

Group A : Lab Assignment No.1

TITLE: Study of Open Source Relational Databases : MySQL

//USE DATABASE

mysql> use info;

Database changed

//SHOW DATABASES

mysql> show databases;

```
+-----+
| Database
|
+-----+
| information_schema |
| host |
| info |
| mysql
|
| performance_schema |
| test
|+-----+
6 rows in set (0.00 sec)
```

//CREATE TABLE

mysql> create table info(roll_no int, name varchar(30), class varchar(20), marks float, dob date);

Query OK, 0 rows affected (0.20 sec)

//INSERT VALUES IN TABLE

mysql> insert into info values('1','harsha','be','98.0','1996-07-12');

Query OK, 1 row affected (0.05 sec)

mysql> insert into info values('2','tej','te','98.1','1997-07-12');

Query OK, 1 row affected (0.25 sec)

```
mysql> insert into info values('2','keshav','te','98.2','1998-05-11');
```

Query OK, 1 row affected (0.08 sec)

//DISPLAY TABLE

```
mysql> select *from info;
```

```
+-----+-----+-----+-----+-----+
| roll_no | name | class | marks | dob
|
+-----+-----+-----+-----+-----+
|
1 | harsha | be | 98 | 1996-07-12 || 2 | tej | te
| 98.1 | 1997-07-12 |
| 2 | keshav | te | 98.2 | 1998-05-11 |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

//DISPLAY PARTICULAR COLUMN

```
mysql> select roll_no,marks from info;
```

```
+-----+-----+
| roll_no | marks |
+-----+-----+
| 1 | 98 |
| 2 | 98.1 |
| 2 | 98.2 |
+-----+-----+
3 rows in set (0.00 sec)
```

//DELETE PARTICULAR ROW

```
mysql> delete from info where name='tej';
```

Query OK, 1 row affected (0.16 sec)

```
mysql> select *from info;
```

```
+-----+-----+-----+-----+-----+| roll_no |
name | class | marks | dob
|
+-----+-----+-----+-----+-----+
| 1 | harsha | be | 98 | 1996-07-12 |
| 2 | keshav | te | 98.2 | 1998-05-11 |
+-----+-----+-----+-----+-----+
```

2 rows in set (0.00 sec)

//CREATE NEW DATABASE

mysql> create database new1;

Query OK, 1 row affected (0.03 sec)

//SHOW DATABASES

mysql> show databases;

```
+-----+
| Database
|
+-----+
| information_schema |
| host |
| info |
| mysql |
| new1 |
| performance_schema || test
|
```

7 rows in set (0.00 sec)

//DROP DATABASE

mysql> drop database new1;

Query OK, 0 rows affected (0.11 sec)

mysql> show databases;

```
+-----+
| Database
|
+-----+
| information_schema |
| host |
| info |
| mysql
|
| performance_schema |
| test
|
```

6 rows in set (0.00 sec)

mysql> use info;

Database changed

mysql> select*from info;

```
+-----+-----+-----+-----+-----+
| roll_no | name | class | marks | dob
|
+-----+-----+-----+-----+
| 1 | harsha | be | 98 | 1996-07-12 |
| 2 | keshav | te | 98.2 | 1998-05-11 |
+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

//Update row of the table

mysql> update info set class='secomp' where roll_no='1';

Query OK, 1 row affected (0.17 sec)
Rows matched: 1 Changed: 1 Warnings: 0

//For Display the table

mysql> select*from info;

```
+-----+-----+-----+-----+-----+
| roll_no | name | class | marks | dob|
+-----+-----+-----+-----+-----+
| 1 | harsha | secomp | 98 | 1996-07-12 |
| 2 | keshav | te
| 98.2 | 1998-05-11 |
+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

//For Add column into the table

mysql> alter table info add sirname varchar(20);

Query OK, 2 rows affected (0.55 sec)
Records: 2 Duplicates: 0 Warnings: 0

//DISPLAY TABLE

mysql> select*from info;

