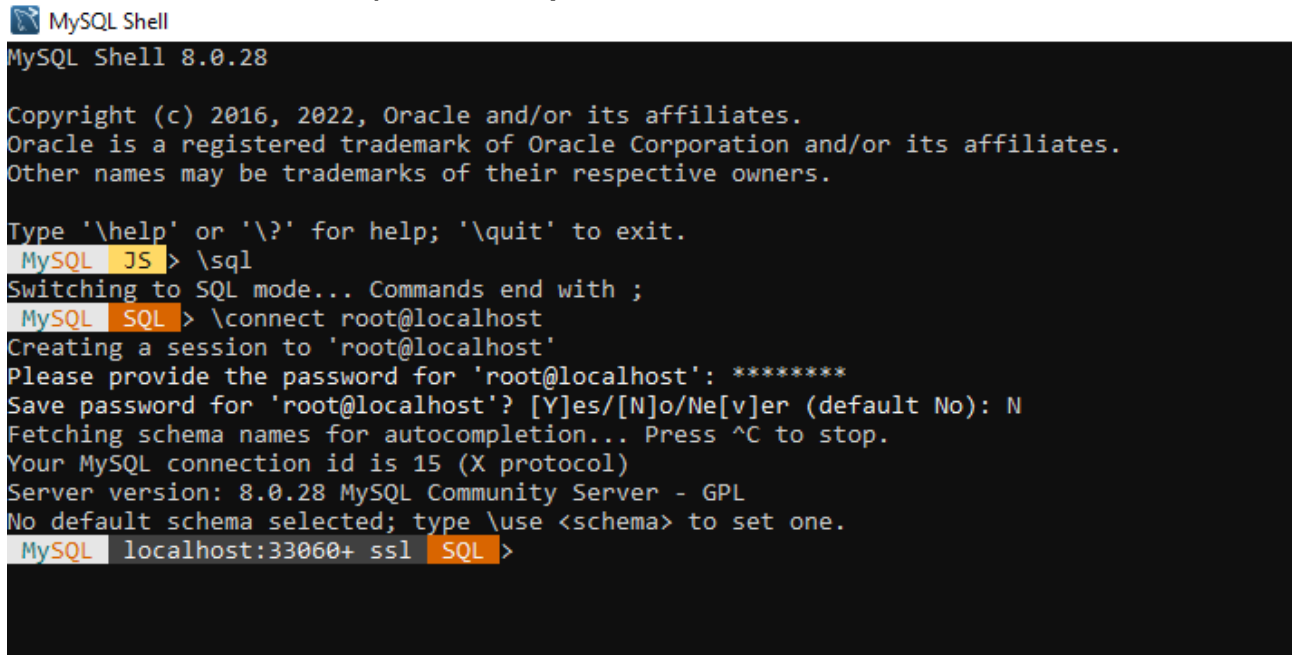


# MySQL (Day 2) – Assignment 01

## Connecting a Server from MySQL Shell

### In MySQL Shell,

- 1) Change the language from javascript(default) to SQL  
( run : \sql )
- 2) Connect to a MySQL Server (run : \connect [root@localhost](#) and enter the password)



```
MySQL Shell
MySQL Shell 8.0.28

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Type '\help' or '\?' for help; '\quit' to exit.
MySQL JS > \sql
Switching to SQL mode... Commands end with ;
MySQL SQL > \connect root@localhost
Creating a session to 'root@localhost'
Please provide the password for 'root@localhost': *****
Save password for 'root@localhost'? [Y]es/[N]o/[e]ver (default No): N
Fetching schema names for autocompletion... Press ^C to stop.
Your MySQL connection id is 15 (X protocol)
Server version: 8.0.28 MySQL Community Server - GPL
No default schema selected; type \use <schema> to set one.
MySQL localhost:33060+ ssl SQL >
```

## GENERAL COMMANDS :

### COMMAND : SHOW DATABASES;

It lists all the databases in the server.

### COMMAND : USE <DATABASE\_NAME>;

It switches to the specified database to use it.

### COMMAND : SHOW TABLES;

It lists all the tables in the chosen database.

### COMMAND : DESCRIBE <TABLE\_NAME>;

(OR)

### COMMAND : DESC <TABLE\_NAME>;

It displays the schema of a table.

