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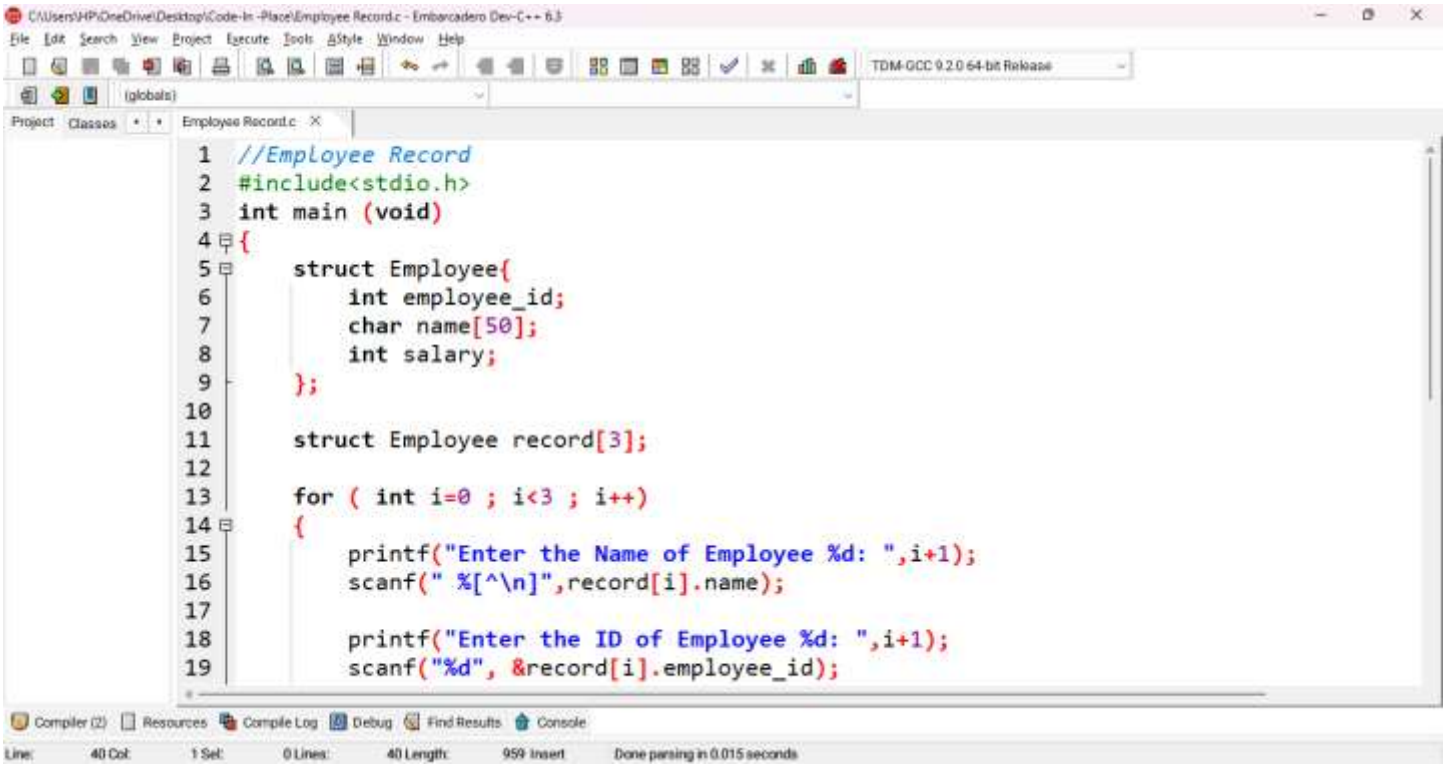
