

## LAB EXERCISE-3

**Q1.** Create a database named **dblab1**. Use this newly created database. Create the following tables under the **dblab1** database.

- **Student( RollNo char (8), SName varchar (20), Gender char (1), City varchar(20))** where RollNo is defined as the key attribute. Also, assume that the RollNo values are of IIITDM's RollNo types such as "1901CS99"
- **Course (CCode char(5), CName varchar(20), Credit smallint)** where CCode is defined as the key attribute. Also assume that the CCode consists of values such as "CS354", "ME305", etc, i.e. first two are upper case character types and remaining three are digit types.
- **Enrolled (RollNo char(8), CCode char(5), YoE int)** with RollNo and CCode are defined as the foreign key constraints to Student (RollNo) and Course (CCode) respectively.

For each of the following questions, write a MySQL query. You need to insert required values in the tables to check whether the MySQL queries are working or not.

- In the Course table add a column course type (CType varchar(20)). This CType will take a value from Core, Elective, or Open Elective. In the Student table add a column Email of varchar(30). This column should be unique and only one email value is to be inserted. Insert email values in "username@domain-name" format.
- Find the name of all the courses which start with "CS" code.
- Find the name of the male students who have at least two "a"s in their names.
- Find the students who have not enrolled in between 2018 and 2019.
- Find the course with least credit.
- Find the name of the Course which is not enrolled by any students in the year 2020.
- Find the total number of students city wise.
- Find the rollno of the students who have enrolled to 5 number of courses.
- Find the total number of courses enrolled by student with roll no "1901CS99".
- Find all the 5 level courses (the digits parts of the course code should start with 5).
- Count the number of students containing "CS" as part of the RollNo.
- Find the roll no of students who have enrolled in more than 4 courses in the year 2020.
- Find the course code which is taken by most number of female students who are from Delhi city.
- Find the name of all the students whose email ids have "gmail.com" or "yahoo.com" as the domain name.

**Note: Read the Query very carefully and accordingly make the entry in table. Result of query **Must Not** be empty otherwise zero marks will be assigned.**