

SC165

Problem Statement: Department maintains student information. The file contains roll number, name, division and address. Allow users to add, delete information about students. Display information of a particular employee. If the record of the student does not exist an appropriate message is displayed. If it is, then the system displays the student details. Use a sequential file to maintain the data.

```
#include<iostream>
#include<fstream>
#include<string.h>
using namespace std;
class student
{
public:
int roll;
char name[10];
char div;
char add[10];
public:
void create();
void display();
int search();
};
void student::create()
{
student rec;
char ans;
ofstream fout;
fout.open("stud.txt",ios::app);
do
{
cout<<"\n\tEnter Roll No of Student : ";
cin>>rec.roll;
cout<<"\n\tEnter a Name of Student : ";
cin>>rec.name;
cout<<"\n\tEnter a Division of Student : ";
cin>>rec.div;
cout<<"\n\tEnter a Address of Student : ";
cin>>rec.add;
fout.write((char *)&rec,sizeof(rec))<<flush;
cout<<"\n\tDo You Want to Add More Records: ";
cin>>ans;
}while(ans=='y' || ans=='Y');
```

```

fout.close();
}
void student::display()
{
student rec;
ifstream fin;
fin.open("stud.txt",ios::in);
fin.seekg(0,ios::beg);
cout<<"\n\tThe Content of File are:\n";
cout<<"\n\tRoll\tName\tDiv\tAddress";
while(fin.read((char *)&rec,sizeof(rec)))
{
if(rec.roll!=-1)
cout<<"\n\t"<<rec.roll<<"\t"<<rec.name<<"\t"<<rec.div<<"\t"<<rec.add;
}
fin.close();
}
int student::search()
{
student rec;
int r,i=0;
ifstream fin;
fin.open("stud.txt",ios::in);
fin.seekg(0,ios::beg);
cout<<"\n\tEnter a Roll No: ";
cin>>r;
while(fin.read((char *)&rec,sizeof(rec)))
{
if(rec.roll==r)
{
cout<<"\n\tRecord Found...\n";
cout<<"\n\tRoll\tName\tDiv\tAddress";
cout<<"\n\t"<<rec.roll<<"\t"<<rec.name<<"\t"<<rec.div<<"\t"<<rec.add;
return i;
}
i++;
}
fin.close();
return 0;
}
int main()
{
student obj;
int ch,key;

```

```

char ans;
do
{
cout<<"\n\t***** Student Information *****";
cout<<"\n\t1. Create\n\t2. Display\n\t3. Search\n\t4. Exit";
cout<<"\n\t..... Enter Your Choice: ";
cin>>ch;
switch(ch)
{
case 1: obj.create();
break;
case 2: obj.display();
break;
case 3: key=obj.search();
if(key==0)
cout<<"\n\tRecord Not Found...\n";
break;
case 4:
break;
}
cout<<"\n\t..... Do You Want to Continue in Main Menu: ";
cin>>ans;
}while(ans=='y' || ans=='Y');
return 1;
}

```

```

main.cpp  stud.txt  :
1  1as  shinde  1vs  pratik  1ps  thorat  1at  samyak
input

***** Student Information *****
1. Create
2. Display
3. Search
4. Exit
..... Enter Your Choice: 1

Enter Roll No of Student : 164

Enter a Name of Student : aryan

Enter a Division of Student : 1

Enter a Address of Student : as

Do You Want to Add More Records: y

Enter Roll No of Student : 165

Enter a Name of Student : shinde

Enter a Division of Student : 1

Enter a Address of Student : vs

Do You Want to Add More Records: y

Enter Roll No of Student : 166

Enter a Name of Student : pratik

```

```
main.cpp stud.txt :
1 1 aryan 1as ..... shinde 1vs ..... pratik 1ps ..... thorat 1at ..... samyak .....

input
Enter Roll No of Student : 166

Enter a Name of Student : pratik

Enter a Division of Student : 1

Enter a Address of Student : ps

Do You Want to Add More Records: y

Enter Roll No of Student : 168

Enter a Name of Student : thorat

Enter a Division of Student : 1

Enter a Address of Student : at

Do You Want to Add More Records: y

Enter Roll No of Student : 169

Enter a Name of Student : samyak

Enter a Division of Student : 1

Enter a Address of Student : sw

Do You Want to Add More Records: n

..... Do You Want to Continue in Main Menu: y
```

```
1 1 aryan 1as ..... shinde 1vs ..... pratik 1ps ..... thorat 1at ..... samyak 1sw .....

input
The Content of File are:

Roll  Name  Div  Address
164   aryan  1    as
165   shinde 1    vs
166   pratik 1    ps
168   thorat 1    at
169   samyak 1    sw
..... Do You Want to Continue in Main Menu: y

***** Student Information *****
1. Create
2. Display
3. Search
4. Exit
..... Enter Your Choice: 3

Enter a Roll No: 165

Record Found...

Roll  Name  Div  Address
165   shinde 1    vs
..... Do You Want to Continue in Main Menu: y

***** Student Information *****
1. Create
2. Display
3. Search
4. Exit
..... Enter Your Choice: 4

..... Do You Want to Continue in Main Menu: n

...Program finished with exit code 1
Press ENTER to exit console.
```