

```
Suresh Dahal@ACONITIN c:\xampp
# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 10
Server version: 10.4.32-MariaDB mariadb.org binary distribution

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

Figure 1 login to the database server

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

MariaDB [(none)]> show databases;
+-----+
| Database |
+-----+
| college  |
| information_schema |
| lab      |
| mysql    |
| performance_schema |
| phpmyadmin |
| test     |
| wordpress |
+-----+
8 rows in set (0.023 sec)
```

Figure 2 create database

```
MariaDB [(none)]> use college;
Database changed
MariaDB [college]> .
```

Figure 3 use database

```
MariaDB [college]> drop database college;
Query OK, 0 rows affected (0.011 sec)

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

Figure 4 delete database

```

MariaDB [college]> create table department (dnumber int primary key, dname varchar(
50), mgr_ssn int, mgr_start_date date);
Query OK, 0 rows affected (0.012 sec)

MariaDB [college]> create table employee (eid int primary key, name varchar(50), de
pt_id int, salary int, join_date date);
Query OK, 0 rows affected (0.045 sec)

MariaDB [college]> show tables;
+-----+
| Tables_in_college |
+-----+
| department         |
| employee           |
+-----+
2 rows in set (0.001 sec)

```

Figure 5 create table

```

MariaDB [college]> describe employee;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| eid        | int(11)       | NO   | PRI | NULL    |       |
| name       | varchar(50)   | YES  |     | NULL    |       |
| dept_id    | int(11)       | YES  |     | NULL    |       |
| salary     | int(11)       | YES  |     | NULL    |       |
| join_date  | date          | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.050 sec)

```

Figure 6 describe table

```

MariaDB [college]> drop table employee;
Query OK, 0 rows affected (0.070 sec)

MariaDB [college]> show tables;
+-----+
| Tables_in_college |
+-----+
| department         |
+-----+
1 row in set (0.000 sec)

```

Figure 7 delete table

```

MariaDB [college]> insert into employee values (1, "Suresh", 10, 10000, '2078-10-12
');
Query OK, 1 row affected (0.040 sec)

MariaDB [college]> select * from employee;
+-----+-----+-----+-----+-----+
| eid | name  | dept_id | salary | join_date |
+-----+-----+-----+-----+-----+
| 1   | Suresh | 10      | 10000  | 2078-10-12 |
+-----+-----+-----+-----+-----+
1 row in set (0.000 sec)

```

Figure 8 insert data into the table

```
MariaDB [college]> select * from employee;
+-----+-----+-----+-----+-----+
| eid | name  | dept_id | salary | join_date |
+-----+-----+-----+-----+-----+
| 1   | Suresh | 10      | 10000  | 2078-10-12 |
+-----+-----+-----+-----+-----+
1 row in set (0.000 sec)

MariaDB [college]> truncate table employee;
Query OK, 0 rows affected (0.010 sec)

MariaDB [college]> select * from employee;
Empty set (0.000 sec)
```

Figure 9 view all records from a relation

```
MariaDB [college]> alter table employee add phone varchar(10);
Query OK, 0 rows affected (0.042 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

Figure 10 add new column to the table

```
MariaDB [college]> alter table employee modify column phone varchar(13);
Query OK, 0 rows affected (0.042 sec)
Records: 0 Duplicates: 0 Warnings: 0

MariaDB [college]> describe employee;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| eid   | int(11)       | NO   | PRI | NULL    |       |
| name  | varchar(50)   | YES  |     | NULL    |       |
| dept_id | int(11)      | YES  |     | NULL    |       |
| salary | int(11)       | YES  |     | NULL    |       |
| join_date | date        | YES  |     | NULL    |       |
| phone | varchar(13)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.050 sec)
```

Figure 11 modify the data type of the column

```
MariaDB [college]> alter table employee drop column phone;
Query OK, 0 rows affected (0.042 sec)
Records: 0 Duplicates: 0 Warnings: 0

MariaDB [college]> describe employee;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| eid   | int(11)       | NO   | PRI | NULL    |       |
| name  | varchar(50)   | YES  |     | NULL    |       |
| dept_id | int(11)      | YES  |     | NULL    |       |
| salary | int(11)       | YES  |     | NULL    |       |
| join_date | date        | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.012 sec)
```

Figure 12 delete a column from a relation

```

MariaDB [college]> update employee set salary=20000 where eid = 1;
Query OK, 1 row affected (0.040 sec)
Rows matched: 1  Changed: 1  Warnings: 0

MariaDB [college]> select * from employee;
+-----+-----+-----+-----+-----+
| eid | name  | dept_id | salary | join_date |
+-----+-----+-----+-----+-----+
| 1   | Suresh | 10      | 20000  | 2078-10-12 |
+-----+-----+-----+-----+-----+
1 row in set (0.000 sec)

```

Figure 13 update tuple of a relation

```

MariaDB [college]> delete from employee where eid = 1;
Query OK, 1 row affected (0.002 sec)

MariaDB [college]> select * from employee;
Empty set (0.000 sec)

```

Figure 14 delete a tuple from a relation