

ASJID TAHIR

19P-0085

# DATABASE SYSTEM LAB

## LAB # 10:

## DCL User & Grant Privileges:

```
MariaDB [(none)]> use 19p0085_asjdtahir
Database changed
MariaDB [19p0085_asjdtahir]> CREATE USER 'nutec'@'localhost' IDENTIFIED BY 'doe';
Query OK, 0 rows affected (0.008 sec)

MariaDB [19p0085_asjdtahir]> ALTER USER 'nutec'@'localhost' identified by 'allen';
Query OK, 0 rows affected (0.001 sec)
```

[illegible]

```
MariaDB [19p0085_asjdtahir]> Select host,user,password from mysql.user;
```

Host	User	Password
localhost	root	
localhost	nutec	*C94FD2FCBF408CBBFAAB9C07FF4221D265AFB18F
127.0.0.1	root	
::1	root	
localhost	pma	

```
5 rows in set (0.003 sec)
```

When you open php myadmin you see tables data is too large so that's why the terminal show like this. So to show properly we use \G command:

```
MariaDB [19p0085_asjidtahir]> select * from mysql.user\G;
***** 1. row *****
      Host: localhost
      User: root
      Password:
      Select_priv: Y
      Insert_priv: Y
      Update_priv: Y
      Delete_priv: Y
      Create_priv: Y
      Drop_priv: Y
      Reload_priv: Y
      Shutdown_priv: Y
      Process_priv: Y
      File_priv: Y
      Grant_priv: Y
      References_priv: Y
      Index_priv: Y
      Alter_priv: Y
      Show_db_priv: Y
      Super_priv: Y
      Create_tmp_table_priv: Y
      Lock_tables_priv: Y
      Execute_priv: Y
      Repl_slave_priv: Y
      Repl_client_priv: Y
      Create_view_priv: Y
      Show_view_priv: Y
      Create_routine_priv: Y
      Alter_routine_priv: Y
```

Second Terminal:

User login:

```
XAMPP for Windows - mysql -u nutec -p

Setting environment for using XAMPP for Windows.
Asjid Tahir@AJJI c:\xampp
# mysql -u nutec -p
Enter password: *****
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 47
Server version: 10.4.22-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MariaDB [(none)]> show databases;
+-----+
| Database                |
+-----+
| information_schema      |
| test                    |
+-----+
2 rows in set (0.001 sec)

MariaDB [(none)]>
```

## Grant (Root Terminal):

```
MariaDB [(none)]> grant select on 19p0085_asjiddahir.employee to 'nutec'@'localhost';
Query OK, 0 rows affected (0.011 sec)

MariaDB [(none)]>
```

## Second Nutec Terminal:

```
MariaDB [(none)]> show databases
-> ;
+-----+
| Database                |
+-----+
| 19p0085_asjiddahir      |
| information_schema      |
| test                    |
+-----+
3 rows in set (0.001 sec)

MariaDB [(none)]>
```

## Revoke (Root):

```
MariaDB [(none)]> revoke select on 19p0085_asjiddahir.EMPLOYEE from 'nutec'@'localhost';
Query OK, 0 rows affected (0.001 sec)

MariaDB [(none)]>
```

## Revoke (Nutech):

```
MariaDB [(none)]> show databases;
+-----+
| Database |
+-----+
| information_schema |
| test      |
+-----+
2 rows in set (0.001 sec)

MariaDB [(none)]>
```

Current selection does not contain a unique column. Grid edit, Edit, Copy and Delete features may result in undesired behavior.

Showing rows 0 - 4 (5 total, Query took 0.0027 seconds)

SELECT \* FROM `user`

Options: ☐ Show all | Number of rows: 25 | Filter rows: Search this table

	Host	User	Password	Select_priv	Insert_priv	Update_priv	Delete_priv	Create_priv	Drop_priv	Reload_priv
<input type="checkbox"/>	localhost	root		Y	Y	Y	Y	Y	Y	Y
<input type="checkbox"/>	localhost	nutech	*C94FD2FCBF408CBBFAAB9C07FF4221D265AFB18F	N	N	N	N	N	N	N
<input type="checkbox"/>	127.0.0.1	root		Y	Y	Y	Y	Y	Y	Y
<input type="checkbox"/>	:::1	root		Y	Y	Y	Y	Y	Y	Y
<input type="checkbox"/>	localhost	pma		N	N	N	N	N	N	N

Query results operations: ☐ Print | ☐ Copy to clipboard | ☐ Export | ☐ Display chart | ☐ Create view

