To create new database and table :

To create new Database:-

create Database db;
show databases;

Output:-

```
MariaDB [(none)]> show databases;
+--------------------+
| Database           |
+--------------------+
| db                 |
| information_schema |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
5 rows in set (0.001 sec)
```

To create new table:-

use db;

create Table student (
roll_no int primary key auto_increment,
name varchar(100) not null,
address varchar(100),
marks int not null);

Show tables;

Output:-

```
MariaDB [db]> show tables;
+--------------+
| Tables_in_db |
+--------------+
| student      |
+--------------+
1 row in set (0.001 sec)
```

Altering a Table:-

Add Column:-

alter table student add column class varchar(3);

Output:-

```
+---------+--------------+--------------+-------+-------+
| roll_no | name         | address      | marks | class |
+---------+--------------+--------------+-------+-------+
|       1 | aditya       | bedag        |    83 | NULL  |
|       2 | Leyona       | travancoor   |    93 | NULL  |
|       3 | alan         | london       |    85 | NULL  |
|       4 | Roy          | malapuram    |    73 | NULL  |
|       5 | aboobacker   | adimally     |    86 | NULL  |
|       6 | Sidique      | painavu      |    94 | NULL  |
|       7 | kunjilakshmi | vangikavalla |    92 | NULL  |
|       8 | Mathew       | adimally     |    88 | NULL  |
|       9 | laura        | adimally     |    96 | NULL  |
|      10 | aleena       | pallikavala  |    83 | NULL  |
+---------+--------------+--------------+-------+-------+
10 rows in set (0.002 sec)
```

Rename Column :-

Alter Table student rename column address to town;

Output:-

```
+---------+--------------+--------------+-------+-------+
| roll_no | name         | town         | marks | class |
+---------+--------------+--------------+-------+-------+
|       1 | aditya       | bedag        |    83 | NULL  |
|       2 | Leyona       | travancoor   |    93 | NULL  |
|       3 | alan         | london       |    85 | NULL  |
|       4 | Roy          | malapuram    |    73 | NULL  |
|       5 | aboobacker   | adimally     |    86 | NULL  |
|       6 | Sidique      | painavu      |    94 | NULL  |
|       7 | kunjilakshmi | vangikavalla |    92 | NULL  |
|       8 | Mathew       | adimally     |    88 | NULL  |
|       9 | laura        | adimally     |    96 | NULL  |
|      10 | aleena       | pallikavala  |    83 | NULL  |
+---------+--------------+--------------+-------+-------+
10 rows in set (0.001 sec)
```

Drop Column :-

alter table drop class;

Output:-

```
+---------+------------+---------------+-------+
| roll_no | name       | town          | marks |
+---------+------------+---------------+-------+
|       1 | aditya     | bedag         |    83 |
|       2 | Leyona     | travancoor    |    93 |
|       3 | alan       | london        |    85 |
|       4 | Roy        | malapuram     |    73 |
|       5 | aboobacker | adimally      |    86 |
|       6 | Sidique    | painavu       |    94 |
|       7 | kunjilakshmi | vangikavalla |    92 |
|       8 | Mathew     | adimally      |    88 |
|       9 | laura      | adimally      |    96 |
|      10 | aleena     | pallikavala   |    83 |
+---------+------------+---------------+-------+
10 rows in set (0.001 sec)
```

Modify Column:-

alter table student modify column address varchar(50);
select COLUMN_NAME, DATA_TYPE, CHARACTER_MAXIMUM_LENGTH from information_schema.columns where table_name="student";

Output:-

```
+-------------+-----------+--------------------------+
| COLUMN_NAME | DATA_TYPE | CHARACTER_MAXIMUM_LENGTH |
+-------------+-----------+--------------------------+
| roll_no     | int       |                     NULL |
| name        | varchar   |                      100 |
| address     | varchar   |                       50 |
| marks       | int       |                     NULL |
+-------------+-----------+--------------------------+
4 rows in set (0.001 sec)
```

Drop :-

Drop a Table:-

drop table student;
show tables;

Output:-

```
MariaDB [db]> show tables;
Empty set (0.001 sec)
```

Drop Database:-

drop database db;
show databases;

Output:-

```
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
4 rows in set (0.001 sec)
```

Rename :-

rename table student to stu;
show tables;

Output:-

```
+--------------+
| Tables_in_db |
+--------------+
| stu          |
+--------------+
1 row in set (0.000 sec)
```

Truncate Table:-

Truncate table stu;
select * from stu;

Output:-

```
MariaDB [db]> select * from stu;
Empty set (0.001 sec)
```