ASSIGNMENT NO: 11

NAME: SYEDA FAIZA ASLAM

ROLL NO: CT-064

SECTION: B

COURSE: CODE IN PLACE

TASKS:

Task 1: Employee Record

Question:

Write a C program using structures to store and display information of 3 employees.

Each employee has:

Employee ID

Name

Salary

Requirements:

1.Define a structure named Employee.

2.Take input for 3 employees.

3.Display their details in a neat format.

Hint:

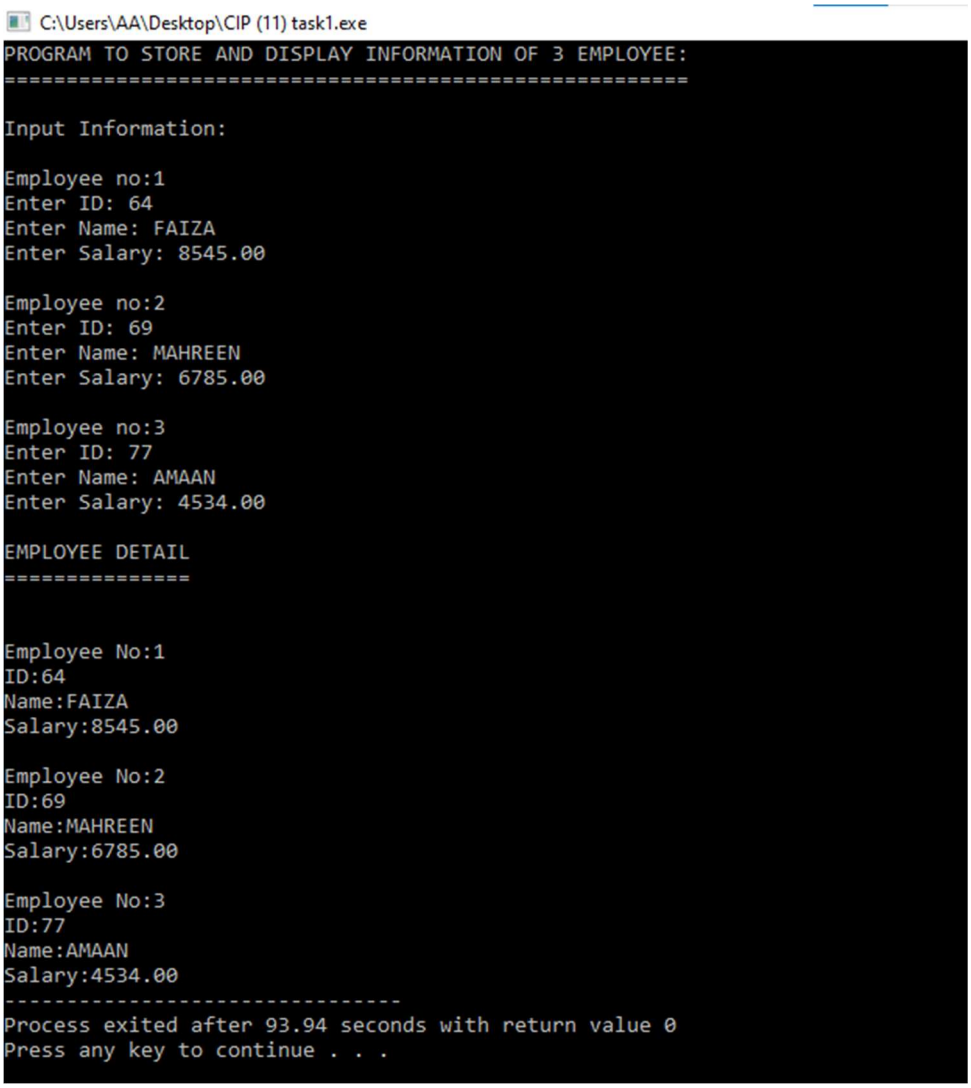
Use an array of structures.

