Name: Devanshu Surana

Roll No.: 23

Panel: C

Batch: C1

OOCCJ Lab Assignment 4A

CODE:

FILE HANDLING:

```
#include <iostream>
#include <fstream>
using namespace std;
class student{ private:
int rollno; string name; int id;
public:
student();
student(int rollno,string name,int id);
void display();
void get();
void clear();
};
student::student(){
rollno=0000;
name="UN_named";
id=9999;
}
student::student(int x,string y,int z){ rollno=x;
```

```
name=y;
id=z;
void student::display(){
cout<<"Roll Number is: "<<rollno<<endl; cout<<"Name is:</pre>
"<<name<<endl; cout<<"ID Is: "<<id<<endl;
}
void student::get(){
int a,b;
string c;
cout<<"Your Roll Number is: "<<endl; cin>>a;
rollno=a;
cout<<"Your Name Is: "<<endl; cin>>c;
name=c;
cout<<"Your ID Is:"<<endl; cin>>b;
id=b;
}
void student :: clear(){
rollno=-1;
name="NULL";
id=9999;
}
int main() {
ifstream fin;
ofstream fout;
```

```
student s1; fout.open("text.txt",ios::out); s1.get();
fout.write((char *)&s1,sizeof(s1)); fout.close(); fin.open("text.txt",ios::in);
s1.clear();
s1.display();
fin.read((char *)&s1,sizeof(s1)); s1.display();
return 0;
}
```

OUTPUT:-

```
Your Roll Number is:
23
Your Name Is:
Devanshu Surana
Your ID Is:
Roll Number is: -1
Name is: NULL
ID Is: 9999
Roll Number is: -1
Name is: NULL
ID Is: 9999
```

EXCEPTION HANLDING:

```
#include<iostream>
#include<fstream>
using namespace std;
```

class hotel

```
{
  string cust_name;
  int cust_id;
  int income;
  string city;
  string room_type;
  int age;
  public:
    hotel();
     void accept();
     void display();
     void getage();
     void getincome();
     void getcity();
     void getroom_type();
};
hotel::hotel()
{
  cust_name="";
  cust_id=0;
  income=0;
  city="";
  room_type="";
  age=0;
```

```
}
void hotel::accept()
{
  cout <<"\n Enter customer name: ";</pre>
  cin >> cust_name;
  cout <<"\n Enter customer id: ";</pre>
  cin >> cust_id;
  getage();
  getincome();
  getcity();
  getroom_type();
}
void hotel::getage()
  try
     int a;
     cout<<"Enter your age: ";</pre>
     cin>>a;
     if (a<18 || a>55)
     throw(a);
     age=a;
  }
  catch(int a1)
```

```
{
     cout<<"Age should be between 18 and 55!!"<<endl;
}
void hotel::getincome()
{
  try
     int b;
     cout<<"Enter your income: ";</pre>
     cin>>b;
     if (b<50000 \parallel b>100000)
     throw(b);
     income=b;
  catch (int b1)
     cout<<"Income should be between 50k and 1L!!"<<endl;
  }
}
void hotel::getcity()
{
  try
```

```
string c;
     cout<<"Enter city: ";</pre>
     cin>>c;
     if (c!="pune" && c!="mumbai")
     throw(c);
     city=c;
  catch(string c1)
  {
     cout<<"City must be pune or mumbai!!"<<endl;</pre>
  }
}
void hotel::getroom_type()
{
  try
  {
     string d;
     cout<<"Enter room type: ";</pre>
     cin>>d;
     if (d!="delux" && d!="super delux")
     throw(d);
     room_type=d;
  }
  catch(string d1)
  {
```

```
cout<<"Room must be delux or super delux!!"<<endl;</pre>
  }
}
void hotel::display()
{
  cout<<"Customer id: "<<cust_id<<endl;</pre>
  cout<<"Customer name: "<<cust_name<<endl;</pre>
  cout<<"Customer age: "<<age<<endl;</pre>
  cout<<"Customer income: "<<income<<endl;</pre>
  cout<<"Customer city: "<<city<<endl;</pre>
  cout<<"Customer roomtype: "<<room_type<<endl;</pre>
}
int main()
{
  hotel h1,h2;
  h1.accept();
  ofstream out("hotel.txt",ios::out);
  out.write((char*)&h1,sizeof(h1));
  out.close();
  ifstream in("hotel.txt",ios::in);
  in.read((char*)&h2,sizeof(h2));
  in.close();
  h2.display();
return 0;
```

OUTPUT:

```
Enter customer name: devanshu

Enter customer id: 1
Enter your age: 19
Enter your income: 70000
Enter city: pune
Enter room type: delux
Customer id: 1
Customer name: devanshu
Customer age: 19
Customer income: 70000
Customer city: pune
Customer roomtype: delux
```