

Code:

```
#include <iostream>
#include <string.h>
#include <exception>
using namespace std;

class Student
{
private:
    string name;
    int roll_no;
    string class_name;
    char division;
    string dob;
    string blood_group;
    string contact_address;
    string phone_no;
    string driving_license;

public:
    Student()
    {
        this->name = "";
        this->roll_no = 0;
        this->class_name = "";
        this->division = 'A';
        this->dob = "";
        this->blood_group = "";
        this->contact_address = "";
        this->phone_no = "";
        this->driving_license = "";
    }

    Student(Student &other)
    {
        this->name = other.name;
        this->roll_no = other.roll_no;
        this->class_name = other.class_name;
        this->division = 'A';
        this->dob = other.dob;
        this->blood_group = other.blood_group;
        this->contact_address = other.contact_address;
        this->phone_no = other.phone_no;
        this->driving_license = other.driving_license;
    }
}
```

```

~Student()
{
    cout << "Memory Deallocated!!!";
}

inline void display()
{
    cout << "\n\nStudent Details: \n";
    cout << "Name: " << name << endl;
    cout << "Roll No: " << roll_no << endl;
    cout << "Class Name : " << class_name << endl;
    cout << "Division: " << division << endl;
    cout << "Date of Birth: " << dob << endl;
    cout << "Blood Group: " << blood_group << endl;
    cout << "Contact Address: " << contact_address << endl;
    cout << "Telephone Number: " << phone_no << endl;
    cout << "Driving license Number: " << driving_license << endl;
}

friend class Data;
};

class Data
{
public:
    void getData(Student &student)
    {
        cout << "Enter student Name: ";
        cin >> student.name;

        cout << "Enter student Roll No: ";
        cin >> student.roll_no;

        cout << "Enter student class name: ";
        cin >> student.class_name;

        cout << "Enter student date of birth: ";
        cin >> student.dob;

        cout << "Enter student blood group: ";
        cin >> student.blood_group;

        cout << "Enter student contact address: ";
        cin >> student.contact_address;

        cout << "Enter student phone number: ";
    }
}

```

```

        cin >> student.phone_no;

        cout << "Enter student driving license number: ";
        cin >> student.driving_license;

        cout<<"\n";
    }
};

int main()
{
    try
    {
        Student *student1 = new Student();
        Data data1;

        data1.getData(*student1);
        student1->display();

        Student student2 = *student1;
        student2.display();

        delete student1;
    }
    catch (exception &e)
    {
        cerr << e.what() << '\n';
    }
}

```

Output:

```

PS D:\Education\Degree\Third Sem\Object Oriented Programming\Lab Assignment\Codes> cd "d:\Education\Degree\Third Sem\Object Oriented Programming\Lab Assignment\Codes\" ; if ($?) { g++ Information_system.cpp -o Information_system } ; if ($?) { .\Information_system }

Enter student Name: Suraj
Enter student Roll No: 73
Enter student class name: SACE
Enter student date of birth: 19-01-2047
Enter student blood group: A+
Enter student contact address: Karjat
Enter student phone number: 9309191026
Enter student driving license number: MH1620120123456.

Student Details:
Name: Suraj
Roll No: 73
Class Name :SACE
Division: A
Date of Birth: 19-01-2047
Blood Group: A+
Contact Address: Karjat
Telephone Number: 9309191026
Driving license Number: MH1620120123456.

Memory Deallocated!!!Memory Deallocated!!!

```