CS 2073
Computer Programming with Engineering Applications
Assignment 1
Due Monday September 24

1. (100 pts) Write a program that computes and prints the area and volume of a sphere given its radius. The area of a sphere can be computed using the following equation

$$Area = 4\pi r^2$$

The volume of a sphere can be computed using the following equation

$$Volume = \frac{4}{3}\pi r^3$$

(a) Name your file assign1.c

(b) Pay attention to the division $\frac{4}{3}$ we want 1.333 not 1.

(c) Use *float* for type of radius.

(d) Use 3.141593 for the value of π.

(e) Test your program with the following cases.

```
Enter radius:
2
Area =   50.265
Volume =   33.510

Enter radius:
2.5
Area =   78.540
Volume =   65.450
```

Submit your program electronically using the blackboard system

The program you submit should be your own work. Cheating will be reported to office of academic integrity. Both the copier and copiee will be held responsible.