```
+-----+-----+-----+-----+-----+-----+
| roll_no | name | class | marks | dob
| sirname |
+-----+-----+-----+-----+-----+-----+
| 1 | harsha | secomp | 98 | 1996-07-12 | NULL |
| 2 | keshav | te
| 98.2 | 1998-05-11 | NULL |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.09 sec)
```

// Modify Datatype of particular column

mysql> alter table info modify roll_no float;

Query OK, 2 rows affected (0.48 sec)

Records: 2 Duplicates: 0 Warnings: 0

//DISPLAY TABLE

mysql> select*from info;

```
+-----+-----+-----+-----+-----+-----+
| roll_no | name | class | marks | dob | sirname |
+-----+-----+-----+-----+-----+-----+
| 1 | harsha | secomp | 98 | 1996-07-12 | NULL ||
| 2 | keshav | te | 98.2 | 1998-05-11 | NULL |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

//For Description of table

mysql> desc info;

```
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| roll_no | float | | | | |
| name | varchar(30) | YES | | NULL | |
| YES | | | | | |
| NULL | | | | | |
| varchar(30) | YES | | | | |
| class | varchar(20) | YES | | | |
| marks | float | | | | |
| dob | date | | | | |
| YES | | | | | |
| YES | | | | | |
| NULL | | | | | |
| | | | | | |
| | | | | | |
| NULL | | | | | |
| | | | | | |
| NULL | | | | | |
| NULL | | | | | |
| sirname | varchar(20) | YES || NULL |
| | | | | | |
| | | | | | |
```

```
|
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

//For delete the particular column

```
mysql> alter table info drop sirname;
```

Query OK, 2 rows affected (0.36 sec)
Records: 2 Duplicates: 0 Warnings: 0

//For Display the table

```
mysql> select*from info;
```

```
+-----+-----+-----+-----+-----+
| roll_no | name | class | marks | dob |
+-----+-----+-----+-----+
| 1 | harsha | secomp | 98 | 1996-07-12 |
| 2 | keshav | te | 98.2 | 1998-05-11 |
+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

```
mysql> alter table info add sirname varchar(20);
```

Query OK, 2 rows affected (0.53 sec)
Records: 2 Duplicates: 0 Warnings: 0

//For Display the table

```
mysql> select*from info;
```

```
+-----+-----+-----+-----+-----+-----+
| roll_no | name | class | marks | dob | sirname |
+-----+-----+-----+-----+-----+-----+
| 1 | harsha | secomp | 98 | 1996-07-12 | NULL |
| 2 | keshav | te | 98.2 | 1998-05-11 | NULL |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

//Renaming the column

```
mysql> alter table info change name fullname varchar(20);
```

Query OK, 2 rows affected (0.61 sec)
Records: 2 Duplicates: 0 Warnings: 0

//Display table

```
mysql> select*from info;
```

```

+-----+-----+-----+-----+-----+-----+
| roll_no | fullname | class | marks | dob |
| sirname |
+-----+-----+-----+-----+-----+
| 1 | harsha | secomp | 98 | 1996-07-12 | NULL |
| 2 | keshav | te |
| 98.2 | 1998-05-11 | NULL |
+-----+-----+-----+-----+-----+
/

```

//Insert values in table

```
mysql> insert into info values('101', 'sai', 'se', '80', '2017-1-12', 'xyz');
```

Query OK, 1 row affected (0.08 sec)

```
mysql> insert into info values('102', 'ram', 'se', '90', '2018-1-12', 'uvw');
```

Query OK, 1 row affected (0.22 sec)

//Display table

```
mysql> select*from info;
```

```

+-----+-----+-----+-----+-----+-----+
| roll_no | fullname | class | marks | dob |
| sirname |
+-----+-----+-----+-----+-----+
| 1 | harsha | secomp | 98 | 1996-07-12 | NULL |
| 2 | keshav | te |
| 101 | sai |
| 102 | ram | se |
| 98.2 | 1998-05-11 | NULL |
| 80 | 2017-01-12 | xyz |
| se |
| 90 | 2018-01-12 | uvw |
|
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

```

//Creating View

```
mysql> create view te as select roll_no, fullname, class from info;
```

Query OK, 0 rows affected (0.20 sec)

//Display table

```
mysql> select*from te;
```

```

+-----+-----+-----+
| roll_no | fullname | class |

```

```

+-----+-----+-----+
| 1 | harsha | secomp |
| 2 | keshav | te
| 101 | sai
| 102 | ram
| se
| se
|
|
|
+-----+-----+-----+

```

//USE DATABASE

mysql> use info;

Database changed

//SHOW DATABASES

mysql> show databases;