Bookmark this SQL query

## LAB TASKS:

1):

```
create user 'Asjid'@'localhost' identified by 'ajji';
MariaDB [19p0085_asjidthahir]> CREATE USER 'asjid'@'localhost' IDENTIFIED BY 'ajj';
Query OK, 0 rows affected (0.005 sec)

MariaDB [19p0085_asjidthahir]>
```

```
--To login to second terminal asjid
--mysql -u asjid -p
show databases;
```

```

Asjid Tahir@AJJI c:\xampp
# mysql -u asjid -p
Enter password: ***
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 15
Server version: 10.4.22-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MariaDB [(none)]> show databases;
+-----+
| Database                |
+-----+
| 19p0085_asjiddtahir     |
| information_schema      |
| test                    |
+-----+
3 rows in set (0.001 sec)

MariaDB [(none)]>

```

2a):

```

GRANT ALL PRIVILEGES ON 19p0085_asjiddtahir.* TO 'asjid'@'localhost';

Asjid Tahir@AJJI c:\xampp
# mysql -u asjid -p
Enter password: ***
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 15
Server version: 10.4.22-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MariaDB [(none)]> show databases;
+-----+
| Database                |
+-----+
| 19p0085_asjiddtahir     |
| information_schema      |
| test                    |
+-----+
3 rows in set (0.001 sec)

MariaDB [(none)]>

```

2b):

```

--2b)
select * from themepark;
update themepark SET PARK_NAME='AJJI' where PARK_CODE='dgsgd';

```

```
MariaDB [19p0085_asjdtahir]> select * from themepark;
```

PARK_CODE	PARK_NAME	PARK_CITY	PARK_COUNTRY
dgsgd	dgfsdg	dgfsdgdgdfgdg	z
FR1001	FairyLand	PARIS	FR
NL1202	Efling	NOORD	NL
SP4533	AdventurePort	BARCELONA	SP
SW2323	Labyrinthe	LAUSANNE	SW
UK2622	MiniLand	WINDSOR	UK
UK3452	PleasureLand	STOKE	UK
ZA1342	GoldTown	JOHANNESBURG	ZA

```
8 rows in set (0.075 sec)
```

```
MariaDB [19p0085_asjdtahir]> select * from themepark;
```

PARK_CODE	PARK_NAME	PARK_CITY	PARK_COUNTRY
dgsgd	AJJI	dgfsdgdgdfgdg	z
FR1001	FairyLand	PARIS	FR
NL1202	Efling	NOORD	NL
SP4533	AdventurePort	BARCELONA	SP
SW2323	Labyrinthe	LAUSANNE	SW
UK2622	MiniLand	WINDSOR	UK
UK3452	PleasureLand	STOKE	UK
ZA1342	GoldTown	JOHANNESBURG	ZA

```
8 rows in set (0.000 sec)
```

```
--2c)
--To access view
GRANT ALL PRIVILEGES ON 19p0085_asjdtahir.empfr1 TO 'asjid'@'localhost';
select * from empfr1;
MariaDB [fb]> GRANT CREATE on *.* to 'asjid'@'localhost';
Query OK, 0 rows affected (0.002 sec)

MariaDB [fb]>
```

Asjid Terminal:

```
ERROR 1007 (HY000): Can't create database 'test'; database exists
MariaDB [19p0085_asjdtahir]> create database test_DB;
Query OK, 1 row affected (0.001 sec)

MariaDB [19p0085_asjdtahir]>
```

3):

```
--3)
revoke select on 19p0085_asjdtahir.empfr1 from 'asjid'@'localhost';
```

```

MariaDB [19p0085_asjdtahir]> revoke select on 19p0085_asjdtahir.empfr1 from 'asjid'@'localhost';
Query OK, 0 rows affected (0.001 sec)

MariaDB [19p0085_asjdtahir]>

```

```

--4)
select * from themepark;
insert into themepark values('FR1005','Ajjiland','Lahore','PK');
select * from themepark;
insert into themepark values('FR1006','Ibrarland','Islamabad','P');
commit;