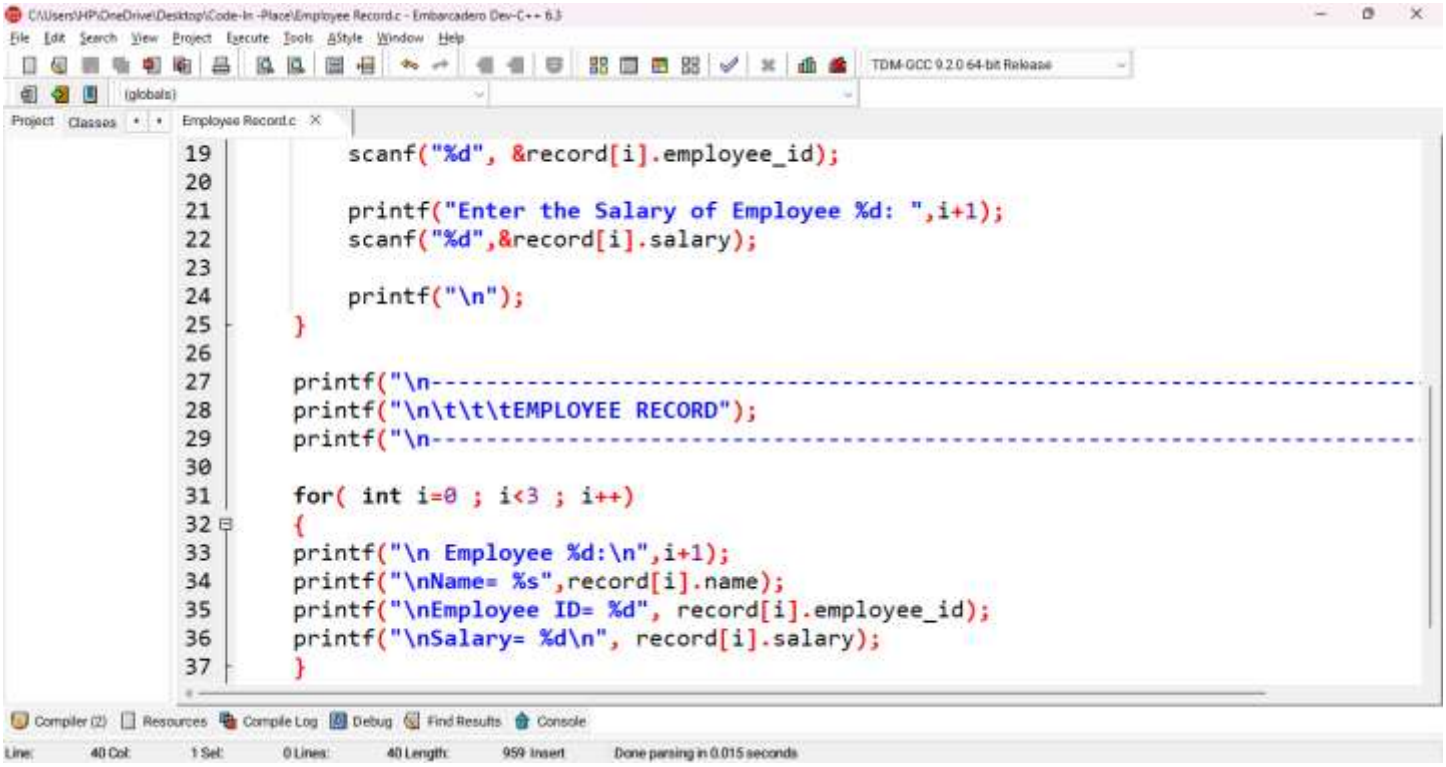
SECTION: **B**