## CREATING A DATABASE

**COMMAND:** CREATE DATABASE <DB\_NAME>;

Its a **DDL** command

```
MySQL localhost:33060+ ssl SQL >
MySQL localhost:33060+ ssl SQL > show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| sys |
+-----+
4 rows in set (0.0012 sec)
MySQL localhost:33060+ ssl SQL >
MySQL localhost:33060+ ssl SQL > CREATE DATABASE HondaCars;
Query OK, 1 row affected (0.0359 sec)
MySQL localhost:33060+ ssl SQL > show databases;
+-----+
| Database |
+-----+
| hondacars |
| information_schema |
| mysql |
| performance_schema |
| sys |
+-----+
5 rows in set (0.0411 sec)
MySQL localhost:33060+ ssl SQL >
```

**TO DROP (DELETE) A DATABASE,** use the below command,

**COMMAND :** DROP DATABASE <DB\_NAME>;

## DDL COMMANDS

- 1) CREATE
- 2) ALTER
- 3) TRUNCATE
- 4) DROP

## 1) CREATING A TABLE

**COMMAND** : CREATE TABLE <TAB\_NAME> (SCHEMA);

It creates a table.

```
MySQL Shell
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL > CREATE TABLE models (
    -> id SMALLINT UNSIGNED NOT NULL,
    -> name VARCHAR(50) NOT NULL,
    -> fuel VARCHAR(20) NOT NULL,
    -> BS4 CHAR(1) NOT NULL,
    -> seats TINYINT UNSIGNED NOT NULL
    -> );
Query OK, 0 rows affected (0.1018 sec)
MySQL localhost:33060+ ssl hondacars SQL > show tables;
+-----+
| Tables_in_hondacars |
+-----+
| models              |
+-----+
1 row in set (0.0026 sec)
MySQL localhost:33060+ ssl hondacars SQL > describe models;
+-----+-----+-----+-----+-----+-----+
| Field | Type           | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id    | smallint unsigned | NO   |     | NULL    |       |
| name  | varchar(50)      | NO   |     | NULL    |       |
| fuel  | varchar(20)      | NO   |     | NULL    |       |
| BS4   | char(1)          | NO   |     | NULL    |       |
| seats | tinyint unsigned | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.0375 sec)
MySQL localhost:33060+ ssl hondacars SQL >
```

## 2) ALTERING A TABLE

**COMMAND** : ALTER TABLE <TAB\_NAME> <OPERATION TO PERFORM>

It alters an existing table.

```

MySQL Shell
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL > ALTER TABLE models ADD launched_year MEDIUMINT(4);
Query OK, 0 rows affected, 1 warning (0.0657 sec)

Records: 0 Duplicates: 0 Warnings: 1
Warning (code 1681): Integer display width is deprecated and will be removed in a future release.
MySQL localhost:33060+ ssl hondacars SQL > desc models;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id     | smallint unsigned | NO   |     | NULL    |       |
| name   | varchar(50)       | NO   |     | NULL    |       |
| fuel   | varchar(20)       | NO   |     | NULL    |       |
| BS4    | char(1)           | NO   |     | NULL    |       |
| seats  | tinyint unsigned  | NO   |     | NULL    |       |
| launched_year | mediumint | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.0042 sec)

MySQL localhost:33060+ ssl hondacars SQL > ALTER TABLE models MODIFY launched_year MEDIUMINT(4) UNSIGNED;
Query OK, 0 rows affected, 1 warning (0.1379 sec)

Records: 0 Duplicates: 0 Warnings: 1
Warning (code 1681): Integer display width is deprecated and will be removed in a future release.
MySQL localhost:33060+ ssl hondacars SQL > describe models;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id     | smallint unsigned | NO   |     | NULL    |       |
| name   | varchar(50)       | NO   |     | NULL    |       |
| fuel   | varchar(20)       | NO   |     | NULL    |       |
| BS4    | char(1)           | NO   |     | NULL    |       |
| seats  | tinyint unsigned  | NO   |     | NULL    |       |
| launched_year | mediumint unsigned | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.0020 sec)

MySQL localhost:33060+ ssl hondacars SQL >

```

### 3) TRUNCATE ROWS

**COMMAND :** TRUNCATE TABLE <TAB\_NAME>;

It removes all the rows from a table. The Schema is unaffected.

