

## PG - DAC Sept 2023 Logical Building & Problem Solving Assignment - 3 (Date:12/09/2023)

1. Write a program that converts Centigrade to Fahrenheit.

Expected Output:

Input a temperature (in Centigrade): 45

113.000000 degrees Fahrenheit.

2. Write a C program that calculates the volume of a sphere.

**Expected Output:** 

Input the radius of the sphere: 2.56

The volume of sphere is 70.276237.

3. Write a C program that prints the perimeter of a rectangle using its height and width as inputs.

**Expected Output:** 

Input the height of the Rectangle: 5

Input the width of the Rectangle: 7

Perimeter of the Rectangle is: 24.000000

4. Write a C program that converts kilometers per hour to miles per hour.

**Expected Output:** 

Input kilometers per hour: 15

9.320568 miles per hour

5. Write a C program that takes hours and minutes as input, and calculates the total number of minutes.

**Expected Output:** 

Input hours: 5Input minutes: 37

Total: 337 minutes.

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

Expected Output: Input minutes: 546 9 Hours, 6 Minutes

7. Write a program in C that reads a forename, surname and year of birth and displays the names and the year one after another sequentially.

**Expected Output:** 

Input your firstname: Tom Input your lastname: Davis Input your year of birth: 1982

Tom Davis 1982

8. Write a program in C to calculate the sum of three numbers with input on one line separated by a comma.

**Expected Output:** 

Input three numbers separated by comma: 5,10,15

The sum of three numbers: 30

9. Write a C program to perform addition, subtraction, multiplication and division of two numbers.

Expected Output:

Input any two numbers separated by comma: 10,5

The sum of the given numbers: 15

The difference of the given numbers: 5

The product of the given numbers: 50

The quotient of the given numbers : 2.000000

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

**Expected Output:** 

Input two angles of triangle separated by comma: 50,70

Third angle of the triangle: 60