# **CS 115 - Introduction to Programming in Python**

# **Lab 02**

**Lab Objectives:** Conditional Statements, Loops – for and while, Strings

1. Write a program, Lab02\_Q1.py that inputs 3 integer values and calculates and displays their product according to a rule: If one of the values is negative or 0, then it does not count towards the product. The program will stop if all a, b and c are negative.

**Sample Run: (User inputs are red)**

Enter first number: 8

Enter second number: 3

Enter third number: 4

Product of a,b,c: 96

Enter first number: 5

Enter second number: -3

Enter third number: -2

Product of a,b,c: 5

Enter first number: -3

Enter second number: -5

Enter third number: -2

1. Write a Python script, Lab02\_Q2.py that does the following:

Use a **for** loop that computes the **sum** of all even numbers from a to b (both inclusive) and prints this sum. If a is **not** less than b, the program will output a message.

(Example: if a=25, n2=82, then it will find 26+ 28 + 30 .... + 80 + 82)

**Sample Run:**

Enter a: 3

Enter b: 20

Sum = 108

**Sample Run:**

Enter a: 32

Enter b: 2

32 is not < 2

1. Write a program, Lab02\_Q3.py, that inputs a set of characters from the user and forms a string by concatenating only the digits in reverse order. The user will continue inputting until ‘\*’ is entered.

**Hint:** You can invoke the isdigit() function on a character, and it will return True if the string is a digit, False if not. ‘5’.isdigit() -> True.

**Sample Run:**

Enter a character:c

Enter a character:b (space character)

Enter a character:5

Enter a character:1

Enter a character:s

Enter a character:1

Enter a character:.

Enter a character:\*

Formed String = "115"