QUESTION 01: EMPLOYEE RECORD

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

SOURCE CODE:





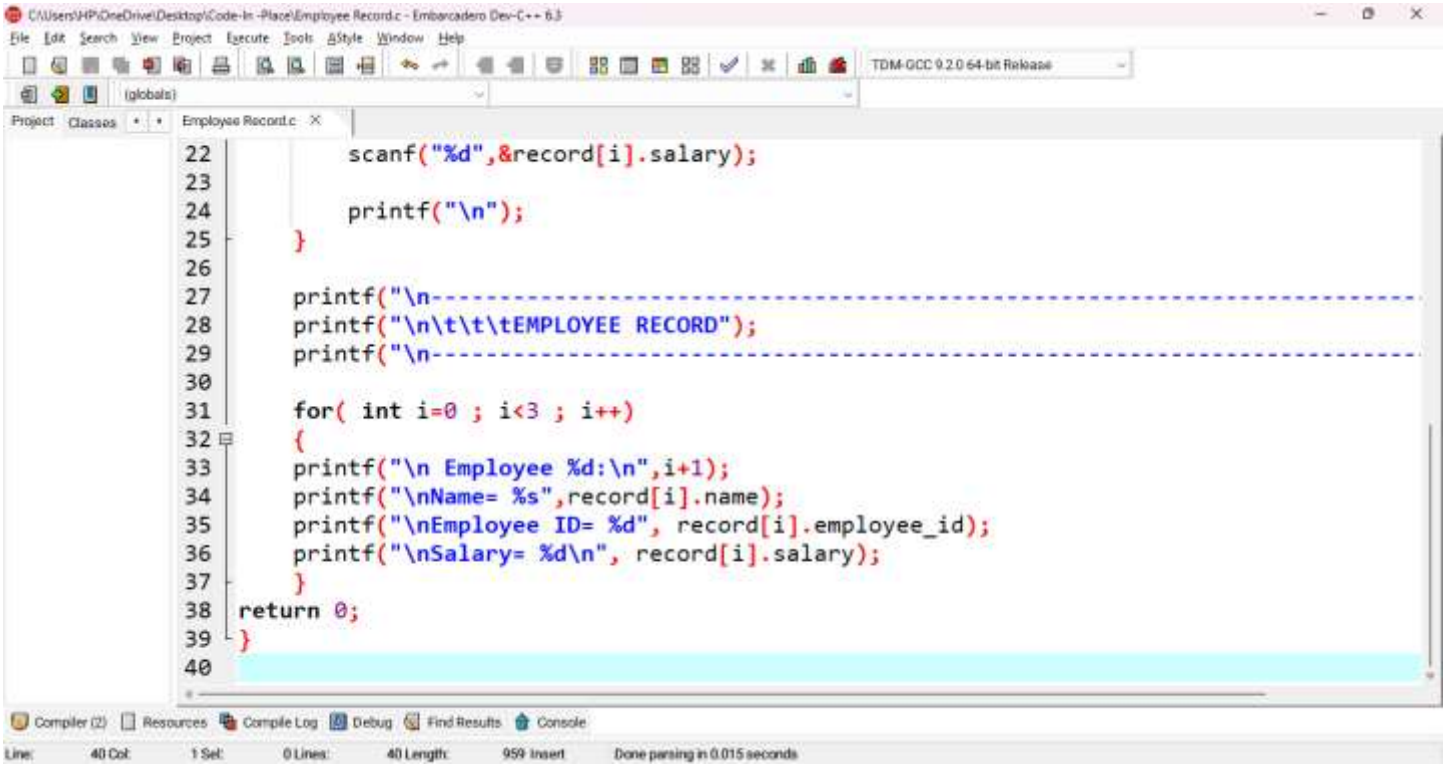
```
        scanf("%d", &record[i].employee_id);

        printf("Enter the Salary of Employee %d: ",i+1);
        scanf("%d",&record[i].salary);

        printf("\n");
    }

    printf("\n-------------------------------------------------------------------------------");
    printf("\n\t\t\tEMPLOYEE RECORD");
    printf("\n-------------------------------------------------------------------------------");

    for( int i=0 ; i<3 ; i++)
    {
    printf("\n Employee %d:\n",i+1);
    printf("\nName= %s",record[i].name);
    printf("\nEmployee ID= %d", record[i].employee_id);
    printf("\nSalary= %d\n", record[i].salary);
    }
```



```
        scanf("%d",&record[i].salary);

        printf("\n");
    }

    printf("\n-------------------------------------------------------------------------------");
    printf("\n\t\t\tEMPLOYEE RECORD");
    printf("\n-------------------------------------------------------------------------------");

    for( int i=0 ; i<3 ; i++)
    {
    printf("\n Employee %d:\n",i+1);
    printf("\nName= %s",record[i].name);
    printf("\nEmployee ID= %d", record[i].employee_id);
    printf("\nSalary= %d\n", record[i].salary);
    }
return 0;
}
```

OUTPUT:

