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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2024-2025

NARASARAOPETA ENGINEERING COLLEGE: NARASARAOPET

(AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that Gollapalli Yamini Thripura Sundari , Roll No: 23471A0586, 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

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

Emcet ranking system

Aim:

\\Emcet ranking system (highest score student get first,if more then one student get equal score then check the subject priority)here don' t change student order.

```
#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);
```

```
    }
}
void rankStudents(struct Student students[], int n) {
    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;
      }
       // If scores 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;
}
    else if (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 Student temp = students[i];
    students[i] = students[j];
    students[j] = temp;
 }
        }
        }
       }
  }
   }
}
int main(){
int n;
   printf("Enter number of students: ");
    scanf("%d", &n);
    struct Student students[n];
for (int i = 0; i < n; i++) {
  printf("Enter student %d name: ", i + 1);
      scanf("%s", students[i].name);
    printf("Enter student %d score: ", i + 1);
scanf("%d", &students[i].score);
     printf("Enter student %d physics score: ", i + 1);
      scanf("%d", &students[i].physics);
      printf("Enter student %d chemistry score: ", i + 1);
```

```
        scanf("%d", &students[i].chemistry);
        printf("Enter student %d mathematics score: ", i + 1);
        scanf("%d", &students[i].mathematics);
    }
    rankStudents(students, n);
    printStudents(students, n);
    return 0;
}
```

OUTPUT:

Enter number of students: 2

Enter student 1 name: A

Enter student 1 score: 45

Enter student 1 physics score: 23

Enter student 1 chemistry score: 35

Enter student 1 mathematics score: 45

Enter student 2 name: B

Enter student 2 score: 30

Enter student 2 physics score: 46

Enter student 2 chemistry score: 75

Enter student 2 mathematics score: 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
```