```

```

MariaDB [19p0085_asjdtahir]> select * from themepark;
+-----+-----+-----+-----+
| PARK_CODE | PARK_NAME | PARK_CITY | PARK_COUNTRY |
+-----+-----+-----+-----+
| dgsgd     | AJJI      | dgfsdgdgdf | z             |
| FR1001    | FairyLand | PARIS      | FR            |
| NL1202    | Efling    | NOORD      | NL            |
| SP4533    | AdventurePort | BARCELONA | SP            |
| SW2323    | Labyrinthe | LAUSANNE   | SW            |
| UK2622    | MiniLand  | WINDSOR    | UK            |
| UK3452    | PleasureLand | STOKE     | UK            |
| ZA1342    | GoldTown  | JOHANNESBURG | ZA           |
+-----+-----+-----+-----+
8 rows in set (0.000 sec)

MariaDB [19p0085_asjdtahir]> insert into themepark values('FR1005','Ajjiland','Lahore','PK');
Query OK, 1 row affected (0.005 sec)

MariaDB [19p0085_asjdtahir]> select * from themepark;
+-----+-----+-----+-----+
| PARK_CODE | PARK_NAME | PARK_CITY | PARK_COUNTRY |
+-----+-----+-----+-----+
| dgsgd     | AJJI      | dgfsdgdgdf | z             |
| FR1001    | FairyLand | PARIS      | FR            |
| FR1005    | Ajjiland  | Lahore     | PK            |
| NL1202    | Efling    | NOORD      | NL            |
| SP4533    | AdventurePort | BARCELONA | SP            |
| SW2323    | Labyrinthe | LAUSANNE   | SW            |
| UK2622    | MiniLand  | WINDSOR    | UK            |
| UK3452    | PleasureLand | STOKE     | UK            |
| ZA1342    | GoldTown  | JOHANNESBURG | ZA           |
+-----+-----+-----+-----+
9 rows in set (0.000 sec)

MariaDB [19p0085_asjdtahir]> insert into themepark values('FR1006','Ibrarland','Islamabad','P');
Query OK, 1 row affected (0.003 sec)

MariaDB [19p0085_asjdtahir]> commit;
Query OK, 0 rows affected (0.000 sec)

MariaDB [19p0085_asjdtahir]>

```

```

select * from themepark;
rollback;

```

```
select * from themepark; --Roll back command not work because we used commit
command to save our insertion data.
```

```
MariaDB [19p0085_asjdtahir]> select * from themepark;
```

PARK_CODE	PARK_NAME	PARK_CITY	PARK_COUNTRY
dgsgd	AJJI	dgfsdgdgdfgdf	z
FR1001	FairyLand	PARIS	FR
FR1005	Ajjiland	Lahore	PK
FR1006	Ibrarland	Islamabad	P
NL1202	Efling	NOORD	NL
SP4533	AdventurePort	BARCELONA	SP
SW2323	Labyrinthe	LAUSANNE	SW
UK2622	MiniLand	WINDSOR	UK
UK3452	PleasureLand	STOKE	UK
ZA1342	GoldTown	JOHANNESBURG	ZA

```
10 rows in set (0.001 sec)
```

```
MariaDB [19p0085_asjdtahir]> rollback;
```

```
Query OK, 0 rows affected (0.000 sec)
```

```
MariaDB [19p0085_asjdtahir]> select * from themepark;
```