MySQL Shell

```
1 row in set (0.0016 sec)
MySQL localhost:33060+ ssl hondacars SQL > CREATE TABLE truncate_me (
    -> name VARCHAR(30),
    -> age INT(2)
    -> );
Query OK, 0 rows affected, 1 warning (0.0607 sec)
Warning (code 1681): Integer display width is deprecated and will be removed in a future release.
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL > INSERT INTO truncate_me (name,age) VALUES ('John Doe',18);
Query OK, 1 row affected (0.0532 sec)
MySQL localhost:33060+ ssl hondacars SQL > desc truncate_me;
+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+
| name  | varchar(30)   | YES  |     | NULL    |      |
| age   | int           | YES  |     | NULL    |      |
+-----+-----+
2 rows in set (0.0364 sec)
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM truncate_me;
+-----+-----+
| name  | age |
+-----+-----+
| John Doe | 18 |
+-----+-----+
1 row in set (0.0006 sec)
MySQL localhost:33060+ ssl hondacars SQL > INSERT INTO truncate_me (name, age) VALUES ('Jack', 19), ('Sam',20), ('Jake',21),('Alexander',22);
Query OK, 4 rows affected (0.0363 sec)

Records: 4  Duplicates: 0  Warnings: 0
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM truncate_me;
+-----+-----+
| name  | age |
+-----+-----+
| John Doe | 18 |
| Jack    | 19 |
| Sam     | 20 |
| Jake    | 21 |
| Alexander | 22 |
+-----+-----+
5 rows in set (0.0005 sec)
MySQL localhost:33060+ ssl hondacars SQL >
```

MySQL Shell

```
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM truncate_me;
+-----+-----+
| name  | age |
+-----+-----+
| John Doe | 18 |
| Jack    | 19 |
| Sam     | 20 |
| Jake    | 21 |
| Alexander | 22 |
+-----+-----+
5 rows in set (0.0005 sec)
MySQL localhost:33060+ ssl hondacars SQL > TRUNCATE TABLE truncate_me;
Query OK, 0 rows affected (0.0854 sec)
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM truncate_me;
Empty set (0.0393 sec)
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL > show tables;
+-----+
| Tables_in_hondacars |
+-----+
| models              |
| truncate_me         |
+-----+
2 rows in set (0.0378 sec)
MySQL localhost:33060+ ssl hondacars SQL > describe truncate_me;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| name  | varchar(30)   | YES  |     | NULL    |      |
| age   | int           | YES  |     | NULL    |      |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.0019 sec)
MySQL localhost:33060+ ssl hondacars SQL >
```

## 4) DROPPING A TABLE

**COMMAND :** DROP TABLE <TAB\_NAME>;

It drops a table. The table's data along with its schema is also deleted.

```
MySQL Shell
MySQL localhost:33060+ ssl hondacars SQL > CREATE TABLE drop_me (
    -> Language VARCHAR(20),
    -> Founder VARCHAR(20)
    -> );
Query OK, 0 rows affected (0.0830 sec)
MySQL localhost:33060+ ssl hondacars SQL > show tables;
+-----+
| Tables_in_hondacars |
+-----+
| drop_me             |
| models              |
| truncate_me         |
+-----+
3 rows in set (0.0371 sec)
MySQL localhost:33060+ ssl hondacars SQL > describe drop_me;
+-----+-----+-----+-----+-----+-----+
| Field | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Language | varchar(20) | YES |     | NULL    |       |
| Founder  | varchar(20) | YES |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.0489 sec)
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL > INSERT INTO drop_me (Language, Founder)
    -> VALUES ('C','Dennis Ritchie'),
    -> ('C++','Bjarne Stroustrup'),
    -> ('Java','James Gosling'),
    -> ('Python','Guido Van Rossum');
Query OK, 4 rows affected (0.0401 sec)
Records: 4 Duplicates: 0 Warnings: 0
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM drop_me;
+-----+-----+
| Language | Founder      |
+-----+-----+
| C        | Dennis Ritchie |
| C++      | Bjarne Stroustrup |
| Java     | James Gosling  |
| Python   | Guido Van Rossum |
+-----+-----+
4 rows in set (0.0006 sec)
MySQL localhost:33060+ ssl hondacars SQL >
```

```

MySQL Shell
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM drop_me;
+-----+-----+
| Language | Founder |
+-----+-----+
| C        | Dennis Ritchie |
| C++     | Bjarne Stroustrup |
| Java    | James Gosling |
| Python  | Guido Van Rossum |
+-----+-----+
4 rows in set (0.0006 sec)
MySQL localhost:33060+ ssl hondacars SQL > DROP TABLE drop_me;
Query OK, 0 rows affected (0.0706 sec)
MySQL localhost:33060+ ssl hondacars SQL > show tables;
+-----+
| Tables_in_hondacars |
+-----+
| models |
| truncate_me |
+-----+
2 rows in set (0.0350 sec)
MySQL localhost:33060+ ssl hondacars SQL > describe drop_me;
ERROR: 1146: Table 'hondacars.drop_me' doesn't exist
MySQL localhost:33060+ ssl hondacars SQL >