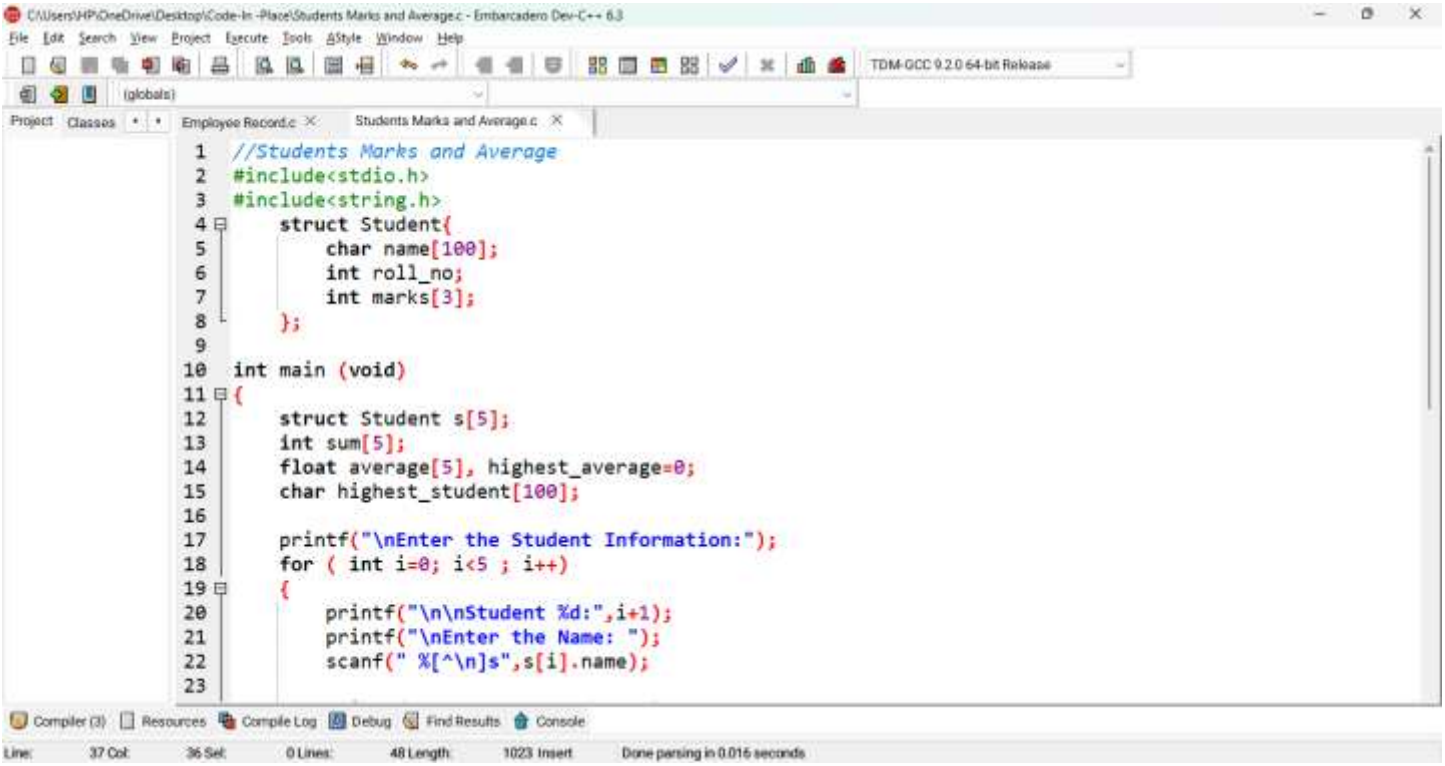

Enter the Name of Employee 1: Areefa Samar
Enter the ID of Employee 1: 25062
Enter the Salary of Employee 1: 56000
Enter the Name of Employee 2: Waqar Samar
Enter the ID of Employee 2: 25098
Enter the Salary of Employee 2: 23000
Enter the Name of Employee 3: Umaiza Samar
Enter the ID of Employee 3: 256788
Enter the Salary of Employee 3: 90000
EMPLOYEE RECORD
Employee 1:
Name= Areefa Samar
Employee ID= 25062
Salary= 56000
Employee 2:

