**Assignment 1:**

#include <stdio.h>

#include <string.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(" %[^\n]", 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 total = 0;

for(int i = 0; i < 5; i++) {

total += s->marks[i];

}

s->average = total / 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\n", s[topperIndex].id);

printf("Name: %s\n", s[topperIndex].name);

printf("Marks: ");

for(int i = 0; i < 5; i++) {

printf("%d ", s[topperIndex].marks[i]);

}

printf("\nAverage: %.2f\n", 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;

}