

XXXXXXXXXXXXXXXXXXXXX(Title of your project)

A Mini Project

Academic Year: 2021 - 22 ODDSEMESTER

**Department with Specialization : B.Tech., – Computer Science
and**

Engineering with AI & ML

Semester : I

Course Code : 18CSS101J

**Course Title : Programming Problem
Solving**

Submitted by

Rishendra [RA2111026010221]

Shanmukh[RA2111026010217]

Arun [RA2111026010230]

Shravan [RA2111026010237]

Under the Guidance of

Dr.R.Lakshminarayana

(Associate Professor, NWC)



SRM

INSTITUTE OF SCIENCE & TECHNOLOGY
Deemed to be University u/s 3 of UGC Act, 1956

DEPARTMENT OF COMPUTING

KATTANKULATHUR- 603 203

January 2022

AIM : To provide a convenient and comprehensive method of assistance to a teacher or lecturer to amplify the accessibility of students marks or grades.

ALGORITHM :

Step 1 : Start

Step 2 : Declare a file variable

Step 3 : Open the file Srm.dat in writing mode

Step 4 : Declare the variables

Step 5 : Press 1 to continue and 0 to exit

Step 6 : Assign the values of marks of the respective subjects

Step 7 : Close the writing file

Step 8 : Open the file Srm.dat in reading mode

Step 9 : Read the data by using fscanf

Step 10 : Calculate the total and average marks

Step 11 : The respective student marks will be portrayed as either pass or fail on basis of the marks obtained in the particular subjects

Step 12 : If the student fails in any particular subject/subjects then the failed subject/subjects are portrayed for that respective student

Step 13 : Close the reading file

Step 14 : End

Source Code:

Writing file:

```
#include<stdio.h>
#include<stdlib.h>
int main()
{FILE *fp;
fp=fopen("Srm.dat","a");

int sno,m1,m2,m3,m4,m5;
char name[100];

printf("                \n");
printf("##### \n");
printf("##### \n");
printf("## \n");
printf("##          STUDENT RECORD PROGRAMME          ## \n");
printf("## \n");
printf("##### \n");
printf("##### \n");
printf("\n");
printf(" #-----# \n");
printf(" | Note:- \n");
printf(" | the maximum marks that can be achieved in each subject : 50M \n");
printf(" | minimum marks that should be achieved in each subject : 25M \n");
printf(" | If the Candidate fails in Even a Single Subject His Final Result Will Be Given as 'FAIL' \n");
printf(" #-----# \n");

while(1){
int n;
printf("enter 1 to continue 0 to stop:");
scanf("%d",&n);
if(n==0)
{exit(0);
}

printf("----- \n");
printf("      Enter student Number      :  ");
scanf("%d",&sno);
printf("      Enter student name        :  ");
scanf("%s",name);
printf("      Enter marks in PPS        :  ");
scanf("%d",&m1);
printf("      Enter marks in Maths      :  ");
scanf("%d",&m2);
printf("      Enter marks in Chemistry  :  ");
scanf("%d",&m3);
printf("      Enter marks in Third-language :  ");
```

```
scanf("%d",&m4);
printf("      Enter marks in Civil & Mechanical  :  ");
scanf("%d",&m5);
fprintf(fp,"%20s%5d%5d%5d%5d%5d",name,sno,m1,m2,m3,m4,m5);
}
fclose(fp);
return 0;
}
```

Reading file:

```
#include<stdio.h>

#include<stdlib.h>

int main()

{FILE *p;

p=fopen("Srm.dat","r");

int sno,m1,m2,m3,m4,m5,tot;

float avg;

char name[100];

while(feof(p)==0)

{   int t;

fscanf(p,"%20s%5d%5d%5d%5d%5d",name,&sno,&m1,&m2,&m3,&m4,&m5);

tot=m1+m2+m3+m4+m5;

avg=tot/5;

printf("                \n");

printf("                ##### \n");

printf("                # ##### \n");

printf("                # #                # # \n");

printf("                # #                STUDENT MARKS MEMO                # # \n");

printf("                # #                # # \n");

printf("                # ##### \n");

printf("                ##### \n");

printf("\n");

printf("                ----- \n");

printf("                Student Name                : %s\n "                ,name);

printf("                Student Number                : %d\n "                ,sno );

printf("                Marks obtained in PPS                : %d\n "                ,m1 );

printf("                Marks obtained in Maths                : %d\n "                ,m2 );

printf("                Marks obtained in Chemistry                : %d\n "                ,m3 );

printf("                Marks obtained in Thrid-Language                : %d\n "                ,m4 );
```

```

printf("          Marks obtained in Civil & Mechanical    : %d\n "          ,m5 );

printf("          Total                : %d\n "          ,tot );

printf("          Average                : %.2f\n"          ,avg );

if(m1>=25&&m2>=25&&m3>=25&&m4>=25&&m5>=25)

{printf("          Status                : PASS\n "          );}

else

{printf("          Status                : FAIL\n "          );}

printf("          Failed in                : ");

if(m1<25)

printf("PPS ");

if(m2<25)

printf("Maths ");

if(m3<25)

printf("Chemistry ");

if(m4<25)

printf("Third-Language ");

if(m5<25)

printf("Civil&Mech \n");

else

printf("None\n");


printf("          -----\n");

printf("\n");

}

fclose(p);

return 0;

}

```

Input and Output:

```
#####
# *****#
# # #
# # STUDENT RECORD PROGRAMME # #
# # #
# *****#
#####

#-----#
| Note:- |
| the maximum marks that can be achieved in each subject : 50M |
| minimum marks that should be achieved in each subject : 25M |
| If the Candidate fails in Even a Single Subject His Final Result Will Be Given as 'FAIL' |
#-----#

enter 1 to continue 0 to stop:1
-----
Enter student Number : 1
Enter student name : john
Enter marks in PPS : 35
Enter marks in Maths : 26
Enter marks in Chemistry : 35
Enter marks in Third-language : 26
Enter marks in Civil & Mechanical : 35
enter 1 to continue 0 to stop:1
-----
Enter student Number : 2
Enter student name : loki
Enter marks in PPS : 3
Enter marks in Maths : 3
Enter marks in Chemistry : 3
Enter marks in Third-language : 3
Enter marks in Civil & Mechanical : 3
enter 1 to continue 0 to stop:0
```

```
#####
# *****#
# # #
# # STUDENT MARKS MEMO # #
# # #
# *****#
#####

-----
Student Name : john
Student Number : 1
Marks obtained in PPS : 35
Marks obtained in Maths : 26
Marks obtained in Chemistry : 35
Marks obtained in Third-language : 26
Marks obtained in Civil & Mechanical : 35
Total : 157
Average : 31.00
Status : PASS
Failed in : None
-----

#####
# *****#
# # #
# # STUDENT MARKS MEMO # #
# # #
# *****#
#####

-----
Student Name : loki
Student Number : 2
Marks obtained in PPS : 3
Marks obtained in Maths : 3
Marks obtained in Chemistry : 3
Marks obtained in Third-language : 3
Marks obtained in Civil & Mechanical : 3
Total : 15
Average : 3.00
Status : FAIL
Failed in : PPS Maths Chemistry Third-Language Civil&Mech
-----
```

Result: The respective student's marks in the particular subjects will be portrayed or depicted in a organized manner and his/her status of either pass or fail is also exhibited.