

## Assignment 02 :

Name : Gangurde Vaishnavi Bharat

Roll No : 25

Division : A

Class : SE

Problem Statement :

Develop a program in c++ to create a database of student's information system contain the following information : ( Name, Roll No, Class, Division, Date of birth, Blood Group, Contact Address, Telephone Number, Driving license number and other ). Construct the database with suitable member functions, Make use of constructor, default constructor, copy constructor, destructor, static member functions, friend class, this pointer, inline code and dynamic memory allocation operator – new and delete as well as exception handling.

Source Code :

---

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

class studInfo
{
private:
    static int object_count;

public:
    // Creation of variables
    char name[20];
    int rollNo;
    char className[3];
    char division[3];
```

```

char DOB[20];
char bloodGroup[3];
char contactAddress[20];
char telephoneNo[20];
char drivingLicenceNo[20];

// Creation of default constructor
studInfo()
{
    rollNo = 1;
    strcpy(name, "vaishu");
    strcpy(className, "TE");
    strcpy(division, "A");
    strcpy(DOB, "1/08/2002");
    strcpy(bloodGroup, "A+");
    strcpy(contactAddress, "chandwad");
    strcpy(telephoneNo, "1245");
    strcpy(drivingLicenceNo, "7896");
}

// Creation of copy constructor
studInfo(studInfo *t)
{
    rollNo = t->rollNo;
    strcpy(name, t->name);
    strcpy(className, t->className);
    strcpy(division, t->division);
    strcpy(DOB, t->DOB);
    strcpy(bloodGroup, t->bloodGroup);
    strcpy(contactAddress, t->contactAddress);
    strcpy(telephoneNo, t->telephoneNo);
    strcpy(drivingLicenceNo, t->drivingLicenceNo);
}

// Creation of data members
void accept()
{
    cout << "\nAdd Student Record Here:" << endl;
    cout << "=====" << endl;

    cout << "Enter the name of the student:" << endl;
    cin >> name;
}

```

```

    cout << "Enter the roll no:" << endl;
    cin >> rollNo;

    cout << "Enter the class:" << endl;
    cin >> className;

    cout << "Enter the division:" << endl;
    cin >> division;

    cout << "Enter the DOB:" << endl;
    cin >> DOB;

    cout << "Enter the blood group:" << endl;
    cin >> bloodGroup;

    cout << "Enter the contact address:" << endl;
    cin >> contactAddress;

    cout << "Enter the telephone no:" << endl;
    cin >> telephoneNo;

    cout << "Enter the driving licence no:" << endl;
    cin >> drivingLicenceNo;

    cout << "===== " << endl;
}

void display()
{
    cout << "\nStudent Records:" << endl;
    cout << "===== " << endl;
    cout << "Name of student : " << name << endl;
    cout << "          Roll No : " << rollNo << endl;
    cout << "          Class : " << className << endl;
    cout << "          Division : " << division << endl;
    cout << "          DOB : " << DOB << endl;
    cout << "          Blood Group : " << bloodGroup << endl;
    cout << "Contact Address : " << contactAddress << endl;
    cout << "  Telephone No : " << telephoneNo << endl;
    cout << "DrivingLicenceNo: " << drivingLicenceNo << endl;
    cout << "===== " << endl;
}

```

```

static void count()
{
    cout << "Total objects are :" << object_count << endl;
}
};

int studInfo::object_count = 0;

int main()
{
    studInfo obj1, obj2;
    obj2.accept();
    studInfo obj3(obj2);
    obj1.display();
    obj2.display();
    obj3.display();

    studInfo::count();

    return 0;
}

```

```

/*
OUTPUT :
Add Student Record Here:
=====
Enter the name of the student:
Vaishnavi
Enter the roll no:
25
Enter the class:
SE
Enter the division:
A
Enter the DOB:
24/07/2002
Enter the blood group:
O+
Enter the contact address:
chandwad
Enter the telephone no:
7378914638

```

Enter the driving licence no:

2556

=====

Student Records:

=====

Name of student : vaishu

Roll No : 1

Class : TE

Division : A

DOB : 1/08/2002

Blood Group : A+

Contact Address : chandwad

Telephone No : 1245

DrivingLicenceNo: 7896

=====

Student Records:

=====

Name of student : Vaishnavi

Roll No : 25

Class : SE

Division : A

DOB : 24/07/2002

Blood Group : O+

Contact Address : chandwad

Telephone No : 7378914638

DrivingLicenceNo: 2556

=====

Student Records:

=====

Name of student : Vaishnavi

Roll No : 25

Class : SE

Division : A

DOB : 24/07/2002

Blood Group : O+

Contact Address : chandwad

Telephone No : 7378914638

DrivingLicenceNo: 2556

=====

Total objects are :0

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