

Lab Task 03

1. Write a program using a function that calculates the BMI (Body Mass Index) and print the accurate result on screen up to 3 decimal places. Note: Use the formula kg/m^2 . Note that your function should accept two arguments, the height in meters, and the weight in kg. Calculate the BMI and return the result back to main. From the main you should print the BMI value on screen. Here keep in mind the precedence of operators!

Sample Output:

Enter height in meters: 0.8

Enter weight in kilograms: 40

BMI: 62.500

2. Write a program using a function that converts seconds into hours, minutes, and seconds. Here, the function should not accept any argument, neither return anything. Print the result within the function. Output should be in HH:MM:SS format. Use an online converter to check your program's output with the actual result. Google or ask ChatGPT **ONLY** for the part that how can you add a 0 in the start if the number if it's a single digit. And avoid it if the number is of 2 digits. Like below output.

Sample Output:

Enter the total number of seconds: 5000

01:23:20

3. Write a program that converts Celsius to Fahrenheit through a function. Your function should accept one argument i-e temperature in Celsius, and prints the results within the function. Formula: $F = (9/5)C + 32$

Sample Output:

Enter temperature in Celsius: 32

32.00 degrees Celsius is equal to 89.60 degrees Fahrenheit

4. Pizza Pi Palace needs a program to calculate the number of slices a pizza of any size can be divided into. The program should perform the following steps:

- A) Input the diameter of the pizza in inches (in the function).
- B) Calculate the number of slices that may be taken from a pizza of that size (task should be performed using a function that does not accept any argument but returns the no of slices). Each slice should have an area of 14.125 inches. Store this 14.125 into a const global variable.
- C) Display a message telling the number of slices (in main).

Sample Output:

Enter the diameter of the pizza in inches: 8

The pizza with a diameter of 8 inches can be divided into 3 slices.