PARK_CODE	PARK_NAME	PARK_CITY	PARK_COUNTRY
dgsgd	AJJI	dgfsdgdgdfgdf	z
FR1001	FairyLand	PARIS	FR
FR1005	Ajjiland	Lahore	PK
FR1006	Ibrarland	Islamabad	P
NL1202	Efling	NOORD	NL
SP4533	AdventurePort	BARCELONA	SP
SW2323	Labyrinthe	LAUSANNE	SW
UK2622	MiniLand	WINDSOR	UK
UK3452	PleasureLand	STOKE	UK
ZA1342	GoldTown	JOHANNESBURG	ZA

```
10 rows in set (0.000 sec)
```

```
MariaDB [19p0085_asjdtahir]>
```

```
--ROLLBACK Task
```

```
--4b)
```

```
insert into themepark values('FR1099','Omland','Lhr','k');
```

```
select * from themepark;
```

```
--4c)
```

```
update themepark SET PARK_NAME='DEMO' where PARK_CODE='FR1001';
```

```
--4d)
```

```
rollback;
```

```
select * from themepark;
```



```

MariaDB [19p0085_asjdtahir]> insert into themepark values('FR1099','Omland','Lhr','k');
Query OK, 1 row affected (0.001 sec)

MariaDB [19p0085_asjdtahir]> select * from themepark;
+-----+-----+-----+-----+
| PARK_CODE | PARK_NAME | PARK_CITY | PARK_COUNTRY |
+-----+-----+-----+-----+
| dgsgd    | AJJI      | dgfsdgdgdfgdg | z            |
| FR1001    | Dreamland | PARIS        | FR           |
| FR1005    | Ajjiland  | Lahore        | PK           |
| FR1006    | Ibrarland | Islamabad     | P            |
| FR1007    | TAHIR     | Karachi       | Pk           |
| FR1099    | Omland    | Lhr           | k            |
| NL1202    | Efling    | NOORD        | NL           |
| SP4533    | AdventurePort | BARCELONA    | SP           |
| SW2323    | Labyrinthe | LAUSANNE     | SW           |
| UK2622    | MiniLand  | WINDSOR      | UK           |
| UK3452    | PleasureLand | STOKE       | UK           |
| ZA1342    | GoldTown  | JOHANNESBURG | ZA           |
+-----+-----+-----+-----+
12 rows in set (0.000 sec)

MariaDB [19p0085_asjdtahir]> update themepark SET PARK_NAME='DEMO' where PARK_CODE='FR1001';
Query OK, 1 row affected (0.000 sec)
Rows matched: 1  Changed: 1  Warnings: 0

MariaDB [19p0085_asjdtahir]> select * from themepark;
+-----+-----+-----+-----+
| PARK_CODE | PARK_NAME | PARK_CITY | PARK_COUNTRY |
+-----+-----+-----+-----+
| dgsgd    | AJJI      | dgfsdgdgdfgdg | z            |
| FR1001    | DEMO      | PARIS        | FR           |
| FR1005    | Ajjiland  | Lahore        | PK           |
| FR1006    | Ibrarland | Islamabad     | P            |
| FR1007    | TAHIR     | Karachi       | Pk           |
| FR1099    | Omland    | Lhr           | k            |
| NL1202    | Efling    | NOORD        | NL           |
| SP4533    | AdventurePort | BARCELONA    | SP           |
| SW2323    | Labyrinthe | LAUSANNE     | SW           |
| UK2622    | MiniLand  | WINDSOR      | UK           |
| UK3452    | PleasureLand | STOKE       | UK           |
| ZA1342    | GoldTown  | JOHANNESBURG | ZA           |
+-----+-----+-----+-----+
12 rows in set (0.000 sec)

MariaDB [19p0085_asjdtahir]> rollback;
Query OK, 0 rows affected (0.003 sec)

```

After Rollback:

```
MariaDB [19p0085_asjdtahir]> select * from themepark;
```

PARK_CODE	PARK_NAME	PARK_CITY	PARK_COUNTRY
dgsgd	AJJI	dgfsdgdgdfgdf	z
FR1001	Dreamland	PARIS	FR
FR1005	Ajjiland	Lahore	PK
FR1006	Ibrarland	Islamabad	P
FR1007	TAHIR	Karachi	Pk
NL1202	Efling	NOORD	NL
SP4533	AdventurePort	BARCELONA	SP
SW2323	Labyrinthe	LAUSANNE	SW
UK2622	MiniLand	WINDSOR	UK
UK3452	PleasureLand	STOKE	UK
ZA1342	GoldTown	JOHANNESBURG	ZA

```
11 rows in set (0.001 sec)
```

```
MariaDB [19p0085_asjdtahir]>
```

```
--4e)
```

```
insert into themepark values ('ab2222','luminus','Sheikhupura','AB');
```

```
insert into themepark values ('ab333','stadum','sialkot','CD');
```

```
update themepark set park_name='shumalia' where park_code='FR1001';
```

```
delete from themepark where park_code='dgsgd';
```

```
savepoint s1;
```

```
select * from themepark;
```

```
MariaDB [19p0085_asjdtahir]> insert into themepark values ('ab2222','luminus','Sheikhupura','AB');
Query OK, 1 row affected (0.002 sec)
```

```
MariaDB [19p0085_asjdtahir]> insert into themepark values ('ab333','stadum','sialkot','CD');
Query OK, 1 row affected (0.000 sec)
```

```
MariaDB [19p0085_asjdtahir]> select * from themepark;
```

