

```

#include<iostream>
#include<fstream>
using namespace std;
typedef struct student
{
int roll;
char a,name[20],add[30];
}stud;
ifstream fin;
ofstream fout;
fstream fm;
int n;
char fname[20];
void create();
void display();
void insert();
void search(int key);
void deletel(int key);
int main()
{
int ch,x;
do
{
cout<<"\n1.Accept\n2.Display\n3.Insert\n4.Search\n5.Delete\n6.Exit";
cout<<"\nEnter your choice=";
cin>>ch;
switch(ch)
{
case 1:
create();
break;
case 2:
display();
break;
case 3:
insert();
break;
case 4:
cout<<"Enter roll no to search=";
cin>>x;
search(x);
break;
case 5:
cout<<"Enter roll no to delete=";
cin>>x;
deletel(x);
break;
}
}while(ch!=6);
return 0;
}void create()
{
int i;
stud s;

```

```

cout<<"Enter name of the file=";
cin>>fname;
fm.open(fname,ios::out);
cout<<"\nEnter no. of records:=";
cin>>n;
for(i=0;i<n;i++)
{
cout<<"Enter roll no=";
cin>>s.roll;
cout<<"Enter name=";
cin>>s.name;
cout<<"Enter division=";
cin>>s.a;
cout<<"Enter address=";
cin>>s.add;
fm.write((char*)&s,sizeof(s));
}
fm.close();
} //create
void display()
{
int i;
stud s;
fin.open(fname);
cout<<"\nROLL NO\tNAME\tDIV\tADDRESS";
// while(!fin.eof())
for(i=0;i<n;i++)
{
fin.read((char*)&s,sizeof(s));
cout<<"\n"<<s.roll<<"\t"<<s.name<<"\t"<<s.a<<"\t"<<s.add;
}
fin.close();
} //display
void insert()
{
stud s;
fout.open(fname,ios::app);
cout<<"Enter roll no=";
cin>>s.roll;
cout<<"Enter name=";
cin>>s.name;
cout<<"Enter division=";
cin>>s.a;
cout<<"Enter address=";
cin>>s.add;
fout.write((char*)&s,sizeof(s));
n++;
fout.close();
}
void search(int key)
{
stud s;
int flag=0,i;
fin.open(fname);

```

```

for(i=0;i<n;i++)
{
fin.read((char *)&s,sizeof(s));
if(s.roll==key)
{
cout<<"\nRecord is present";
cout<<s.roll<<"\nRoll No.";
cout<<s.name<<"\nName=";
cout<<s.a<<"\nDivision=";
cout<<s.add<<"\nAddress=";
flag=1;
}
}
if(flag==0)
cout<<"\nRoll no.= "<<key<<" is not present in the record";
fin.close();
}
void delete1(int key)
{
stud s;
int flag=0,i;
fin.open(fname);
fout.open("temp.txt",ios::out);
for(i=0;i<n;i++)
{
fin.read((char *)&s,sizeof(s));
if(s.roll==key)
{
cout<<"\nRecord deleted successfully";
flag=1;
}
else
{
fout.write((char *)&s,sizeof(s));
}
}
if(flag==0)
cout<<"\nRoll no.= "<<key<<" is not present in the record";
else
n--;
fin.close();
fout.close();
remove(fname);
rename("temp.txt",fname);
}

```

Output:-

- 1.Accept
- 2.Display
- 3.Insert
- 4.Search

5.Delete
6.Exit
Enter your choice=1
Enter name of the file=StudentRecords
Enter no. of records:=2
Enter roll no=20
Enter name=Shankar
Enter division=A
Enter address=dodi
Enter roll no=58
Enter name=Tanmay
Enter division=A
Enter address=Nashik
1.Accept
2.Display
3.Insert
4.Search
5.Delete
6.Exit
Enter your choice=2
ROLL NO NAME DIV ADDRESS
20 Shankar A dod
58 Tanmay A Nashik
1.Accept
2.Display
3.Insert
4.Search
5.Delete
6.Exit
Enter your choice=3
Enter roll no=40
Enter name=Hardik
Enter division=A
Enter address=sangamner
1.Accept
2.Display
3.Insert
4.Search
5.Delete
6.Exit
Enter your choice=4
Enter roll no to search=20
Record is present20
Roll No.Shankar
Name=A
Division=dodi
Address=
1.Accept
2.Display
3.Insert
4.Search
5.Delete
6.Exit
Enter your choice=5

Enter roll no to delete=40
Record deleted successfully
1.Accept
2.Display
3.Insert
4.Search
5.Delete
6.Exit
Enter your choice=2
ROLL NO NAME DIV ADDRESS
20 Shankar A dodi
58 Tanmay A Nashik
1.Accept
2.Display
3.Insert
4.Search
5.Delete
6.Exit
Enter your choice=6