CSCI 256 – Programming in Python **Fall 2022**
Program 2

Programming Activity

Write a program that reads the lengths of the three sides of a triangle in inches, convert them into cm and calculates the area of the triangle. Check the sample output below.

Recall that the conversion from inches to cm: $\mathbf{1\ inch = 2.54\ cm}$
You will use the following formula to calculate the area of a triangle given the lengths of its sides:

$$\text{area} = \sqrt{s(s-x)(s-y)(s-z)}$$

where x, y and z denote the sides of the triangle, and s is calculated as **s = (½)(x + y + z)**
For this assignment, we will assume that all entries for x, y, and z produce a valid triangle.

You can name your program **triangleYourLastName.py**

```
# prompt for inputs


# calculate area


# display the output (output 2 decimal places)
```

Sample Output

```
Enter side x in inches: 4
Enter side y in inches: 5
Enter side z in inches: 6

For a triangle of sides 10.16 cm, 12.70 cm, and 15.24 cm
Area = 64.01 square cm
```

Include header comments (i.e., **at the beginning of your file**) formatted as shown below. Your electronic submission of the program file will represent your endorsement of the Honor Code Statement.

```
# Course: CSCI 256, Section 1
# Student Name: Jane Doe
# Student ID: 12345678
# Program 2
# Due Date:

# In keeping with the Honor Code of UM, I have neither given nor
# received assistance from anyone other than the TA or the instructor.

# Program Description:
```

Notice: You need to submit **your program** in Blackboard. Click on **Program 2** link in Bb, click **Browse My Computer**, attach the program, and click **Submit**.