```

+-----+
| Database
|
+-----+
| information_schema |
| host |
| info |
| mysql
|
| performance_schema |
| test
|+-----+
6 rows in set (0.00 sec)

```

//CREATE TABLE

mysql> create table info(roll_no int, name varchar(30), class varchar(20), marks float, dob date);

Query OK, 0 rows affected (0.20 sec)

//INSERT VALUES IN TABLEmysql> insert into info values('1','harsha','be','98.0','1996-07-12');

Query OK, 1 row affected (0.05 sec)

mysql> insert into info values('2','tej','te','98.1','1997-07-12');

Query OK, 1 row affected (0.25 sec)

mysql> insert into info values('2','keshav','te','98.2','1998-05-11');

Query OK, 1 row affected (0.08 sec)

//DISPLAY TABLE

mysql> select *from info;

```
+-----+-----+-----+-----+-----+
| roll_no | name | class | marks | dob
|
+-----+-----+-----+-----+-----+
|
1 | harsha | be | 98 | 1996-07-12 || 2 | tej | te
| 98.1 | 1997-07-12 |
| 2 | keshav | te | 98.2 | 1998-05-11 |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

//DISPLAY PARTICULAR COLUMN

mysql> select roll_no,marks from info;

```
+-----+-----+
| roll_no | marks |
+-----+-----+
| 1 | 98 |
| 2 | 98.1 |
| 2 | 98.2 |
+-----+-----+
3 rows in set (0.00 sec)
```

//DELETE PARTICULAR ROW

mysql> delete from info where name='tej';

Query OK, 1 row affected (0.16 sec)

mysql> select *from info;

```
+-----+-----+-----+-----+-----+| roll_no |
name | class | marks | dob
|
+-----+-----+-----+-----+-----+
| 1 | harsha | be | 98 | 1996-07-12 |
| 2 | keshav | te | 98.2 | 1998-05-11 |
+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

//CREATE NEW DATABASE

mysql> create database new1;

Query OK, 1 row affected (0.03 sec)

//SHOW DATABASES

mysql> show databases;

```
+-----+
| Database
|
+-----+
| information_schema |
| host |
| info |
| mysql |
| new1 |
| performance_schema || test
|
+-----+
7 rows in set (0.00 sec)
```

//DROP DATABASE

mysql> drop database new1;

Query OK, 0 rows affected (0.11 sec)

mysql> show databases;

```
+-----+
| Database
|
+-----+
| information_schema |
| host |
| info |
| mysql
|
| performance_schema |
| test
|
+-----+
6 rows in set (0.00 sec)
```

mysql> use info;

Database changed

mysql> select*from info;

```
+-----+-----+-----+-----+-----+
| roll_no | name | class | marks | dob
|
+-----+-----+-----+-----+-----+
| 1 | harsha | be | 98 | 1996-07-12 |
| 2 | keshav | te | 98.2 | 1998-05-11 |
```

```
+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

//Update row of the table

mysql> update info set class='secomp' where roll_no='1';

Query OK, 1 row affected (0.17 sec)

Rows matched: 1 Changed: 1 Warnings: 0

//For Display the table

mysql> select*from info;

```
+-----+-----+-----+-----+-----+
| roll_no | name | class | marks | dob|
+-----+-----+-----+-----+-----+
| 1 | harsha | secomp | 98 | 1996-07-12 |
| 2 | keshav | te | 98.2 | 1998-05-11 |
+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

//For Add column into the table

mysql> alter table info add sirname varchar(20);

Query OK, 2rows affected (0.55 sec)

Records: 2 Duplicates: 0 Warnings: 0

//DISPLAY TABLE

mysql> select*from info;

```
+-----+-----+-----+-----+-----+-----+
| roll_no | name | class | marks | dob | sirname |
+-----+-----+-----+-----+-----+-----+
| 1 | harsha | secomp | 98 | 1996-07-12 | NULL |
| 2 | keshav | te | 98.2 | 1998-05-11 | NULL |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.09 sec)
```

// Modify Datatype of particular column

mysql> alter table info modify roll_no float;

Query OK, 2 rows affected (0.48 sec)

Records: 2 Duplicates: 0 Warnings: 0

//DISPLAY TABLE

mysql> select*from info;