```

## DML – DATA MANIPULATION LANGUAGE

- 1) INSERT
- 2) UPDATE
- 3) DELETE

### 1) INSERTING INTO TABLE

**COMMAND :** INSERT INTO <TAB\_NAME> (ATTRIBUTES) VALUES (ROW 1), (ROW 2), ..... ;

It inserts rows into an existing table.

```

MySQL Shell
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL > describe models;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id    | smallint unsigned | NO | | NULL | |
| name  | varchar(50) | NO | | NULL | |
| fuel  | varchar(20) | NO | | NULL | |
| BS4   | char(1) | NO | | NULL | |
| seats | tinyint unsigned | NO | | NULL | |
| launched_year | mediumint unsigned | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.0018 sec)

MySQL localhost:33060+ ssl hondacars SQL > INSERT INTO models (id,name,fuel,bs4,seats,launched_year) VALUES (
-> 10, 'City', 'Petrol','Y',5,2014);
Query OK, 1 row affected (0.0386 sec)

MySQL localhost:33060+ ssl hondacars SQL > INSERT INTO models (id,name,fuel,bs4,seats,launched_year) VALUES
-> (22,'Civic','Petrol','Y',5,2006),
-> (51,'Amaze','Petrol','N',5,2013),
-> (62,'Brio','Diesel','Y',5,2011),
-> (86,'Jazz','Petrol','N',5,2009);
Query OK, 4 rows affected (0.0397 sec)

Records: 4 Duplicates: 0 Warnings: 0
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+-----+-----+-----+-----+-----+-----+
| id | name | fuel | BS4 | seats | launched_year |
+-----+-----+-----+-----+-----+-----+
| 10 | City | Petrol | Y | 5 | 2014 |
| 22 | Civic | Petrol | Y | 5 | 2006 |
| 51 | Amaze | Petrol | N | 5 | 2013 |
| 62 | Brio | Diesel | Y | 5 | 2011 |
| 86 | Jazz | Petrol | N | 5 | 2009 |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.0008 sec)

MySQL localhost:33060+ ssl hondacars SQL >

```

## 2) UPDATE A TABLE

**COMMAND :** UPDATE <TAB\_NAME> SET <ATTRIBUTE> = <NEW VALUE> WHERE CONDITION;

It updates value(s) in a table.

```

MySQL Shell
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+-----+-----+-----+-----+-----+-----+
| id | name | fuel | BS4 | seats | launched_year |
+-----+-----+-----+-----+-----+-----+
| 10 | City | Petrol | Y | 5 | 2014 |
| 22 | Civic | Petrol | Y | 5 | 2006 |
| 51 | Amaze | Petrol | N | 5 | 2013 |
| 62 | Brio | Diesel | Y | 5 | 2011 |
| 86 | Jazz | Petrol | N | 5 | 2009 |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.0009 sec)

MySQL localhost:33060+ ssl hondacars SQL > UPDATE models SET fuel = 'Gas' where id=86;
Query OK, 1 row affected (0.0370 sec)

Rows matched: 1 Changed: 1 Warnings: 0
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+-----+-----+-----+-----+-----+-----+
| id | name | fuel | BS4 | seats | launched_year |
+-----+-----+-----+-----+-----+-----+
| 10 | City | Petrol | Y | 5 | 2014 |
| 22 | Civic | Petrol | Y | 5 | 2006 |
| 51 | Amaze | Petrol | N | 5 | 2013 |
| 62 | Brio | Diesel | Y | 5 | 2011 |
| 86 | Jazz | Gas | N | 5 | 2009 |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.0317 sec)

MySQL localhost:33060+ ssl hondacars SQL >

