C++ Basic Programming Exercises

# Instruction:

Do all 5 exercises in different .cpp files. Push all .cpp file in the GitHub class repository (<https://github.com/Dr-Khatib/SCSE1013-FCP-24251/>). Create a folder name as LabExer1 in your own folder and place all 5 exercises .cpp files in there. (Example : SCSE1013-FCP-24251/StudentFiles/Khatib/LabExer1/Exercise1.cpp). Submit by today before 11.59pm.

# Exercise 1: Enhanced Input and Output

Question:  
Write a C++ program that asks the user to enter their full name (with spaces) and their birth year. Calculate their age based on the current year (assume 2024).

## Sample Terminal Output:

Enter your full name: Alice Johnson  
Enter your birth year: 2002  
Hello, Alice Johnson! You are 22 years old.

# Exercise 2: Enhanced Arithmetic Operations

Question:  
Write a C++ program that takes two floating-point numbers and performs arithmetic operations. Format the output to show 2 decimal places.

## Sample Terminal Output:

Enter two numbers: 12.345 3.789  
Sum: 16.13  
Difference: 8.56  
Product: 46.79  
Quotient: 3.26

# Exercise 3: Enhanced Conditional Check (if-else)

Question:  
Write a C++ program that checks whether a given integer is positive, negative, or zero.

## Sample Terminal Output:

Enter an integer: -5  
-5 is negative.

# Exercise 4: Largest of Three Numbers (With Equality Check)

Question:  
Write a C++ program that asks the user to input three numbers and determines if the first number is the largest or if there is a tie for the largest number.

## Sample Terminal Output:

Enter three numbers: 10 10 5  
10 is the largest (or tied for largest).

# Exercise 5: Extended Switch Statement

Question:  
Write a C++ program that takes a number between 1 to 5 from the user and prints a message based on the input. If the input is out of range, print an error message.

## Sample Terminal Output:

Enter a number (1-5): 4  
You chose 4 - Almost there!