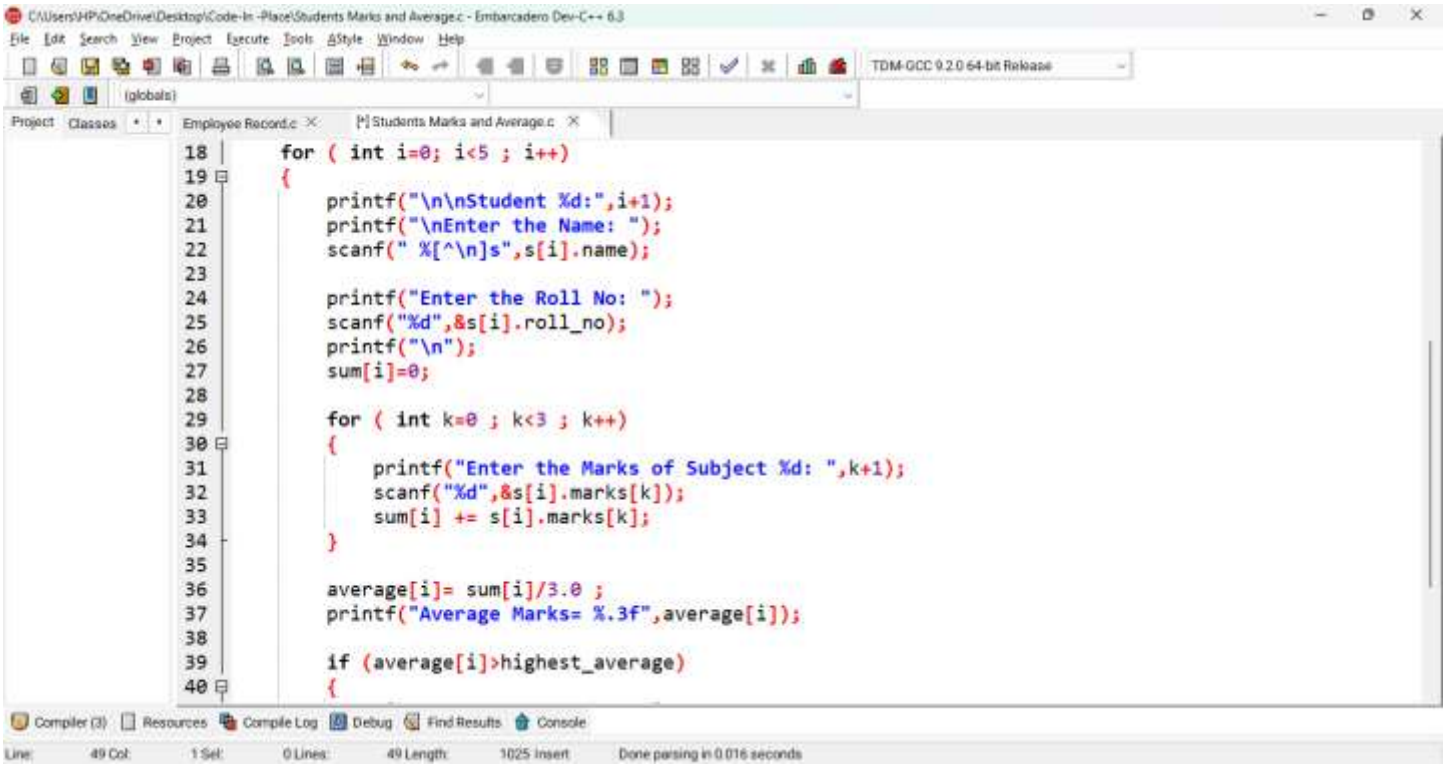

EMPLOYEE RECORD
Employee 1:
Name= Areefa Samar
Employee ID= 25062
Salary= 56000
Employee 2:
Name= Waqar Samar
Employee ID= 25098
Salary= 23000
Employee 3:
Name= Umaiza Samar
Employee ID= 256788
Salary= 90000
Process exited after 74.35 seconds with return value 0
Press any key to continue . . .