```



### 3) DELETE TABLE ROW

**COMMAND :** DELETE FROM <TAB\_NAME> WHERE <CONDITION>;

It deletes a row(s) from an existing table.

```
MySQL Shell
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+----+-----+-----+-----+-----+-----+
| id | name  | fuel  | BS4  | seats | launched_year |
+----+-----+-----+-----+-----+-----+
| 10 | City  | Petrol | Y    | 5     | 2014          |
| 22 | Civic | Petrol | Y    | 5     | 2006          |
| 51 | Amaze | Petrol | N    | 5     | 2013          |
| 62 | Brio  | Diesel | Y    | 5     | 2011          |
| 86 | Jazz  | Gas    | N    | 5     | 2009          |
+----+-----+-----+-----+-----+-----+
5 rows in set (0.0006 sec)

MySQL localhost:33060+ ssl hondacars SQL > INSERT INTO models (id,name,fuel,bs4,seats,launched_year) VALUES
-> (100,'To Be DELETED', '_', '_',0,0);
Query OK, 1 row affected (0.0352 sec)

MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+----+-----+-----+-----+-----+-----+
| id | name      | fuel  | BS4  | seats | launched_year |
+----+-----+-----+-----+-----+-----+
| 10 | City      | Petrol | Y    | 5     | 2014          |
| 22 | Civic     | Petrol | Y    | 5     | 2006          |
| 51 | Amaze     | Petrol | N    | 5     | 2013          |
| 62 | Brio      | Diesel | Y    | 5     | 2011          |
| 86 | Jazz      | Gas    | N    | 5     | 2009          |
| 100 | To Be DELETED | _    | _    | 0     | 0             |
+----+-----+-----+-----+-----+-----+
6 rows in set (0.0317 sec)

MySQL localhost:33060+ ssl hondacars SQL > DELETE FROM models WHERE id=100;
Query OK, 1 row affected (0.0401 sec)

MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+----+-----+-----+-----+-----+-----+
| id | name  | fuel  | BS4  | seats | launched_year |
+----+-----+-----+-----+-----+-----+
| 10 | City  | Petrol | Y    | 5     | 2014          |
| 22 | Civic | Petrol | Y    | 5     | 2006          |
| 51 | Amaze | Petrol | N    | 5     | 2013          |
| 62 | Brio  | Diesel | Y    | 5     | 2011          |
| 86 | Jazz  | Gas    | N    | 5     | 2009          |
+----+-----+-----+-----+-----+-----+
5 rows in set (0.0006 sec)

MySQL localhost:33060+ ssl hondacars SQL >
```

## TCL - TRANSACTION CONTROL LANGUAGE

### TO START A TRANSACTION :

**COMMAND :** START TRANSACTION;

It starts a transaction.

### 1) COMMIT

**COMMAND :** COMMIT;

It commits (saves) all the changes made after starting the transaction.

```

MySQL Shell
MySQL localhost:33060+ ssl hondacars SQL > SELECT * from models;
+-----+-----+-----+-----+-----+-----+
| id | name | fuel | BS4 | seats | launched_year |
+-----+-----+-----+-----+-----+
| 10 | City | Petrol | Y | 5 | 2014 |
| 22 | Civic | Petrol | Y | 5 | 2006 |
| 51 | Amaze | Petrol | N | 5 | 2013 |
| 62 | Brio | Diesel | Y | 5 | 2011 |
| 86 | Jazz | Gas | N | 5 | 2009 |
+-----+-----+-----+-----+-----+
5 rows in set (0.0363 sec)
MySQL localhost:33060+ ssl hondacars SQL > START TRANSACTION;
Query OK, 0 rows affected (0.0005 sec)
MySQL localhost:33060+ ssl hondacars SQL > UPDATE models SET fuel='Gas/Petrol' WHERE id=86;
Query OK, 1 row affected (0.0374 sec)

Rows matched: 1 Changed: 1 Warnings: 0
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+-----+-----+-----+-----+-----+-----+
| id | name | fuel | BS4 | seats | launched_year |
+-----+-----+-----+-----+-----+
| 10 | City | Petrol | Y | 5 | 2014 |
| 22 | Civic | Petrol | Y | 5 | 2006 |
| 51 | Amaze | Petrol | N | 5 | 2013 |
| 62 | Brio | Diesel | Y | 5 | 2011 |
| 86 | Jazz | Gas/Petrol | N | 5 | 2009 |
+-----+-----+-----+-----+-----+
5 rows in set (0.0008 sec)
MySQL localhost:33060+ ssl hondacars SQL > COMMIT;
Query OK, 0 rows affected (0.0325 sec)
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+-----+-----+-----+-----+-----+-----+
| id | name | fuel | BS4 | seats | launched_year |
+-----+-----+-----+-----+-----+
| 10 | City | Petrol | Y | 5 | 2014 |
| 22 | Civic | Petrol | Y | 5 | 2006 |
| 51 | Amaze | Petrol | N | 5 | 2013 |
| 62 | Brio | Diesel | Y | 5 | 2011 |
| 86 | Jazz | Gas/Petrol | N | 5 | 2009 |
+-----+-----+-----+-----+-----+
5 rows in set (0.0019 sec)
MySQL localhost:33060+ ssl hondacars SQL >

