

A Micro Project Report

on

Problem Solving using C Language

Submitted by

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

**NARASARAOPETA ENGINEERING COLLEGE: NARASARAOPET
(AUTONOMOUS)**

Accredited by NAAC with A+ Grade and NBA under Tier-1

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522601, Palnadu(Dt.), Andhra Pradesh, India

2024-2025

NARASARAOPETA ENGINEERING COLLEGE: NARASARAOPET

(AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



CERTIFICATE

This is to certify that **SHAIK SHAHINA BEGUM**, Roll No: **23471A05AU**,
a Second Year Student of the Department of Computer Science and Engineering,
has completed the Micro Project Satisfactorily in “ Problem Solving using C
Language” for the Academic Year 2024-2025..

Project Co-Ordinator

Mr. M. Venkata Rao, M.Tech.

Asst. Professor

HEAD OF THE DEPARTMENT

Dr. S. N. Tirumala Rao, M.Tech., Ph.D.

Professor

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S.No	Description
1.	Eamcet ranking system (highest score student get first,if more thenone student get equal score then check the subject priority here don' t change student order.)

Eamcetrankingsystem

Aim:

**\\Eamcetrankingsystem(highestscorestudentgetfirst,ifmorethenonestudent
getequalscorethencheckthesubjectpriority)heredontchangestudentorder.**

```
#include<stdio.h>
```

```
struct Student{
```

```
    char name[50];
```

```
    int score;
```

```
    int physics, chemistry, mathematics;
```

```
};
```

```
void printStudents(struct Student students[], int n){
```

```
    printf("Name\tScore\tPhysics\tChemistry\tMathematics\tRank\n");
```

```
    for(int i = 0; i < n; i++){
```

```
        printf("%s\t%d\t%d\t%d\t%d\t%d\n",
```

```
        students[i].name,
```

```
        students[i].score,
```

```
        students[i].physics,
```

```
        students[i].chemistry,
```

```
        students[i].mathematics,
```

```
        i + 1);
```

```

    }
}

voidrankStudents(struct Studentstudents[], intn){

    for(int i= 0;i <n- 1;i++){

        for(int j= i+ 1;j<n;j++){

            if (students[i].score <students[j].score){

                struct Student temp=students[i];

                students[i]=students[j];

                students[j] =temp;

            }

            // Ifscores are equal, prioritize subjects

            else if (students[i].score==students[j].score){

                if (students[i].physics<students[j].physics){

                    struct Student temp=students[i];

                    students[i]=students[j];

                    students[j] =temp;

                }

                elseif(students[i].physics ==students[j].physics){

                    if (students[i].chemistry<students[j].chemistry) {

                        struct Student temp =students[i];

                        students[i]=students[j];

                        students[j] =temp;

                    }

                    else if (students[i].chemistry==students[j].chemistry){

```

```
        if (students[i].mathematics<students[j].mathematics){  
            struct Studenttemp=students[i];  
            students[i] =students[j];  
            students[j]=temp;  
        }  
    }  
}  
}  
}
```

```
intmain(){intn;  
  
    printf("Enter numberofstudents:");  
  
    scanf("%d",&n);  
  
    struct Studentstudents[n];  
  
    for(inti = 0; i <n; i++){  
  
        printf("Enterstudent%dname: ", i + 1);  
  
        scanf("%s", students[i].name);  
  
        printf("Enterstudent %dscore: ", i + 1);  
  
        scanf("%d",&students[i].score);  
  
        printf("Enter student %dphysicsscore: ", i+ 1);  
  
        scanf("%d",&students[i].physics);  
  
        printf("Enterstudent %dchemistryscore: ", i + 1);
```

```
scanf("%d",&students[i].chemistry);

printf("Enter student %d mathematicsscore: ", i + 1);

scanf("%d",&students[i].mathematics);

}

rankStudents(students, n);

printStudents(students, n);

return 0;

}
```

OUTPUT:

Enternumberofstudents: 2

Enterstudent 1 name: A

Enterstudent 1 score:45

Enterstudent 1 physicsscore: 23

Enterstudent 1 chemistry score: 35

Enterstudent 1 mathematics score: 45

Enterstudent2 name:B

Enterstudent 2 score: 30

Enter student 2 physicsscore: 46

Enterstudent 2 chemistry score: 75

Enterstudent 2 mathematicsscore: 45

Name	Score	Physics	Chemistry	Mathematics	Rank
A	45	23	35	45	1
B	30	46	75	45	2

```
Enter number of students: 2
Enter student 1 name: kavya
Enter student 1 score: 45
Enter student 1 physics score: 12
Enter student 1 chemistry score: 10
Enter student 1 mathematics score: 23
Enter student 2 name: Radha
Enter student 2 score: 60
Enter student 2 physics score: 20
Enter student 2 chemistry score: 28
Enter student 2 mathematics score: 12
Name      Score  Physics Chemistry  Mathematics  Rank
Radha     60     20      28       12         1
kavya     45     12      10       23         2
```