LAB 1(Expression Evaluation)

1.   Write a C program 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

2.   Write a C program that accepts a distance in inches and prints the corresponding value in cms. Note that 1 inch = 2.54 cm.

Test data and expected output:
Enter the distance in inches:3
Distance 3.00 inches is = 7.62 cms

3.   Write a C program that reads two values from the keyboard, swaps their values and prints out the result.

Test data and expected output:
Enter two values to be swapped:2 5
Values entered are a=2 and b=5
 Values after swap are a=5 and b=2

4.   Write a C program to find the sum of individual digits of a 3 digit number.

Expected output:
 Enter a three digit number : 3467
Invalid number
Enter a 3 digit number : 346
Sum of individual digits of the number 346 is : 13

5. Write a C program that accepts a temperature in Fahrenheit and prints the corresponding temperature in Celsius. C/5 = (F −32)/9

Test data and expected output:
Enter temp in Farenheit:98.4
Temp 98.40 in Farenheit = 36.89 Centigrade

6. Write a C program to print ASCII value of a character.

Test data and expected output :
Enter a character : a
ASCII value of a is :65