```

## 2) ROLLBACK

**COMMAND :** ROLLBACK;

It rollbacks (undo) all the changes made after starting the transaction.

```
Select MySQL Shell
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+-----+-----+-----+-----+-----+-----+
| id | name | fuel | BS4 | seats | launched_year |
+-----+-----+-----+-----+-----+
| 10 | City | Petrol | Y | 5 | 2014 |
| 22 | Civic | Petrol | Y | 5 | 2006 |
| 51 | Amaze | Petrol | N | 5 | 2013 |
| 62 | Brio | Diesel | Y | 5 | 2011 |
| 86 | Jazz | Gas | N | 5 | 2009 |
+-----+-----+-----+-----+-----+
5 rows in set (0.0007 sec)
MySQL localhost:33060+ ssl hondacars SQL > START TRANSACTION;
Query OK, 0 rows affected (0.0004 sec)
MySQL localhost:33060+ ssl hondacars SQL > UPDATE models SET name ='Updated' WHERE id=86;
Query OK, 1 row affected (0.0009 sec)

Rows matched: 1 Changed: 1 Warnings: 0
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+-----+-----+-----+-----+-----+-----+
| id | name | fuel | BS4 | seats | launched_year |
+-----+-----+-----+-----+-----+
| 10 | City | Petrol | Y | 5 | 2014 |
| 22 | Civic | Petrol | Y | 5 | 2006 |
| 51 | Amaze | Petrol | N | 5 | 2013 |
| 62 | Brio | Diesel | Y | 5 | 2011 |
| 86 | Updated | Gas | N | 5 | 2009 |
+-----+-----+-----+-----+-----+
5 rows in set (0.0006 sec)
MySQL localhost:33060+ ssl hondacars SQL > ROLLBACK;
Query OK, 0 rows affected (0.0373 sec)
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+-----+-----+-----+-----+-----+-----+
| id | name | fuel | BS4 | seats | launched_year |
+-----+-----+-----+-----+-----+
| 10 | City | Petrol | Y | 5 | 2014 |
| 22 | Civic | Petrol | Y | 5 | 2006 |
| 51 | Amaze | Petrol | N | 5 | 2013 |
| 62 | Brio | Diesel | Y | 5 | 2011 |
| 86 | Jazz | Gas | N | 5 | 2009 |
+-----+-----+-----+-----+-----+
5 rows in set (0.0465 sec)
MySQL localhost:33060+ ssl hondacars SQL >
```

## MISC- UPDATE COMMAND

If WHERE clause is not specified, UPDATE updates all the records.

