an understanding of using the decision control structure and concepts related to pre-defined functions and Strings.

Assignment: These are 2 unrelated tasks performed in one Java file.

Part 1) Write the code to generate a random number between 5 and 15. Use the **switch** statement to display "OK", if the number is 5 or 6, display "GOOD", if the number is 7, and display "EXCELLENT", for all other cases.

Part 2) Write the code to

- Ask the user for any number and display the rounded number. USE the **round** function. Display the natural logarithm of the number with 5 digits after the decimal point.
- Ask the user for a string. If the input string is entered exactly as "myjava", display an error message and terminate the program. Any other input is considered to be valid.
- If the string input by the user is valid, display the length of the string and the first 3 characters of the string, only if the string has 3 characters or more. Otherwise, display an error message and terminate the program.
- If the string input by the user is valid, display the string in upper case, lower case, and display the first and the last character of the string.

Assignment details:

Write the code for the following exercises in one Java file. Save your file with the format: **firstnameLastnamecit130_lab04.java. Make sure to use the documentation style covered in the Guideline file posted in Canvas.**

Part 1) SAMPLE RUN:

Your generated random number is 7.

Good

Part 2) SAMPLE RUN:

Enter any number: 120.88679

Your rounded number is: 121

The natural logarithm of the number is: 4.79480

Enter a String: myjava

Program terminating!

Enter a String: Hello There

Length of the string: 11

The first 3 characters of the string is: hel

Upper case: HELLO WORLD

Lower case; hello world

First character: H

Last character: e

Enter a String: Hi

Program terminating!