Experiment 1

Aim: Use the formatted input/output statements, operators and expressions of C language

Common Programs (all batches):

a) Write a C program intrst.c that calculates the total interest income on amount Rupees 5 lakhs in a period of 10 years. Show the results for simple interest, compounded interest when the compounding is done annually,semi-annually, quarterly, monthly and daily. Assume that the interest rate is 3.5% per year.
Expected output:
Simple interest on Rs. 500000.00 in 10 years = Rs. 175000.00
Interest on Rs. 500000.00 in 10 years compounded annually = Rs. 205299.38
Interest on Rs. 500000.00 in 10 years compounded semi-annually = Rs. 207389.10
Interest on Rs. 500000.00 in 10 years compounded quarterly = Rs. 208454.42
Interest on Rs. 500000.00 in 10 years compounded monthly = Rs. 209172.41
Interest on Rs. 500000.00 in 10 years compounded daily = Rs. 209521.87

b) Write a C program to input 2 numbers. Perform addition, subtraction, multiplication, division and modulus and display output.

c) Write a C program temp.c that accepts a temperature in Fahrenheit and prints the corresponding temperature in Celsius.
Test data and expected output:
        Enter temp in Farenheit:98.4
        Temp 98.40 in Farenheit = 36.89 Centigrade
d) Write a C program to convert days into year, month and days.

Batchwise Programs

Batch 1: Write a C program to compute a product cost. The program should print the computed cost and the delivery date of the product.

Batch 2: Determine how much money is in the piggy bank that contains several 50, 25, 20, 10 and 5 paise coins. Use the following value to test the program : five 50 paise coins, three 25 paise coins, two 20 paise coins, one 10 paise coin and fifteen 5 paise coins.

Batch 3: Write a C program to find the third angle of a triangle if two angles are given.

Batch 4: Write a program in C that takes minutes as input, and display the total number of hours and minutes.