NOTE : The same behaviour when we use DELETE command without WHERE clause. It deletes all the records from the table when the WHERE clause is not specified.

```

MySQL Shell
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+-----+-----+-----+-----+-----+-----+
| id | name | fuel | BS4 | seats | launched_year |
+-----+-----+-----+-----+-----+
| 10 | City | Petrol | Y | 5 | 2014 |
| 22 | Civic | Petrol | Y | 5 | 2006 |
| 51 | Amaze | Petrol | N | 5 | 2013 |
| 62 | Brio | Diesel | Y | 5 | 2011 |
| 86 | Jazz | Gas/Petrol | N | 5 | 2009 |
+-----+-----+-----+-----+-----+
5 rows in set (0.0006 sec)
MySQL localhost:33060+ ssl hondacars SQL > START TRANSACTION;
Query OK, 0 rows affected (0.0004 sec)
MySQL localhost:33060+ ssl hondacars SQL > UPDATE models SET name = 'Updates All Records';
Query OK, 5 rows affected (0.0369 sec)
Rows matched: 5 Changed: 5 Warnings: 0
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+-----+-----+-----+-----+-----+-----+
| id | name | fuel | BS4 | seats | launched_year |
+-----+-----+-----+-----+-----+
| 10 | Updates All Records | Petrol | Y | 5 | 2014 |
| 22 | Updates All Records | Petrol | Y | 5 | 2006 |
| 51 | Updates All Records | Petrol | N | 5 | 2013 |
| 62 | Updates All Records | Diesel | Y | 5 | 2011 |
| 86 | Updates All Records | Gas/Petrol | N | 5 | 2009 |
+-----+-----+-----+-----+-----+
5 rows in set (0.0007 sec)
MySQL localhost:33060+ ssl hondacars SQL > ROLLBACK;
Query OK, 0 rows affected (0.0316 sec)
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+-----+-----+-----+-----+-----+-----+
| id | name | fuel | BS4 | seats | launched_year |
+-----+-----+-----+-----+-----+
| 10 | City | Petrol | Y | 5 | 2014 |
| 22 | Civic | Petrol | Y | 5 | 2006 |
| 51 | Amaze | Petrol | N | 5 | 2013 |
| 62 | Brio | Diesel | Y | 5 | 2011 |
| 86 | Jazz | Gas/Petrol | N | 5 | 2009 |
+-----+-----+-----+-----+-----+
5 rows in set (0.0006 sec)
MySQL localhost:33060+ ssl hondacars SQL >

```

## ALTER AND ROLLBACK

**ROLLBACK** does **not work with most DDL Commands**, so be careful with DDL commands.

```

MySQL Shell
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+-----+-----+-----+-----+-----+-----+
| id | name | fuel | BS4 | seats | launched_year |
+-----+-----+-----+-----+-----+
| 10 | City | Petrol | Y | 5 | 2014 |
| 22 | Civic | Petrol | Y | 5 | 2006 |
| 51 | Amaze | Petrol | N | 5 | 2013 |
| 62 | Brio | Diesel | Y | 5 | 2011 |
| 86 | Jazz | Gas/Petrol | N | 5 | 2009 |
+-----+-----+-----+-----+-----+
5 rows in set (0.0006 sec)
MySQL localhost:33060+ ssl hondacars SQL > START TRANSACTION;
Query OK, 0 rows affected (0.0003 sec)
MySQL localhost:33060+ ssl hondacars SQL > ALTER TABLE models DROP COLUMN id, DROP COLUMN name;
Query OK, 0 rows affected (0.1096 sec)

Records: 0 Duplicates: 0 Warnings: 0
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+-----+-----+-----+-----+
| fuel | BS4 | seats | launched_year |
+-----+-----+-----+-----+
| Petrol | Y | 5 | 2014 |
| Petrol | Y | 5 | 2006 |
| Petrol | N | 5 | 2013 |
| Diesel | Y | 5 | 2011 |
| Gas/Petrol | N | 5 | 2009 |
+-----+-----+-----+-----+
5 rows in set (0.0005 sec)
MySQL localhost:33060+ ssl hondacars SQL > ROLLBACK;
Query OK, 0 rows affected (0.0002 sec)
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+-----+-----+-----+-----+
| fuel | BS4 | seats | launched_year |
+-----+-----+-----+-----+
| Petrol | Y | 5 | 2014 |
| Petrol | Y | 5 | 2006 |
| Petrol | N | 5 | 2013 |
| Diesel | Y | 5 | 2011 |
| Gas/Petrol | N | 5 | 2009 |
+-----+-----+-----+-----+
5 rows in set (0.0006 sec)
MySQL localhost:33060+ ssl hondacars SQL >

```

## DRL – DATA RETRIEVAL LANGUAGE (OR) DQL – DATA QUERY LANGUAGE

**COMMAND : SELECT <ATTRIBUTES> FROM <TAB\_NAME>;**

It selects specified attributes from a table.

It is the most used SQL command.

Its result is called a query.

