```
//9
#include<iostream>
#include<fstream>
#include<string.h>
using namespace std;
class Student
{
int rno;
char sname[20];
char subject[20];
int sub_code;
float internal;
float university;
public:
Student()
{
rno=0;
strcpy(sname,"\0");
strcpy(subject,"\0");
sub_code=0;
internal=0.0;
university=0.0;
}


int acceptRollno()
{
    return(rno);
}
void acceptDetails()
{
cout<<"\nEnter Details :";
cout<<"\nRoll no: ";
cin>>rno;
cout<<"\nname: ";
cin>>sname;
cout<<"\nSubject Code:";
cin>>sub_code;
cout<<"\nSubject name :";
cin>>subject;
cout<<"\nInternal AssessMent Marks :";
cin>>internal;
cout<<"\nUniversity Exam Marks :";
cin>>university;
}
void putData()
{
cout<<"\nRoll No.:";
cout<<rno;
cout<< "\tname:";
cout<<sname;
cout<<"\nSubject Code :";
cout<<sub_code;
cout<<"\nSubject name:";
cout<<subject;
```

```
cout<<"\nInternal AssessMent Marks:";
cout<<internal;
cout<<"\nUniversity Exam Marks:";
cout<<university<<"\n\n";
}
};
class Operations
{
ifstream fin;
ofstream fout;
fstream fs;
public:
void addRecord( );
void show();
void search(int );
int DelRecord(int );
int edit(int );
};
void Operations::addRecord()
{
Student r;
r.acceptDetails();
fout.open("Data",ios::ate|ios::app);
fout.write((char *)&r,sizeof(r));
fout.close();
}
void Operations::show()
{
Student r;
fin.open("Data");
fin.seekg(0, ios::beg);
while(fin.read((char *)&r,sizeof(r)))
{
r.putData();
}
fin.close();
}
void Operations::search(int rno)
{
Student r;
int flag=0;
fin.open("Data");
fin.seekg(0, ios::beg);
while( fin.read((char *)&r,sizeof(r)))
{

if(r.acceptRollno()==rno)
{
flag=1;
break;
}
}
fin.close();
if(flag==1)
{
```

```
cout<<"\nStudent Found:";
r.putData();
}
else
{
cout<<"\nStudent not Found ";
}
}
int Operations::DelRecord(int rno)
{
Student r;
int flag=0;
fin.open("Data" );
fout.open("Temp",ios::ate|ios::app);
fin.seekg(0, ios::beg);
while( fin.read((char *)&r,sizeof(r)))
{
if(r.acceptRollno()==rno)
{
flag=1;
}
else
{
fout. write((char *)&r,sizeof(r));
}
}
fin.close();
fout.close();
remove("Deta");
rename("Temp","Data");
return(flag);
}
int Operations::edit(int rno)
{
Student r;
int flag=0;
fs.open("Data");
fs.seekg(0, ios:: beg);
while(fs.read((char *)&r,sizeof(r)))
{
    if(r.acceptRollno()==rno)
    {
        flag=1;
        cout<<"\nEnter New Details ";
        r.acceptDetails();
        fs.seekp((int)fs.tellg()-sizeof(r),ios::beg);
        fs.write((char *)&r,sizeof(r));
    }
}
fs.close();
return (flag);
}

int main()
{
```

```
    Operations f;
    int ch,n,i,flag=0;
    do
    {
        "\n\n\t------MENU-------";
        cout<<"\n1.Build a Master Table\n2.List a Table\n3.Insert a new Entry\n4.Delete Old Entry\
        cout<<"\nEnter your choice ";
        cin>>ch;
        switch(ch)
        {
            case 1:
                if(flag==0)
                {
                    cout<<"\nEnter No. of Students to insert ";
                    cin>>n;
                    for(i=0;i<n;i++)
                    {
                        f.addRecord();
                    }
                    flag=1;
                }
                else
                {
                    cout<<"\nsorry table is already built";
                }
                break;
            case 2:
                 f.show();
                 break;

            case 3:f.addRecord();
                break;
            case 4:cout<<"\nEnter Roll No of Student Whoes Student is to be Deleted :";
              cin>>n;
              i=f.DelRecord(n);
              if(i==1)
              {

                 cout<<"\nStudent Deleted Successfully ";
           }
else
{
cout<<"\nStudent not Found ";
}
break;
case 5:cout<<"\nEnter Roll No of Student Whoes Student is to be Edit:";
cin>>n;
i=f.edit(n);
if(i==1)
{
    cout<<"\n Student Modified Successfully ";
}
else
{
cout<<"\nStudent not Found ";
```

```
}
break;
case 6:cout<<"\nEnter Roll No of Student to be Searched ";
cin>>n,
f.search(n);
break;
case 7:
break;
default:cout<<"\n Invalid Choice....";
}
}while(ch!=7);
return(0);
    }
```