Lab 4: Combining 1D and 2D Arrays for Matrix Row Operations

Instructions:

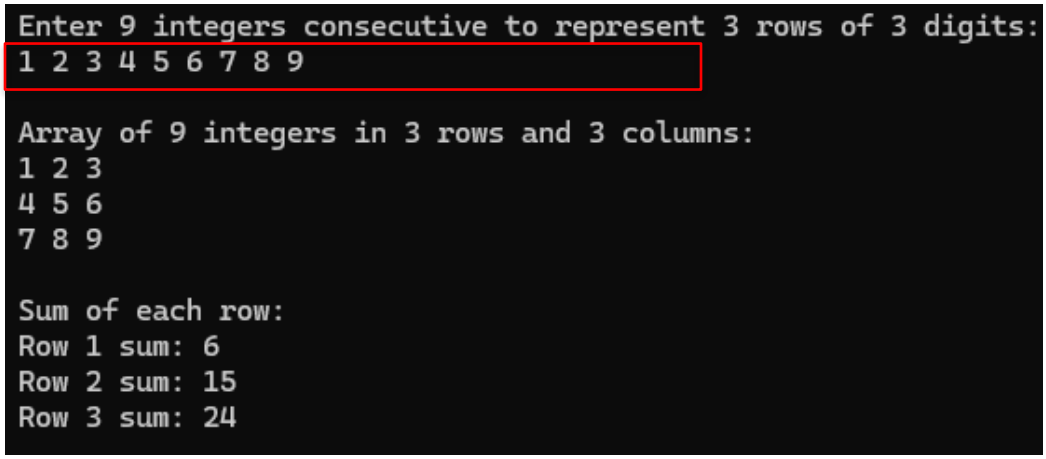
In this lab, you will work with both 1-dimensional and 2-dimensional arrays. You will use a 1D array to store the sum of elements from each row of a 2D array. This lab demonstrates how 1D and 2D arrays can be used together to manipulate and store related data. File should be named (**Lab4.c**)

Goals and Objective:

By the end of this lab, you should be able to:

1. Declare and initialize both 1-dimensional and 2-dimensional arrays.
2. Use nested loops to traverse a 2D array (with rows and columns) and calculate the sum of each row.
3. Store the sum of each row in a 1D array and display the results.

Sample Output:



Grading Criteria:

1. Program executes and achieves desired output: 100 points
    a. The program correctly reads, processes, and calculates the sum of each row, storing it in the 1D array.
2. Calculation errors: -5 points each
    a. Deduct points for incorrect row sum calculations or matrix input handling.
3. Compilation errors: -10 to -20 points (based on severity)
    a. Minor errors: -10 points.
    b. Major errors that prevent the program from compiling: -20 points.
4. Lack of indentation or poor formatting: -5 points
    a. Deduct points for poor code formatting or missing comments.
5. Incorrect array usage: -10 points
    a. Deduct points if the array is not properly declared or used in the program.