**OBJECT-ORIENTED PROGRAMMING**

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| Lab 2 | |
| **Topic** | Functions, implementation in separate files |
| **Objective** | To practice creating a C++ program with separate implementation files for functions and the main program. |

## Task 1:

You have already created a simple calculator using separate implementation files for functions and the main program. Now divide the same program into 3 files, one for function declaration, one for function implementation, and one for the main function.

Three files are

**calculator.h:** Declare functions for addition, subtraction, multiplication, division, square, cube, and the square root and any other necessary functions here.

**calculator.cpp:** Implementing the functions declared in **calculator.h**.

**main.cpp:** Displays a menu for the user to choose an operation and input numbers. It should use the functions defined in **calculator.cpp** to perform the operations.

## Task 2:

Build a C++ program that reads data from a text file and calculates the sum, and average of the numbers, sorts the numbers, counts the number of digits in it, and prints sorted numbers in the file. Create separate implementation and declaration files and a main file that will Display a menu for the user to choose an operation and perform the desired operations.

## Task 3:

Develop a basic text editor program in C++. Use separate files for declaring and implementing text editing functions, such as adding text, deleting text, and displaying the text. The main program should allow users to perform these operations on a text document.

## Task 4:

Create a quiz game where questions and answers are stored in separate text files. Design the program with separate files for reading questions, presenting them to the user, and checking answers.