# Assignment 1: Student Records System

#include <stdio.h>  
  
struct Student {  
 int id;  
 char name[50];  
 int marks[5];  
 float average;  
};  
  
void inputStudents(struct Student s[], int n) {  
 for (int i = 0; i < n; i++) {  
 printf("\nEnter details for Student %d:\n", i + 1);  
 printf("ID: ");  
 scanf("%d", &s[i].id);  
 printf("Name: ");  
 scanf(" %[^  
]", s[i].name);  
 printf("Enter 5 marks: ");  
 for (int j = 0; j < 5; j++) {  
 scanf("%d", &s[i].marks[j]);  
 }  
 }  
}  
  
void calculateAverage(struct Student \*s) {  
 int sum = 0;  
 for (int i = 0; i < 5; i++) {  
 sum += s->marks[i];  
 }  
 s->average = sum / 5.0;  
}  
  
void displayTopper(struct Student s[], int n) {  
 int topperIndex = 0;  
 for (int i = 1; i < n; i++) {  
 if (s[i].average > s[topperIndex].average) {  
 topperIndex = i;  
 }  
 }  
 printf("\nTopper Details:\n");  
 printf("ID: %d\nName: %s\nAverage: %.2f\n", s[topperIndex].id, s[topperIndex].name, s[topperIndex].average);  
}  
  
int main() {  
 int n = 5;  
 struct Student students[n];  
  
 inputStudents(students, n);  
 for (int i = 0; i < n; i++) {  
 calculateAverage(&students[i]);  
 }  
 displayTopper(students, n);  
  
 return 0;  
}