

### Question:

Write a C program to manage student scores for three subjects by accepting the student's name and their scores, calculating the average score, and determining whether the student has passed or failed (with a passing average defined as 50 or above). The program should allow input for up to five students, store each student's name along with their pass/fail result in a CSV file named `student_results.csv`, and print the results to the console. Utilize loops for repeated data entry, conditional statements to evaluate pass/fail status, and user-defined functions to handle calculations and file writing.

### Declarations:

A constant size is defined to represent the maximum number of students (5 in this case).

A user-defined function `csv_result` is declared to handle writing the results to a CSV file.

### Main Function:

**Variable Initialization:** Several variables are declared, including arrays for storing student names, their scores, and the results (pass/fail).

**Input Loop:** A for loop iterates through each student, prompting the user to input their name and scores for three subjects. After gathering the input, the program calculates the average score.

**Pass/Fail Evaluation:** An if statement checks if the average score is greater than or equal to 50. Based on this condition, it determines if the student has passed or failed and stores the result in the corresponding array.

**CSV Output:** After collecting all student data, the `csv_result` function is called to write each student's name and result (pass/fail) to a CSV file named `student_results.csv`.

### CSV Writing Function:

The `csv_result` function takes the file name and arrays containing names and results. It opens the file, iterates through the students, and writes each name along with their pass/fail status to the file, ensuring proper formatting with commas.

### Execution:

The program runs until all students have been processed, and it closes the file after writing the results. The program provides feedback on the console for each student's results.