# SQL LAB – 1

**BY**

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# Questions

- Create a database with the name StudentManagementSystem.

  Create a table with named Student with attributes:

  - StudentID (Primary Key)
  - FirstName
  - LastName
  - DateOfBirth
  - Gender
  - Email
  - Phone

  Create a table with name Course with attributes:

  - CourseID (Primary Key)
  - CourseTitle
  - Credits

  Create a table with named Instructor with attributes:

  - InstructorID (Primary Key)
  - FirstName
  - LastName
  - Email

  Create a table with named Enrollment with attributes:

  - EnrollmentID (Primary Key)
  - EnrollmentDate
  - StudentID(Foreign key)

- CourseID(Foreign Key)
- InstructorID(Foreign key)

Create a table with named Score with attributes:

- ScoreID (Primary Key)
- CourseID (Foreign key)
- StudentID (Foreign Key)
- DateOfExam
- CreditObtained

Create a table with named Feedback with attributes:

- FeedbackID (Primary Key)
- StudentID (Foreign key)
- Date
- InstructorName
- Feedbac

- Create a database with the name StudentManagementSystem.

  Code:

```
mysql> CREATE DATABASE StudentManagementSystem;
Query OK, 1 row affected (0.08 sec)
```

Create a table with named Student with attributes:

● StudentID (Primary Key)

● FirstName

● LastName

● DateOfBirth

● Gender

● Email

● Phone

Code:

```
mysql> create table Student
    -> (
    -> studentId int not null primary key,
    -> firstName varchar(30) not null,
    -> lastName varchar(30) not null,
    -> dateOfBirth date not null,
    -> gender char(1) not null,
    -> email varchar(50) not null unique,
    -> phone int unique check(phone=10)
    -> );
Query OK, 0 rows affected (0.09 sec)
```

Output:

```
mysql> describe Student;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| studentId   | int         | NO   | PRI | NULL    |       |
| firstName   | varchar(30) | NO   |     | NULL    |       |
| lastName    | varchar(30) | NO   |     | NULL    |       |
| dateOfBirth | date        | NO   |     | NULL    |       |
| gender      | char(1)     | NO   |     | NULL    |       |
| email       | varchar(50) | NO   | UNI | NULL    |       |
| phone       | int         | YES  | UNI | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
7 rows in set (0.04 sec)
```

Create a table with name Course with attributes:

- CourseID (Primary Key)
- CourseTitle
- Credits

Code:

```
mysql> create table Course
    -> (
    -> CourseId int primary key,
    -> courseTitle varchar(20) not null,
    -> credits int not null
    -> );
Query OK, 0 rows affected (0.04 sec)
```

Output:

```
mysql> describe Course;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| CourseId    | int         | NO   | PRI | NULL    |       |
| courseTitle | varchar(20) | NO   |     | NULL    |       |
| credits     | int         | NO   |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
3 rows in set (0.01 sec)
```

Create a table with named Instructor with attributes:

- InstructorID (Primary Key)
- FirstName
- LastName
- Email

Code:

```
mysql> create table Instructor
    -> (
    -> instructorId int Primary key,
    -> firstName varchar(30) not null,
    -> lastName varchar(20) not null,
    -> Email varchar(50) not null unique
    -> );
Query OK, 0 rows affected (0.08 sec)
```

Output:

```
mysql> describe Instructor;
+--------------+-------------+------+-----+---------+-------+
| Field        | Type        | Null | Key | Default | Extra |
+--------------+-------------+------+-----+---------+-------+
| instructorId | int         | NO   | PRI | NULL    |       |
| firstName    | varchar(30) | NO   |     | NULL    |       |
| lastName     | varchar(20) | NO   |     | NULL    |       |
| Email        | varchar(50) | NO   | UNI | NULL    |       |
+--------------+-------------+------+-----+---------+-------+
4 rows in set (0.00 sec)
```

Create a table with named Enrollment with attributes:

- EnrollmentID (Primary Key)
- EnrollmentDate
- StudentID(Foreign key)
- CourseID(Foreign Key)
- InstructorID(Foreign key)

Code:

```
mysql> CREATE TABLE Enrollment (
    ->     EnrollmentID INT PRIMARY KEY,
    ->     EnrollmentDate DATE,
    ->     StudentID INT,
    ->     CourseID INT,
    ->     InstructorID INT,
    ->     FOREIGN KEY (StudentID) REFERENCES Student(StudentID),
    ->     FOREIGN KEY (CourseID) REFERENCES Course(CourseID),
    ->     FOREIGN KEY (InstructorID) REFERENCES Instructor(InstructorID)
    -> );
Query OK, 0 rows affected (0.11 sec)
```

Output:

```
mysql> describe Enrollment;
+----------------+------+------+-----+---------+-------+
| Field          | Type | Null | Key | Default | Extra |
+----------------+------+------+-----+---------+-------+
| EnrollmentID   | int  | NO   | PRI | NULL    |       |
| EnrollmentDate | date | YES  |     | NULL    |       |
| StudentID      | int  | YES  | MUL | NULL    |       |
| CourseID       | int  | YES  | MUL | NULL    |       |
| InstructorID   | int  | YES  | MUL | NULL    |       |
+----------------+------+------+-----+---------+-------+
5 rows in set (0.01 sec)
```

Create a table with named Score with attributes:

- ScoreID (Primary Key)
- CourseID (Foreign key)
- StudentID (Foreign Key)
- DateOfExam
- CreditObtained

Code:

```
mysql> CREATE TABLE Score (
    ->     ScoreID INT PRIMARY KEY,
    ->     CourseID INT,
    ->     StudentID INT,
    ->     DateOfExam DATE,
    ->     CreditObtained int not null,
    -> FOREIGN KEY (CourseID) REFERENCES Course(CourseID),
    ->     FOREIGN KEY (StudentID) REFERENCES Student(StudentID)
    -> );
Query OK, 0 rows affected (0.10 sec)
```

Output:

```
mysql> describe Score;
+----------------+------+------+-----+---------+-------+
| Field          | Type | Null | Key | Default | Extra |
+----------------+------+------+-----+---------+-------+
| ScoreID        | int  | NO   | PRI | NULL    |       |
| CourseID       | int  | YES  | MUL | NULL    |       |
| StudentID      | int  | YES  | MUL | NULL    |       |
| DateOfExam     | date | YES  |     | NULL    |       |
| CreditObtained | int  | NO   |     | NULL    |       |
+----------------+------+------+-----+---------+-------+
5 rows in set (0.00 sec)
```

Create a table with named Feedback with attributes:

- FeedbackID (Primary Key)
- StudentID (Foreign key)
- Date
- InstructorName
- Feedback

Code:

```
mysql> CREATE TABLE Feedback (
    ->     FeedbackID INT PRIMARY KEY,
    ->     StudentID INT,
    ->     Date DATE,
    ->     InstructorName VARCHAR(100) not null,
    ->     Feedback varchar(100),
    ->     FOREIGN KEY (StudentID) REFERENCES Student(StudentID)
    -> );
Query OK, 0 rows affected (0.09 sec)
```

Output:

```
mysql> describe Feedback;
+----------------+-------------+------+-----+---------+-------+
| Field          | Type        | Null | Key | Default | Extra |
+----------------+-------------+------+-----+---------+-------+
| FeedbackID     | int         | NO   | PRI | NULL    |       |
| StudentID      | int         | YES  | MUL | NULL    |       |
| Date           | date        | YES  |     | NULL    |       |
| InstructorName | varchar(100) | NO   |     | NULL    |       |
| Feedback       | varchar(100) | YES  |     | NULL    |       |
+----------------+-------------+------+-----+---------+-------+
5 rows in set (0.00 sec)
```