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#include <stdio.h>
#include <string.h>

// Define structure for student
struct Student {
    char name[50];
    int rollNumber;
    int marks[3]; // marks for three subjects
    int totalMarks;
    float averageMarks;
    char result[10]; // to store pass or fail
};

// Function to calculate total marks and average marks
void calculateMarks(struct Student *student);

// Function to determine pass or fail
void determineResult(struct Student *student);

int main() {
    struct Student student;

    // Input details of the student
    printf("Enter name of the student: ");
    scanf("%[^\n]*c", student.name); // %[^\n]*c to read spaces in name

    printf("Enter roll number of the student: ");
    scanf("%d", &student.rollNumber);

    // Input marks for three subjects
    printf("Enter marks for three subjects:\n");
    for (int i = 0; i < 3; ++i) {
        printf("Subject %d: ", i + 1);
        scanf("%d", &student.marks[i]);
    }

    // Function call to Calculate total marks and average marks
    calculateMarks(&student);

    // Function call to Determine pass or fail
    determineResult(&student);

    // Display the marksheet
    printf("\n\n----- Student Marksheet ----- \n\n");
    printf("Name: %s\n", student.name);
    printf("Roll Number: %d\n", student.rollNumber);
    printf("Marks:\n");
    for (int i = 0; i < 3; ++i) {
        printf(" Subject %d: %d\n", i + 1, student.marks[i]);
    }
    printf("Total Marks: %d\n", student.totalMarks);
    printf("Average Marks: %.2f\n", student.averageMarks);
    printf("Result: %s\n", student.result);

    return 0;
}

// Function to calculate total marks and average marks
void calculateMarks(struct Student *student) {
    student->totalMarks = 0;

    for (int i = 0; i < 3; ++i) {
        student->totalMarks += student->marks[i];
    }

    student->averageMarks = (float)student->totalMarks / 3.0;
}

// Function to determine pass or fail
void determineResult(struct Student *student) {
    int passMarks = 35; // Assuming pass marks for each subject

    for (int i = 0; i < 3; ++i) {
        if (student->marks[i] < passMarks) {
            strcpy(student->result, "Fail");
            return;
        }
    }

    strcpy(student->result, "Pass");
}

```