```
+-----+-----+-----+-----+-----+-----+
| roll_no | name | class | marks | dob | sirname |
+-----+-----+-----+-----+-----+-----+
1 | harsha | secomp | 98 | 1996-07-12 | NULL ||
2 | keshav | te | 98.2 | 1998-05-11 | NULL |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

//For Description of table

mysql> desc info;

```
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| roll_no | float | | | | |
| name | varchar(30) | YES | | | |
| YES | | | | | |
| NULL | | | | | |
| varchar(30) | YES | | | | |
| class | varchar(20) | YES | | | |
| marks | float | | | | |
| dob | date | YES | | | |
| date | | YES | | | |
| YES | | | | | |
| NULL | | | | | |
| | | | | | |
| | | | | | |
| NULL | | | | | |
| | | | | | |
| NULL | | | | | |
| NULL | | | | | |
| sirname | varchar(20) | YES || NULL |
| | | | | | |
| | | | | | |
| | | | | | |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

//For delete the particular column

mysql> alter table info drop sirname;

Query OK, 2 rows affected (0.36 sec)
Records: 2 Duplicates: 0 Warnings: 0

//For Display the table

mysql> select*from info;

```
+-----+-----+-----+-----+-----+
| roll_no | name | class | marks | dob
|
+-----+-----+-----+-----+-----+
| 1 | harsha | secomp | 98 | 1996-07-12 |
| 2 | keshav | te
| 98.2 | 1998-05-11 |
+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

mysql> alter table info add sirname varchar(20);

Query OK, 2 rows affected (0.53 sec)
Records: 2 Duplicates: 0 Warnings: 0

//For Display the table

mysql> select*from info;

```
+-----+-----+-----+-----+-----+-----+
| roll_no | name | class | marks | dob
| sirname |
+-----+-----+-----+-----+-----+-----+
| 1 | harsha | secomp | 98 | 1996-07-12 | NULL |
| 2 | keshav | te | 98.2 | 1998-05-11 | NULL |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

//Renaming the column

mysql> alter table info change name fullname varchar(20);

Query OK, 2 rows affected (0.61 sec)
Records: 2 Duplicates: 0 Warnings: 0

//Display table

mysql> select*from info;

```
+-----+-----+-----+-----+-----+-----+
| roll_no | fullname | class | marks | dob
| sirname |
+-----+-----+-----+-----+-----+-----+
| 1 | harsha | secomp | 98 | 1996-07-12 | NULL |
| 2 | keshav | te
| 98.2 | 1998-05-11 | NULL |
```

--	--	--	--	--	--

//Insert values in table

mysql> insert into info values('101', 'sai', 'se', '80', '2017-1-12', 'xyz');

Query OK, 1 row affected (0.08 sec)

mysql> insert into info values('102', 'ram', 'se', '90', '2018-1-12', 'uvw');

Query OK, 1 row affected (0.22 sec)

//Display table

mysql> select*from info;

```
+-----+-----+-----+-----+-----+-----+
| roll_no | fullname | class | marks | dob | NULL |
| sirname | +-----+-----+-----+-----+-----+
+-----+
| 1 | harsha | secomp | 98 | 1996-07-12 | NULL |
| 2 | keshav | te |  |  |  |
| 101 | sai |  |  |  |  |
| 102 | ram | se |  |  |  |
| 98.2 | 1998-05-11 | NULL |  |  |  |
| 80 | 2017-01-12 | xyz |  |  |  |
| se |  |  |  |  |  |
| 90 | 2018-01-12 | uvw |  |  |  |
|  |  |  |  |  |  |
+-----+-----+-----+-----+-----+-----+
```

4 rows in set (0.00 sec)

//Creating View

mysql> create view te as select roll_no, fullname, class from info;

Query OK, 0 rows affected (0.20 sec)

//Display table

mysql> select*from te;

```
+-----+-----+-----+
| roll_no | fullname | class |
+-----+-----+-----+
| 1 | harsha | secomp |
| 2 | keshav | te |
| 101 | sai |  |
| 102 | ram | se |
| se |  |  |
| se |  |  |
```

