# Fundamentals of Computer Programming
# CSE 114
# Assignment 1

Write a C program that finds areas of squares and rectangles and volumes of spheres and cylinders. Your program should follow the following instructions:

1) Ask the user the length of a square's edge and print its area. ($a^2$)

2) Ask user the length of a rectangle's two edges and print its area. (ab)

3) Ask user the radius of a sphere and print its volume. ($4\pi r^3/3$)

4) Ask user the radius and height of a cylinder and print its area. ($\pi r^2 h$)

5) Calculate the mean average and standard deviation of all the values entered by the user and print them. (You can find out about mean average and standard deviation at https://en.wikipedia.org/wiki/Standard_deviation)

**WARNING:** Defining functions for each task is mandatory! If you do not have functions for the tasks you will not get a grade. You can use *math.h* for square root of a value and $\pi$ =3.1415.

**Example:**

Enter the length of your square's edge: 5
Area of the square: 25
Enter the lengths of your rectangles edges: 5 4
Area of the rectangle: 20
Enter radius of your sphere: 2
Volume of the sphere: 33.509
Enter radius and height of your cylinder: 2 4
Volume of the cylinder: 50.264
Average of the values entered: 3.666
Standard deviation of the values entered: 1.366