

## C PROGRAMMING ASSIGNMENT 02.00

### Problem 1: Convert Centigrade to Fahrenheit

#### Description:

Write a C program that converts a temperature from Centigrade to Fahrenheit. The program should take the temperature in Centigrade as input and print the corresponding temperature in Fahrenheit.

#### Hint:

Use the following formula to convert Centigrade to Fahrenheit:

$$\text{Fahrenheit} = (9 \times \text{Centigrade}) / 5 + 32$$

#### Example:

Input: 45

Output: 113.000000 degrees Fahrenheit.

### Problem 2: Calculate the Volume of a Sphere

#### Description:

Write a C program that takes the radius of a sphere as input and calculates its volume. The program should print the calculated volume.

#### Hint:

Use the following formula to calculate the volume of a sphere:

$$\text{Volume} = (4 \times \pi \times \text{radius} \times \text{radius} \times \text{radius}) / 3$$

You can use the value of  $\pi$  as 3.14159.

#### Example:

Input: 2.56

Output: The volume of sphere is 70.276237.

### Problem 3: Convert Hours and Minutes to Total Minutes

#### Description:

Write a C program that takes hours and minutes as input and calculates the total number of minutes. The program should then print the total number of minutes.

#### Hint:

To calculate the total minutes, multiply the number of hours by 60 and then add the minutes.

#### Example:

Input:

Hours: 5

Minutes: 37

Output: Total: 337 minutes.

### Problem 4: Convert Minutes to Hours and Minutes

#### Description:

Write a C program that takes a total number of minutes as input and converts it into hours and minutes. The program should print the number of hours and remaining minutes.

#### Hint:

To get the number of hours, divide the total minutes by 60. To get the remaining minutes, take the modulus of the total minutes by 60.

#### Example:

Input: 546

Output: 9 Hours, 6 Minutes

### Problem 5: Calculate the Sum of Three Numbers

#### Description:

Write a C program that takes three numbers as input on one line separated by commas, and calculates their sum. The program should then print the sum.

#### Hint:

Use the `scanf` function to read three numbers separated by commas. Then, sum the numbers and print the result.

#### Example:

Input: 5,10,15

Output: The sum of three numbers: 30