NAME: ABIN SHOBY

ROLL NO: 21006

EXPERIMENT NO:16

PROGRAM:

#include<stdio.h>

#include<conio.h>

typedef struct student

{

int rollno;

char name[20];

int marks[3];

}stud;

void getdata(stud \*s,int \*n)

{

int i,j;

printf("\n Enter no of students:");

scanf("%d",n);

for(i=0;i<\*n;i++)

{

printf("\n Enter details of student %d",i+1);

printf("\n Roll no:");

scanf("%d",&s[i].rollno);

printf("\n Name:");

scanf("%s",s[i].name);

for(j=0;j<3;j++)

{

printf("\n mark of subject %d:",j+1);

scanf("%d",&s[i].marks[j]);

}

}

}

void main()

{

stud s[100],temp;

int n,i,j,k,f=1;

FILE \*p,\*in;

clrscr();

getdata(s,&n);

if((p=fopen("student.dat","wb+"))==NULL)

{

printf("\n Error opening file...");

exit(0);

}

else

{

for(i=0;i<n;i++)

fwrite(&s[i],sizeof(s),1,p);

fclose(p);

for(i=0;i<n;i++)

{

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

{

if(s[i].rollno>s[j].rollno)

{

temp=s[i];

s[i]=s[j];

s[j]=temp;

}

}

}

if((p=fopen("studsort.dat","wb+"))==NULL)

{

printf("\n Error opening file...");

exit(0);

}

else

{

for(i=0;i<n;i++)

fwrite(&s[i],sizeof(s),1,p);

fclose(p);

in=fopen("studsort.dat","rb+");

printf("\n List of students failed:\n");

k=0;

while(k<n)

{

fread(&temp,sizeof(s),1,in);

for(j=0;j<3;j++)

{

if(temp.marks[j]<40)

{

printf("\t%s\n",temp.name);

break;

}

}

k++;

}

fclose(in);

}

}

getch();

}

OUTPUT:

Enter no of students:3

Enter details of student 1

Roll no:3

Name:Arun

mark of subject 1:89

mark of subject 2:45

mark of subject 3:32

Enter details of student 2

Roll no:2

Name:Ram

mark of subject 1:56

mark of subject 2:78

mark of subject 3:67

Enter details of student 3

Roll no:8

Name:Hari

mark of subject 1:32

mark of subject 2:45

mark of subject 3:12

List of students failed:

Arun

Hari