QUESTION 02: STUDENTS MARKS AND AVERAGE

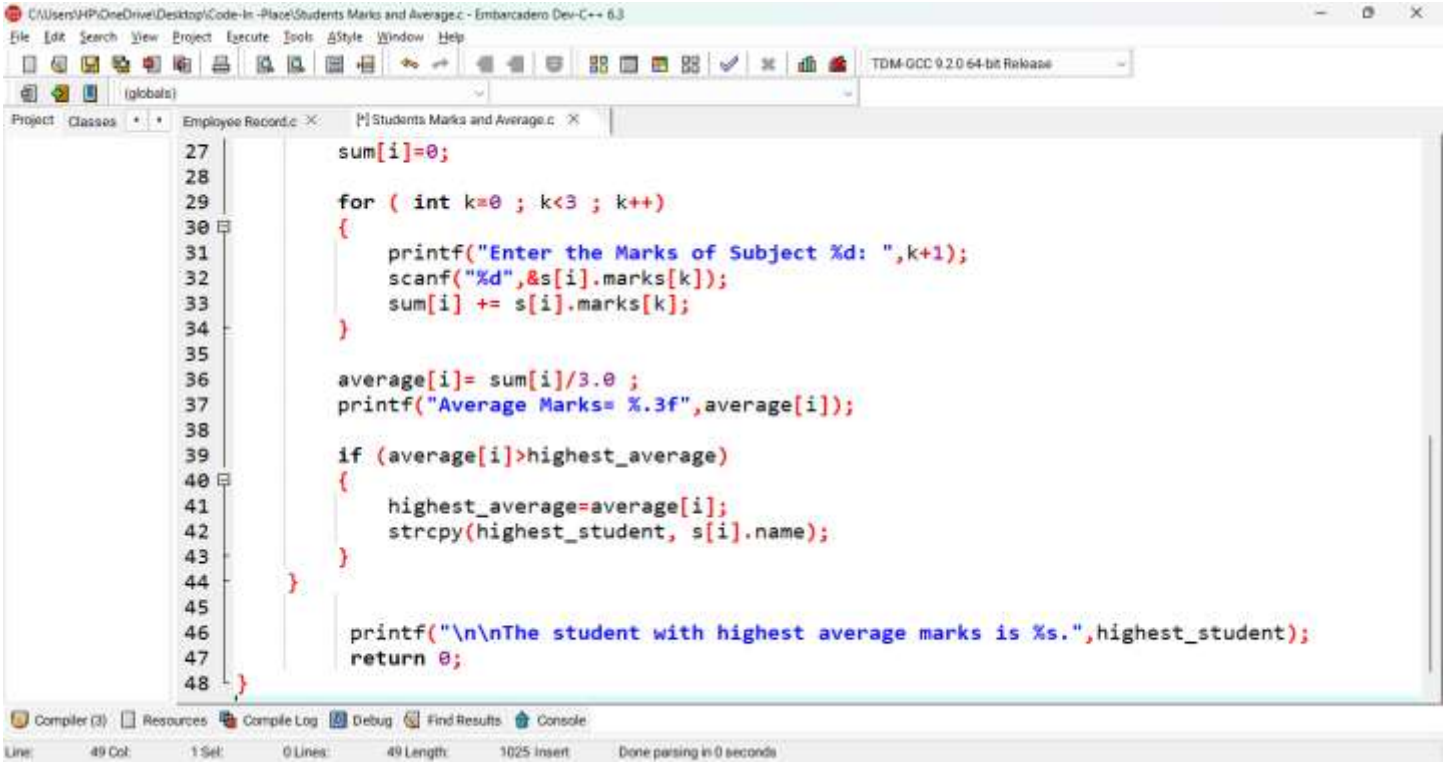
Create a structure called Student to store:
Student name
Roll number
Marks in 3 subjects
Requirements:
Input data for 5 students.
Calculate and display the average marks for each student.
Bonus Challenge:
Display the name of the student with the highest average marks.

SOURCE CODE:



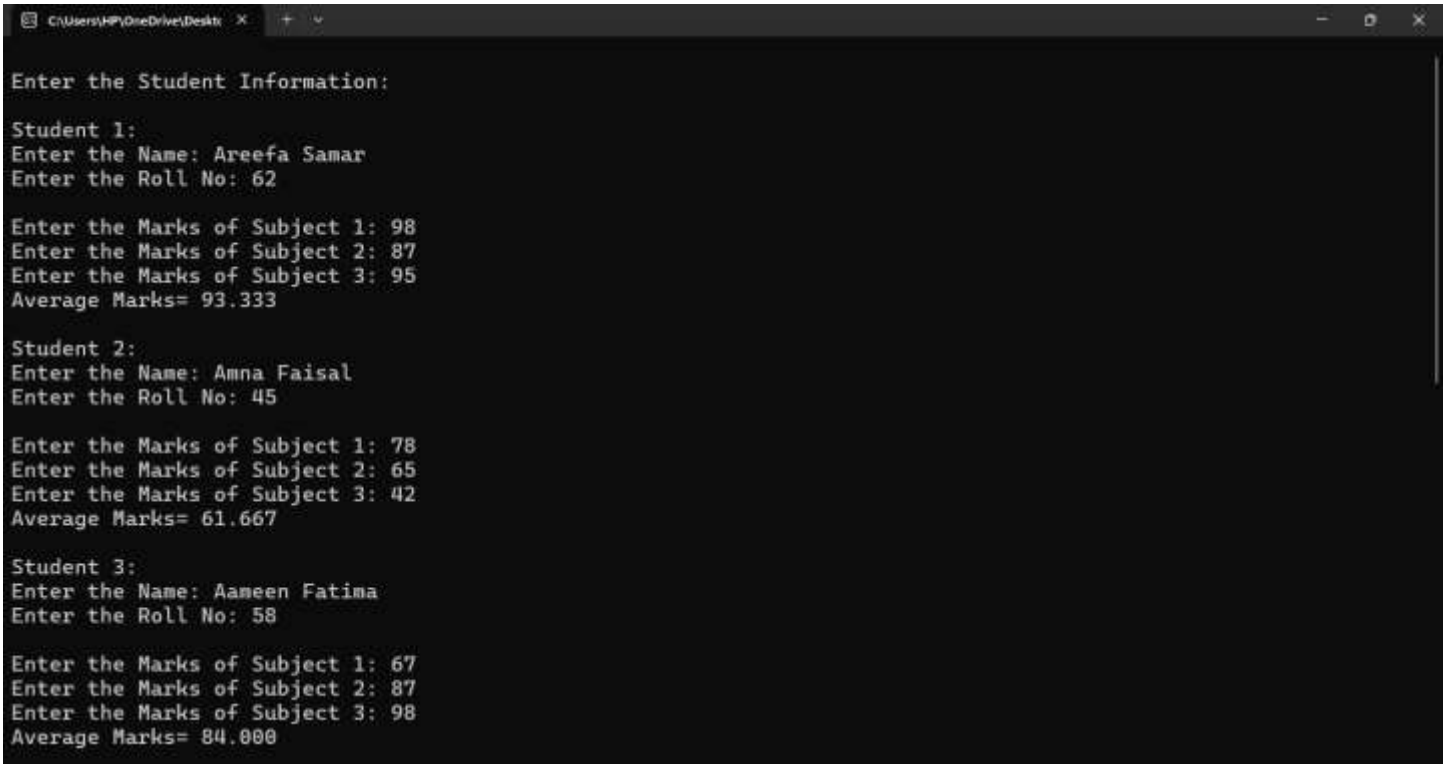


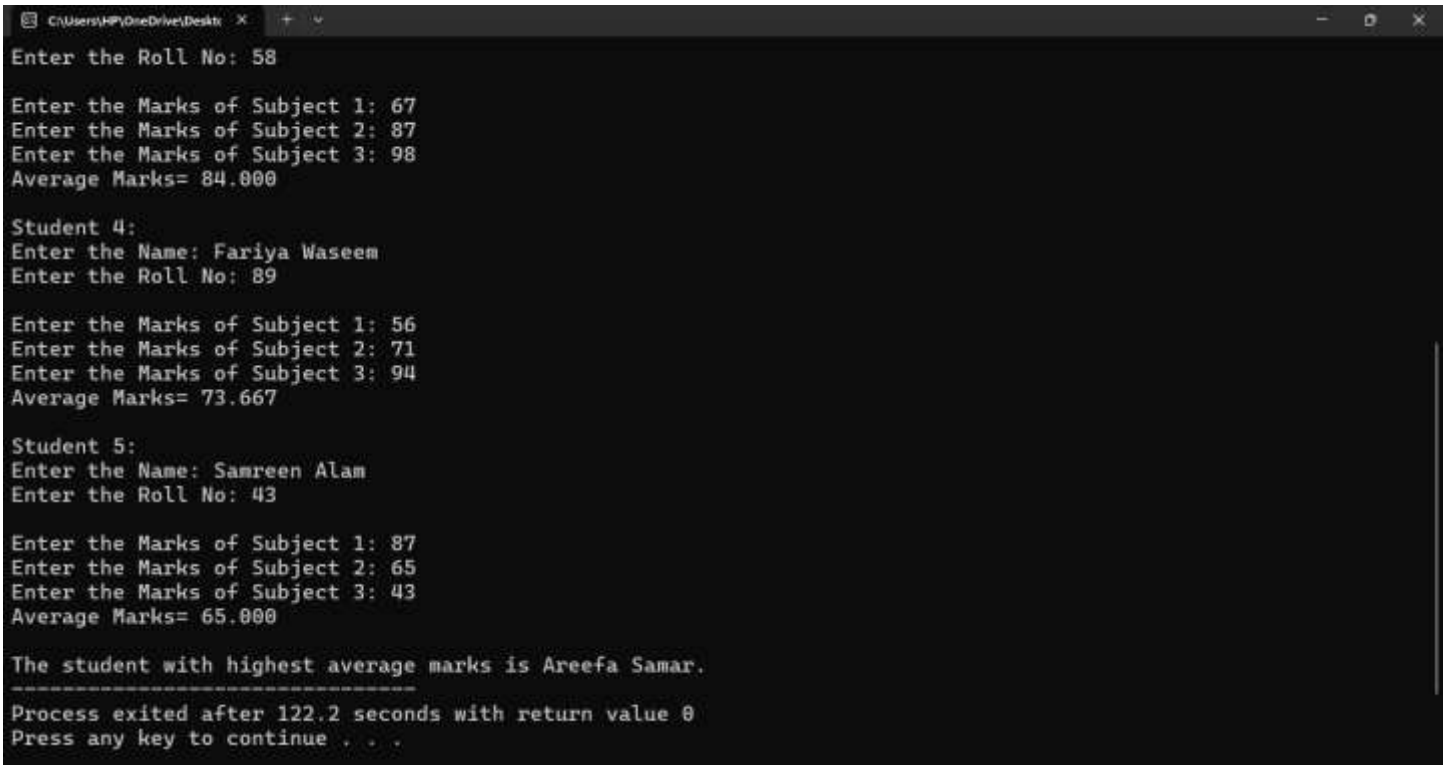
```
18      for ( int i=0; i<5 ; i++)
19      {
20          printf("\n\nStudent %d:",i+1);
21          printf("\nEnter the Name: ");
22          scanf(" %[^\n]s",s[i].name);
23
24          printf("Enter the Roll No: ");
25          scanf("%d",&s[i].roll_no);
26          printf("\n");
27          sum[i]=0;
28
29          for ( int k=0 ; k<3 ; k++)
30          {
31              printf("Enter the Marks of Subject %d: ",k+1);
32              scanf("%d",&s[i].marks[k]);
33              sum[i] += s[i].marks[k];
34          }
35
36          average[i]= sum[i]/3.0 ;
37          printf("Average Marks= %.3f",average[i]);
38
39          if (average[i]>highest_average)
40          {
```



```
27          sum[i]=0;
28
29          for ( int k=0 ; k<3 ; k++)
30          {
31              printf("Enter the Marks of Subject %d: ",k+1);
32              scanf("%d",&s[i].marks[k]);
33              sum[i] += s[i].marks[k];
34          }
35
36          average[i]= sum[i]/3.0 ;
37          printf("Average Marks= %.3f",average[i]);
38
39          if (average[i]>highest_average)
40          {
41              highest_average=average[i];
42              strcpy(highest_student, s[i].name);
43          }
44      }
45
