**FOP 1 – Lab 3 Worksheet**

1. Do the exercises from the lecture notes (at home).
2. Write a program that converts weight given in pounds to weight given kilograms; your program must use user input. (Conversion formula: weight\_in\_kg = 2.2 \* weight\_in\_pounds). Use the problem-solving approach.
3. Write a program that allows a user to input the daily pay rate of an employee and the number of days worked, then it calculates the employee’s gross pay for the week. The output should be formatted with only 1 decimal place for floats. For instance:

**Enter daily pay rate: 123.45**

**Enter days worked: 3**

**Pay Rate: 123.4**

**Days Worked: 3**

**Gross pay for the week: 370.3**

Use the problem-solving approach.

1. Write a program that prompts the user to take 2 inputs and then output whether it is true or false that the first input comes before the second input in lexicographical order; it also should output whether it is true or false that the first input contains more characters than the second input.
2. Write a program that prompts the user to take 3 integers and then outputs whether it is true or false that each integer is between 1 and 10.
3. Write a program that prompts the user to take 3 floats and then outputs whether it is true or false that each float is outside the interval [1.1, 10.5] using equivalent expressions.
4. CHALLENGE: Write a program that gets user input for 3 countries and their respective populations, then it should calculate the average population. The program output should look like the one below:

**Enter first country: Ireland**

**Enter population for Ireland: 5000000**

**Enter second country: Iceland**

**Enter population for Iceland: 70000**

**Enter third country: France**

**Enter population for France: 20000000**

**---------------Average: 8356666.67----------------**

NOTE: the average should display only two digits after the decimal point and both the text and the number should be in the center of a field of 50 characters, with dashes as filling characters on each side. Use the problem-solving approach.