PARK_CODE	PARK_NAME	PARK_CITY	PARK_COUNTRY
ab2222	luminus	Sheikhupura	AB
ab333	stadum	sialkot	CD
dgsgd	AJJI	dgfsdgdgdfgdf	z
FR1001	Dreamland	PARIS	FR
FR1005	Ajjiland	Lahore	PK
FR1006	Ibrarland	Islamabad	P
FR1007	TAHIR	Karachi	Pk
NL1202	Efling	NOORD	NL
SP4533	AdventurePort	BARCELONA	SP
SW2323	Labyrinthe	LAUSANNE	SW
UK2622	MiniLand	WINDSOR	UK
UK3452	PleasureLand	STOKE	UK
ZA1342	GoldTown	JOHANNESBURG	ZA

```
13 rows in set (0.000 sec)
```

```
MariaDB [19p0085_asjdtahir]> update themepark set park_name='shumalia' where park_code='FR1001';
Query OK, 1 row affected (0.000 sec)
```

```
Rows matched: 1  Changed: 1  Warnings: 0
```

```
MariaDB [19p0085_asjdtahir]> select * from themepark;
```

PARK_CODE	PARK_NAME	PARK_CITY	PARK_COUNTRY
ab2222	luminus	Sheikhupura	AB
ab333	stadum	sialkot	CD
dgsgd	AJJI	dgfsdgdgdfgdf	z
FR1001	shumalia	PARIS	FR
FR1005	Ajjiland	Lahore	PK
FR1006	Ibrarland	Islamabad	P
FR1007	TAHIR	Karachi	Pk
NL1202	Efling	NOORD	NL
SP4533	AdventurePort	BARCELONA	SP
SW2323	Labyrinthe	LAUSANNE	SW
UK2622	MiniLand	WINDSOR	UK
UK3452	PleasureLand	STOKE	UK
ZA1342	GoldTown	JOHANNESBURG	ZA

13 rows in set (0.000 sec)

MariaDB [19p0085\_asjiddahir]> delete from themepark where park\_code='dgsgd';  
Query OK, 1 row affected (0.002 sec)

MariaDB [19p0085\_asjiddahir]> savepoint s1;  
Query OK, 0 rows affected (0.000 sec)

MariaDB [19p0085\_asjiddahir]> select \* from themepark;

PARK_CODE	PARK_NAME	PARK_CITY	PARK_COUNTRY
ab2222	luminus	Sheikhupura	AB
ab333	stadum	sialkot	CD
FR1001	shumalia	PARIS	FR
FR1005	Ajjiland	Lahore	PK
FR1006	Ibrarland	Islamabad	P
FR1007	TAHIR	Karachi	Pk
NL1202	Efling	NOORD	NL
SP4533	AdventurePort	BARCELONA	SP
SW2323	Labyrinthe	LAUSANNE	SW
UK2622	MiniLand	WINDSOR	UK
UK3452	PleasureLand	STOKE	UK
ZA1342	GoldTown	JOHANNESBURG	ZA

12 rows in set (0.000 sec)

MariaDB [19p0085\_asjiddahir]>

--4f)

```
insert into themepark values ('ab4444','minipark','Karachi','DD');
insert into themepark values ('ab5555','forest','Islamabad','EE');
rollback to s1;
select * from themepark;
```

```

MariaDB [19p0085_asjiddtahir]> --4f)
MariaDB [19p0085_asjiddtahir]> insert into themepark values ('ab4444','minipark','Karachi','DD');
Query OK, 1 row affected (0.001 sec)

MariaDB [19p0085_asjiddtahir]> insert into themepark values ('ab5555','forest','Islamabad','EE');
Query OK, 1 row affected (0.000 sec)

MariaDB [19p0085_asjiddtahir]> rollback to s1;
Query OK, 0 rows affected (0.000 sec)

MariaDB [19p0085_asjiddtahir]> select * from themepark;
+-----+-----+-----+-----+
| PARK_CODE | PARK_NAME | PARK_CITY | PARK_COUNTRY |
+-----+-----+-----+-----+
| ab2222 | luminus | Sheikhpura | AB |
| ab333 | stadum | sialkot | CD |
| FR1001 | shumalia | PARIS | FR |
| FR1005 | Ajjiland | Lahore | PK |
| FR1006 | Ibrarland | Islamabad | P |
| FR1007 | TAHIR | Karachi | Pk |
| NL1202 | Efling | NOORD | NL |
| SP4533 | AdventurePort | BARCELONA | SP |
| SW2323 | Labyrinthe | LAUSANNE | SW |
| UK2622 | MiniLand | WINDSOR | UK |
| UK3452 | PleasureLand | STOKE | UK |
| ZA1342 | GoldTown | JOHANNESBURG | ZA |
+-----+-----+-----+-----+
12 rows in set (0.000 sec)

MariaDB [19p0085_asjiddtahir]>

```

