Name: Sakshi Mishra

Roll: 53

Subject: DSA

LAB ASSIGNMENT NO. 10

//LAB10 File handling program to 1. Create 2. Display 3. Add 4. Search 5. Remove student records.

```cpp
#include<iostream>
#include<fstream> using
namespace std; struct
student
{ int rn;
char div;
char name[20], adr[20];
}; class File {
char fname[20];
public :
 void create(); void
display(); void
add(); void
Delet(int rn); void
search(int rn);
}; int main()
{ int choice,
rn; File obj;
do {
cout<<"Selec
t operation
from : 1.
Create
records 2.
Display
```

```
records 3.
Add records
4. Remove
records 5. Search records 6. exit\n";
cin>>choice;  switch(choice)
{
case 1: obj.create();
break;
case 2: obj.display();
break;   case 3:
obj.add();   break;
case 4: cout<<"Enter student Roll No whose record to be deleted\n" ;
cin>>rn;  obj.Delet(rn);   break;
case 5: cout<<"Enter student Roll No whose record to be searched\n" ;
cin>>rn;  obj.search(rn);   break;
case 6: cout<<"Exit\n";
break;
default:cout<<"Wrong Choice\n";
break;
}
}while(choice!=6);
return 0; }
void File :: create()
{  ofstream
fp; student
s; char
option;
cout<<"Enter File name to be opened\n";
cin>>fname; fp.open(fname);
do
{
cout<<"Enter student Roll No, Div, Name, Address\n";
cin>>s.rn>>s.div>>s.name>>s.adr;
```

```cpp
fp.write((char*)(&s),sizeof(s));  cout<<"Do you want

to add more records\n"; cin>>option;

}while(option=='y'); fp.close(); }

void File :: display()

{  ifstream fp;

student s;

fp.open(fname);

 cout<<"Roll No\tDiv\tName\tAddress\n";

fp.read((char*)(&s),sizeof(s));  while(!fp.eof())

 {

 cout<<s.rn<<"\t"<<s.div<<"\t"<<s.name<<"\t"<<s.adr<<"\n";

fp.read((char*)(&s),sizeof(s));

} fp.close(); }

void File :: add()

{  fstream fp;  student s;

fp.open(fname, ios::app);

 cout<<"Enter    records    to    be    added   \n    Enter    Roll    No\tDiv\tName\tAddress\n";

cin>>s.rn>>s.div>>s.name>>s.adr; fp.write((char*)(&s),sizeof(s));

fp.close(); }

void File :: search(int rn)

{  fstream fp;  student s;  int

flag=0;  fp.open(fname);

fp.read((char*)(&s),sizeof(s));

while(!fp.eof())

 {

if(rn==s.rn)

{  flag=1;

break; }

 fp.read((char*)(&s),sizeof(s));

 }

if(flag==1)
```

```cpp
cout<<s.rn<<"\t"<<s.div<<"\t"<<s.name<<"\t"<<s.adr<<"\n";
else
 cout<<"Record not found\n";
fp.close(); }
void File :: Delet(int rn)
{  ifstream
fp1;  ofstream
fp2;  student
s;  int flag=0;
fp1.open(fna
me);
fp2.open("te
mp.txt");
 fp1.read((char*)(&s),sizeof(s));
while(!fp1.eof())
 {
if(rn==s.rn)
 {
 cout<<s.rn<<"\t"<<s.div<<"\t"<<s.name<<"\t"<<s.adr<<"\n";
flag=1; } else
fp2.write((char*)(&s),sizeof(s));
fp1.read((char*)(&s),sizeof(s));
 }   if(flag==0)
cout<<"Record not found\n";

fp1.close(); fp2.close();
remove(fname);
rename("temp.txt", fname);
}
```

```
Select operation from : 1. Create records 2. Display records 3. Add records 4. Remove records 5. Search records 6. exit
3
Enter records to be added
 Enter Roll No  Div     Name    Address
70 A Pranjal chakan
Select operation from : 1. Create records 2. Display records 3. Add records 4. Remove records 5. Search records 6. exit
2
Roll No Div     Name    Address
79      A       Manali  Manchar
75      A       Kalyani Akole
73      A       Manasi  Nashik
72      A       Shweta  Aurangabad
70      A       Pranjal chakan
Select operation from : 1. Create records 2. Display records 3. Add records 4. Remove records 5. Search records 6. exit
4
Enter student Roll No whose record to be deleted
70
70      A       Pranjal chakan
Select operation from : 1. Create records 2. Display records 3. Add records 4. Remove records 5. Search records 6. exit
2
Roll No Div     Name    Address
79      A       Manali  Manchar
75      A       Kalyani Akole
73      A       Manasi  Nashik
72      A       Shweta  Aurangabad
Select operation from : 1. Create records 2. Display records 3. Add records 4. Remove records 5. Search records 6. exit
5
Enter student Roll No whose record to be searched
79
79      A       Manali  Manchar
Select operation from : 1. Create records 2. Display records 3. Add records 4. Remove records 5. Search records 6. exit
6
Exit

...Program finished with exit code 0
Press ENTER to exit console.
```