**ASSIGNMENT NO:** 1

**PROBLEM STATEMENT:**

Develop an object oriented program in C++ to create a database of student information system containing the following information: Name, Roll Number, Class, Division, Date of Birth, Blood Group, Contact Address, Telephone Number, Driving license Number, etc. Construct the database with suitable member functions, friend class/friend function, this pointer, inline code and dynamic memory location operators – new and delete. Implement all the keywords as mentioned in the problem statement.

**AIM OF ASSIGNMENT:**

C++ Program to create a student database to understand the concepts of classes and objects, friend class, inline and static member functions, this pointer, dynamic memory allocation.

**DESCRIPTION:**

In this program ,we have created two array of objects of two different classes to store data of student. The object of one class can access the private members of the other class due to friend class funtionality. The arrays of the object are been initialized dynamically by using new and delete opeartors. Deafult Constructor and destructor is used for initilization of object when it is created. Static members are used for counting the number of records created and the use of the pointer has also been made.

**OOP CONCEPT USED:**

* Classes and Objects
* Member Functions including static, inline and friend functions
* this pointer
* Dynamic Memory Allocation Operators including new and delete

**OTHER FUNCTIONALITY USED:**

* getline function

**CONCLUSION:**

Hence, we created a student database and learnt the use of class and array of objects, new and delte operators for dynamic memory allocation,inline keyword and friend class to access the private members of another class, this pointer.