Assignment – 02

Name: Shubham Chemate   **Subject:** OOP Lab

Roll No: 21118   **Date:** 07-Sept-2020

Batch: E-1

Problem Statement:

Develop a program in C++ to create a database of student's information system containing the following information: Name, Roll Number, Class, Division, Date of Birth, Blood Group, Contact Address, Telephone Number, Driving Licence Number and Other. Construct a database with suitable member function. Make use of constructor, default constructor, copy constructor, destructor, static member functions, friend class, this pointer, inline code and dynamic memory allocation operators-new and delete as well as exception handling.

Source Code:

Source code file(.cpp) is provided with this document as attachment.

Input and Output Demo:

Entering Student Information:

```
Enter data for student number : 1
Enter roll number (between 1 to 86) : 18
Enter name : Shubham Chemate
Enter class (class should be FE, SE, TE, BE) : SE
Enter div (div should be in 1 to 11) : 1
Enter Personal Info :
Enter DOB (DD/MM/YYYY) : 20/09/2020
Enter blood group : A+
Enter Address : xyz Road, Parner, A.Nagar - 414103
Enter Driving Licence Number : asdf1234
Enter Telephone Number : 1234567890
Student number 1 is created successfully.
```

Output (Student Information):

```
Student Info for roll number : 18
Name : Shubham Chemate
Class : SE, Div : 1
Date of Birth (DD/MM/YYYY) : 20/09/2020
Blood Group : A+
Address : xyz Road, Parner, A.Nagar - 414103
Driving Licence Number : asdf1234
Telephone Number : 1234567890
```

Output (Student Information – through copy constructor (Copies data of first student)):

```
=========Copy Constructor (Used for copying data of 1st Student)=========
Student Info for roll number : 18
Name : Shubham Chemate
Class : SE, Div : 1
Date of Birth (DD/MM/YYYY) : 20/09/2020
Blood Group : A+
Address : xyz Road, Parner, A.Nagar - 414103
Driving Licence Number : asdf1234
Telephone Number : 1234567890
```

Exception Handling (For invalid roll number):

```
For how many students do you want to create database?? 1

Enter data for student number : 1
Enter roll number (between 1 to 86) : 0
ERROR: Invalid Roll Number. It should be between (1 and 86)
```

Thank You.