Computer Programming Lab (CSE104L)
Lab 4

Q1. You have three ropes each being 10m long. You use the ropes to make a circle, a regular hexagon and an equilateral triangle. Write a program in C to determine the area of each of these figures.

Q2. The perimeter of a circle, square and an equilateral triangle is the same and is taken from the keyboard. Write a program in C to calculate the area of these three.

Q3. Write a C program to input sides of a triangle and check whether triangle is valid or not.

Q4. Write a C program to find all roots of a quadratic equation. Read values of a, b and c from the keyboard and then print roots.

Q5. Write a C program to input electricity unit charge and calculate the total electricity bill according to the given condition:
For first 50 units Rs. 0.50/unit
For next 100 units Rs. 0.75/unit
For next 100 units Rs. 1.20/unit
For unit above 250 Rs. 1.50/unit
An additional surcharge of 20% is added to the bill.

Q6. A 30 kg boulder was initially moving at a velocity of 10 m/s, in order to stop it 10 N of constant retarding force is applied on it. After how long will the boulder stop?

Write the following programs in C using Conditional Operator and conditional statement both

Q7. Take two numbers as user input and print the maximum number.

Q8. Take any number as user input and print whether it is an even number or odd.

Q9. Read three numbers from the keyboard. Find the maximum and second maximum of these numbers.