SOURCECODE:

```
#include<stdio.h>
struct Employee
{
int id;
char name[50];
float salary;
};
int main(void)
{
struct Employee e[3];
int i;
printf("PROGRAM TO STORE AND DISPLAY INFORMATION OF 3 EMPLOYEE:\n");
printf("=====================================================\n\n");
printf("Input Information:\n");
for(i=0; i<3; i++)
{
printf("\nEmployee no:%d\n",i+1);
printf("Enter ID: ");
scanf("%d",&e[i].id);
printf("Enter Name: ");
scanf("%s",&e[i].name);
printf("Enter Salary: ");
scanf("%f",&e[i].salary);
}
printf("\nEMPLOYEE DETAIL\n");
printf("===============\n");
for(i=0; i<3; i++)
{
printf("\n\nEmployee No:%d",i+1);
printf("\nID:%d",e[i].id);
printf("\nName:%s",e[i].name);
```

```
printf("\nSalary:%.2f",e[i].salary);
}
return 0;
}
```

OUTPUT:



Task 2: Student Marks and Average

Question:

Create a structure called Student to store:

Student name

Roll number

Marks in 3 subjects

Requirements:

Input data for 5 students.

Calculate and display the average marks for each student.

Bonus Challenge:

Display the name of the student with the highest average marks.

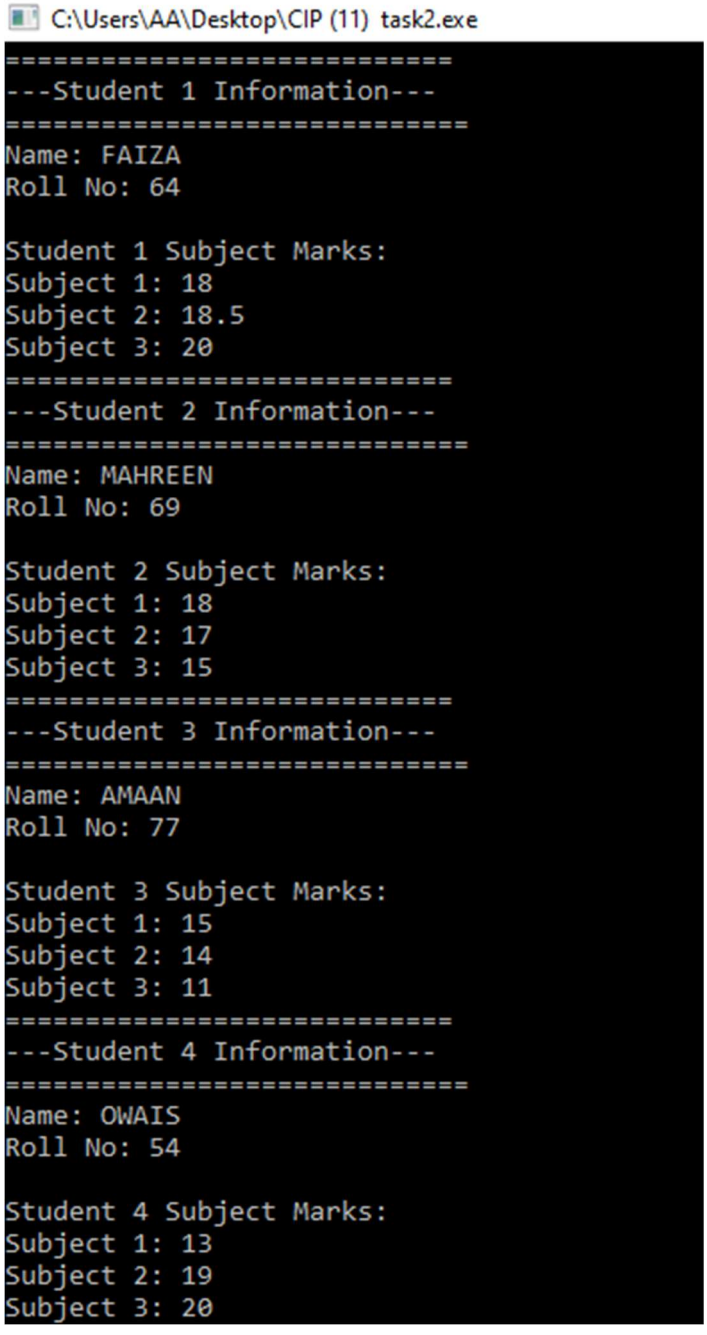
SOURCECODE:

```
#include <stdio.h>
struct Student
{
char name[50];
int roll_no;
float marks[3];
float avg;
};
int main(void)
{
struct Student s[5];
int i,j, highestStudentIndex=0;
float highestAvg=0.0, total;
for(i=0; i<5; i++)
{
	printf("============================\n");
	printf("---Student %d Information---\n",i+1);
	printf("============================\n");
	printf("Name: ");
	scanf("%s",&s[i].name);
	printf("Roll No: ");
	scanf("%d",&s[i].roll_no);
	printf("\nStudent %d Subject Marks:\n",i+1);
	total=0.0;
	for(j=0; j<3; j++)
	{
		printf("Subject %d: ",j+1);
		scanf("%f",&s[i].marks[j]);
		total+=s[i].marks[j];
	}
	s[i].avg=total/3.0;
```

```
        if(s[i].avg>highestAvg)
        {
                highestAvg=s[i].avg;
                highestStudentIndex=i;
        }
}
printf("\nAVERAGE MARKS OF EACH STUDENTS:\n");
printf("================================\n");
for(i=0; i<5; i++)
{
        printf("\nSTUDENT %d:\n",i+1);
        printf("NAME:%s\n",s[i].name);
        printf("ROLL NO:%d\n",s[i].roll_no);
        printf("AVERAGE:%.2f\n",s[i].avg);
}
printf("\n\nHIGHEST AVEARGE OF STUDENT:\n\n");
printf("NAME:%s\n",s[highestStudentIndex].name);
printf("ROLL NO:%d\n",s[highestStudentIndex].roll_no);
printf("AVERAGE:%.2f\n",s[highestStudentIndex].avg);

return 0;
}
```

