NIT-J CSED

Computer Programming Assignment

Topic 1: Basics

1. WAP(Write A Program) to print 'See C is Sea' five times on the console.
2. WAP that will print your mailing address in the following format

   First line: <Your Name>

   Roll No.: <109389>

   Branch: <ECE>
3. WAP which will accept an integer, a decimal number, a character and a string from the keyboard and display them one per line.
4. WAP which will accept two integers (a and b) from the input device and display the results of their sum, difference, product, division and mod on the console by assuming a simple arithmetic calculator.
5. Relationship between Celsius (C) and Fahrenheit (F) is governed by the following formula

   F = 9C/5 + 32 WAP to convert the Celsius to Fahrenheit and vice versa.
6. WAP to compute the gross salary of an employee whose details are given below: Basic pay: Rs.50, 000, dearness allowance: 50% of Basic pay, house rent allowance: 20% of Basic pay, vehicle allowance: 10% of the Basic pay.
7. WAP which will print the '$' symbol in the following format. (Hint: No need to use any loops)

   $

   $ $

   $ $ $

   $ $ $ $

   $ $ $ $ $
8. WAP to swap two numbers using and without using a third variable.
9. WAP which will accept a three digits integer number and display the sum and product of all the digits of that number. (Hint: Use / and % operators)
10. WAP to find the size of various primitive data types used in C such as *int*, *float, double and char*.

Home Assignment ("Optional" for more practice)

"Practice makes the master."

1. The line joining the points (2, 2) and (5, 6) which lie on the circumference of a circle is the diameter of the circle. WAP to compute the area and perimeter of the circle.

2. The price of one pen is Rs.10, one pencil is Rs. 5, and one sharpener is Rs. 2. You purchased 2 pens, 3 pencils and 1 sharpener. Compute the total price as per the following format.

   ****** LIST OF ITEMS ******

Item	Price (Rs.)	Total (Rs.)
Pen	10	20
Pencil	5	15
Sharpener	2	2
Grand Total (Rs.)	17	37

3. WAP which will accept two floating point numbers, assign their sum to an integer variable and then output the values of all three variables.
4. Extend the Q8 for three variables *a*, *b*, and *c* such that *a* holds the value of *c*, *b* holds the value of *a,* and *c* holds the value of *b* using and without using a third variable.
5. Area (A) of a triangle is given by the formula A= $\sqrt{s(s-a)(s-b)(s-c)}$ Where a, b and c are sides of the triangle and 2s = a + b + c.
   WAP to compute the area of the triangle given the values of a, b and c (Take value of a,b,c input from the user).