

# Lab Assignment 1

## Tasks:

1. Create database and table

```
C:\>cd xampp

C:\xampp>cd mysql

C:\xampp\mysql>cd bin

C:\xampp\mysql\bin>mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 9
Server version: 10.4.24-MariaDB mariadb.org binary distribution

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
```

```
MariaDB [(none)]> create database lab1;
Query OK, 1 row affected (0.001 sec)

MariaDB [(none)]> show databases;
+-----+
| Database |
+-----+
| ethfund  |
| gatesofgotham |
| information_schema |
| lab1     |
| mysql    |
| performance_schema |
| phpmyadmin |
+-----+
7 rows in set (0.001 sec)
```

```
MariaDB [(none)]> use lab1
Database changed
MariaDB [lab1]> create table table1(
  -> id int NOT NULL auto_increment,
  -> name varchar(100) not null,
  -> age int not null,
  -> branch varchar(100) not null,
  -> primary key (id)
  -> );
Query OK, 0 rows affected (0.061 sec)
```

```
MariaDB [lab1]> show tables;
+-----+
| Tables_in_lab1 |
+-----+
| table1          |
+-----+
1 row in set (0.001 sec)
```

```
MariaDB [lab1]> describe table1
-> ;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| id    | int(11)       | NO   | PRI | NULL    | auto_increment |
| name  | varchar(100)  | NO   |     | NULL    |                |
| age   | int(11)       | NO   |     | NULL    |                |
| branch | varchar(100)  | NO   |     | NULL    |                |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.049 sec)
```

## 2. Insert data in table

```
MariaDB [lab1]> insert into table1 values(2, "Omkar Mundlik", 19, "AI&DS", "Latur");
Query OK, 1 row affected (0.039 sec)
```

```
MariaDB [lab1]> insert into table1
-> (id, name, age, branch, city)
-> values
-> (3, "Jayesh Mundphane", 20, "Mechanical", "Solapur"),
-> (4, "Asif Mursal", 20, "AI&DS", "Kolhapur"),
-> (5, "Harsh Mule", 19, "Chemical", "Nagpur")
-> ;
Query OK, 3 rows affected (0.039 sec)
Records: 3 Duplicates: 0 Warnings: 0
```

## 3. Display table

```
MariaDB [lab1]> select * from table1;
+-----+-----+-----+-----+-----+
| id | name          | age | branch      | city      |
+-----+-----+-----+-----+-----+
| 1  | Mustansir Bohari | 19  | AI&DS       | Nandurbar |
| 2  | Omkar Mundlik   | 19  | AI&DS       | Latur     |
| 3  | Jayesh Mundphane | 20  | Mechanical  | Solapur   |
| 4  | Asif Mursal     | 20  | AI&DS       | Kolhapur  |
| 5  | Harsh Mule      | 19  | Chemical    | Nagpur    |
+-----+-----+-----+-----+-----+
5 rows in set (0.001 sec)
```

4. Retrieve data from student name and branch

```
MariaDB [lab1]> select name, branch from table1;
+-----+-----+
| name          | branch    |
+-----+-----+
| Mustansir Bohari | AI&DS     |
| Omkar Mundlik   | AI&DS     |
| Jayesh Mundphane | Mechanical |
| Asif Mursal     | AI&DS     |
| Harsh Mule      | Chemical  |
+-----+-----+
5 rows in set (0.000 sec)
```

5. Add extra column in table

```
MariaDB [lab1]> alter table table1
-> add
-> gender varchar(10);
Query OK, 0 rows affected (0.050 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

6. Update data

```
MariaDB [lab1]> alter table table1
-> drop column gender;
Query OK, 0 rows affected (0.049 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

7. Delete a row from a table

```
MariaDB [lab1]> delete from table1
-> where
-> id = 5;
Query OK, 1 row affected (0.042 sec)

MariaDB [lab1]> select * from table1;
+-----+-----+-----+-----+-----+
| id | name          | age | branch    | city    |
+-----+-----+-----+-----+-----+
| 1 | Mustansir Bohari | 19 | AI&DS     | Nandurbar |
| 2 | Omkar Mundlik   | 19 | AI&DS     | Latur    |
| 3 | Jayesh Mundphane | 20 | Mechanical | Solapur  |
| 4 | Asif Mursal     | 20 | AI&DS     | Kolhapur |
+-----+-----+-----+-----+-----+
4 rows in set (0.001 sec)
```

8. Implement drop and truncate and write observation

```
MariaDB [lab1]> use lab1
Database changed
MariaDB [lab1]> create table table2( test varchar(100));
Query OK, 0 rows affected (0.062 sec)

MariaDB [lab1]> describe table2;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| test  | varchar(100) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.053 sec)

MariaDB [lab1]> drop table table2;
Query OK, 0 rows affected (0.047 sec)

MariaDB [lab1]> show tables;
+-----+
| Tables_in_lab1 |
+-----+
| apnatable       |
+-----+
1 row in set (0.001 sec)
```

```
MariaDB [lab1]> select * from table2;
+-----+
| test  |
+-----+
| Data 1 |
| Data 2 |
+-----+
2 rows in set (0.001 sec)

MariaDB [lab1]> truncate table2;
Query OK, 0 rows affected (0.070 sec)

MariaDB [lab1]> select * from table2;
Empty set (0.001 sec)
```

### 9. Implement rename command

```
MariaDB [lab1]> alter table
-> table1
-> rename ApnaTable
-> ;
Query OK, 0 rows affected (0.047 sec)

MariaDB [lab1]> describe ApnaTable
-> ;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| id    | int(11)       | NO   | PRI | NULL    | auto_increment |
| name  | varchar(100)  | NO   |     | NULL    |                |
| age   | int(11)       | NO   |     | NULL    |                |
| branch | varchar(100)  | NO   |     | NULL    |                |
| city  | varchar(100)  | YES  |     | NULL    |                |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.048 sec)
```

### Observation:

1. **Drop table**
  - a. This command deletes a table in database
  - b. Syntax: DROP TABLE table\_name;
2. **Truncate table**
  - a. This command deletes all data inside a table
  - b. Syntax: TRUNCATE table\_name;

### Conclusion:

1. Implemented DDL commands i.e., create, alter, drop, truncate, rename and DML commands i.e., select, insert, update, delete.
2. Comprehended drop and truncate commands