OUTPUT:


C:\Users\AA\Desktop\CIP (11) task2.exe
==========
---Student 1 Information---
==========
Name: FAIZA
Roll No: 64
Student 1 Subject Marks:
Subject 1: 18
Subject 2: 18.5
Subject 3: 20
==========
---Student 2 Information---
==========
Name: MAHREEN
Roll No: 69
Student 2 Subject Marks:
Subject 1: 18
Subject 2: 17
Subject 3: 15
==========
---Student 3 Information---
==========
Name: AMAAN
Roll No: 77
Student 3 Subject Marks:
Subject 1: 15
Subject 2: 14
Subject 3: 11
==========
---Student 4 Information---
==========
Name: OWAIS
Roll No: 54
Student 4 Subject Marks:
Subject 1: 13
Subject 2: 19
Subject 3: 20

C:\Users\AA\Desktop\CIP (11) task2.exe

```
---Student 5 Information---
============================
Name: HASSSAN
Roll No: 56

Student 5 Subject Marks:
Subject 1: 12
Subject 2: 16
Subject 3: 18

AVERAGE MARKS OF EACH STUDENTS:
================================

STUDENT 1:
NAME:FAIZA
ROLL NO:64
AVERAGE:18.83

STUDENT 2:
NAME:MAHREEN
ROLL NO:69
AVERAGE:16.67

STUDENT 3:
NAME:AMAAN
ROLL NO:77
AVERAGE:13.33

STUDENT 4:
NAME:OWAIS
ROLL NO:54
AVERAGE:17.33

STUDENT 5:
NAME:HASSSAN
ROLL NO:56
AVERAGE:15.33


HIGHEST AVEARGE OF STUDENT:

NAME:FAIZA
ROLL NO:64
AVERAGE:18.83
```