Activity – Lesson 1

1. Create a database named **school_db**.

```
MariaDB [(none)]> CREATE DATABASE school_db;
Query OK, 1 row affected (0.011 sec)
```

2. Show all databases.

```
MariaDB [(none)]> SHOW DATABASES;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| phpmyadmin         |
| school_db          |
| test               |
+--------------------+
6 rows in set (0.019 sec)
```

3. Use the database you have created.

```
MariaDB [(none)]> USE school_db;
Database changed
```

4. Create a table named **students** with the following columns:

Column name	Data Type	Notes
id	INT	Auto increment, primary key
name	VARCHAR(100)	
age	INT	
email	VARCHAR(100)	
course	VARCHAR(100)	

```
MariaDB [school_db]> CREATE TABLE students (
    ->     id INT AUTO_INCREMENT PRIMARY KEY,
    ->     name VARCHAR(100),
    ->     age INT,
    ->     email VARCHAR(100),
    ->     course VARCHAR(100)
    -> );
Query OK, 0 rows affected (0.063 sec)
```

5. Show table structure

```
MariaDB [school_db]> DESCRIBE students;
+--------+--------------+------+-----+---------+----------------+
| Field  | Type         | Null | Key | Default | Extra          |
+--------+--------------+------+-----+---------+----------------+
| id     | int(11)      | NO   | PRI | NULL    | auto_increment |
| name   | varchar(100) | YES  |     | NULL    |                |
| age    | int(11)      | YES  |     | NULL    |                |
| email  | varchar(100) | YES  |     | NULL    |                |
| course | varchar(100) | YES  |     | NULL    |                |
+--------+--------------+------+-----+---------+----------------+
5 rows in set (0.125 sec)
```

6. Insert 3 students into the table.
    a. Alice Johnson / 20 / alice@example.com / BSCS
    b. Bob Smith / 22 / bob@example.com / BSIT
    c. Clara Davis / 21 / clara@example.com / BSEMC

```
MariaDB [school_db]> INSERT INTO students (name, age, email, course)
    -> VALUES
    -> ('Alice Johnson', 20, 'alice@example.com', 'BSCS'),
    -> ('Bob Smith', 22, 'bob@example.com', 'BSIT'),
    -> ('Clara Davis', 21, 'clara@example.com', 'BSEMC');
Query OK, 3 rows affected (0.013 sec)
Records: 3  Duplicates: 0  Warnings: 0
```

7. Display all records in the **students** table.

```
MariaDB [school_db]> SELECT * FROM students;
+----+--------------+------+-------------------+--------+
| id | name         | age  | email             | course |
+----+--------------+------+-------------------+--------+
|  1 | Alice Johnson |   20 | alice@example.com | BSCS   |
|  2 | Bob Smith     |   22 | bob@example.com   | BSIT   |
|  3 | Clara Davis   |   21 | clara@example.com | BSEMC  |
+----+--------------+------+-------------------+--------+
3 rows in set (0.003 sec)
```

8. Display only names and emails.

```
MariaDB [school_db]> SELECT name, email FROM students;
+--------------+-------------------+
| name         | email             |
+--------------+-------------------+
| Alice Johnson | alice@example.com |
| Bob Smith     | bob@example.com   |
| Clara Davis   | clara@example.com |
+--------------+-------------------+
3 rows in set (0.001 sec)
```

9. Display students older than 20.

```
MariaDB [school_db]> SELECT * FROM students WHERE age > 20;
+----+------------+------+-------------------+--------+
| id | name       | age  | email             | course |
+----+------------+------+-------------------+--------+
|  2 | Bob Smith  |   22 | bob@example.com   | BSIT   |
|  3 | Clara Davis |   21 | clara@example.com | BSEMC  |
+----+------------+------+-------------------+--------+
2 rows in set (0.021 sec)
```

10. Change Clara's course to Data Science.

```
MariaDB [school_db]> UPDATE students
    -> SET course = 'Data Science'
    -> WHERE name = 'Clara Davis';
Query OK, 1 row affected (0.012 sec)
Rows matched: 1  Changed: 1  Warnings: 0

MariaDB [school_db]> SELECT * FROM students;
+----+--------------+------+-------------------+--------------+
| id | name         | age  | email             | course       |
+----+--------------+------+-------------------+--------------+
|  1 | Alice Johnson |   20 | alice@example.com | BSCS         |
|  2 | Bob Smith     |   22 | bob@example.com   | BSIT         |
|  3 | Clara Davis   |   21 | clara@example.com | Data Science |
+----+--------------+------+-------------------+--------------+
3 rows in set (0.001 sec)
```

11. Delete the student named Bob Smith.

```
MariaDB [school_db]> DELETE FROM students
    -> WHERE name = 'Bob Smith';
Query OK, 1 row affected (0.009 sec)

MariaDB [school_db]> SELECT * FROM students;
+----+--------------+------+-------------------+--------------+
| id | name         | age  | email             | course       |
+----+--------------+------+-------------------+--------------+
|  1 | Alice Johnson |   20 | alice@example.com | BSCS         |
|  3 | Clara Davis   |   21 | clara@example.com | Data Science |
+----+--------------+------+-------------------+--------------+
2 rows in set (0.001 sec)
```