46          printf("\n\nThe student with highest average marks is %s.",highest_student);
47          return 0;
48  }
```

OUTPUT:


Enter the Student Information:
Student 1:
Enter the Name: Areefa Samar
Enter the Roll No: 62
Enter the Marks of Subject 1: 98
Enter the Marks of Subject 2: 87
Enter the Marks of Subject 3: 95
Average Marks= 93.333
Student 2:
Enter the Name: Amna Faisal
Enter the Roll No: 45
Enter the Marks of Subject 1: 78
Enter the Marks of Subject 2: 65
Enter the Marks of Subject 3: 42
Average Marks= 61.667
Student 3:
Enter the Name: Aameen Fatima
Enter the Roll No: 58
Enter the Marks of Subject 1: 67
Enter the Marks of Subject 2: 87
Enter the Marks of Subject 3: 98
Average Marks= 84.000


Enter the Roll No: 58
Enter the Marks of Subject 1: 67
Enter the Marks of Subject 2: 87
Enter the Marks of Subject 3: 98
Average Marks= 84.000
Student 4:
Enter the Name: Fariya Waseem
Enter the Roll No: 89
Enter the Marks of Subject 1: 56
Enter the Marks of Subject 2: 71
Enter the Marks of Subject 3: 94
Average Marks= 73.667
Student 5:
Enter the Name: Samreen Alam
Enter the Roll No: 43
Enter the Marks of Subject 1: 87
Enter the Marks of Subject 2: 65
Enter the Marks of Subject 3: 43
Average Marks= 65.000
The student with highest average marks is Areefa Samar.
Process exited after 122.2 seconds with return value 0
Press any key to continue . . .