## DCL – DATA CONTROL LANGUAGE

- 1) GRANT
- 2) REVOKE

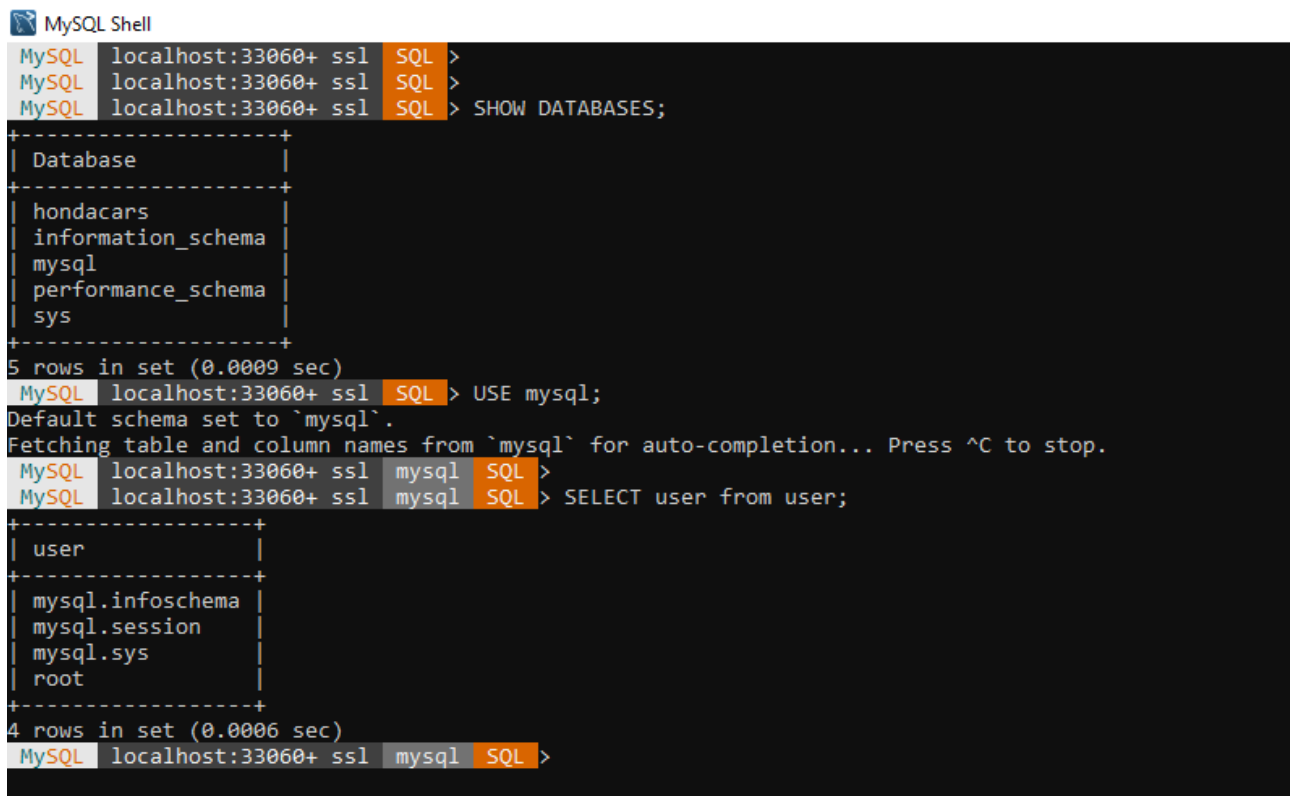
## LISTING ALL USERS IN THE MYSQL SERVER

All the users are stored in the user table in mysql database.

Mysql (DB) -> User (Table) -> user (Column)

### COMMAND :

```
USE mysql;  
SELECT user FROM user;
```



```
MySQL Shell  
MySQL localhost:33060+ ssl SQL >  
MySQL localhost:33060+ ssl SQL >  
MySQL localhost:33060+ ssl SQL > SHOW DATABASES;  
+-----+  
| Database |  
+-----+  
| hondacars |  
| information_schema |  
| mysql |  
| performance_schema |  
| sys |  
+-----+  
5 rows in set (0.0009 sec)  
MySQL localhost:33060+ ssl SQL > USE mysql;  
Default schema set to `mysql`.  
Fetching table and column names from `mysql` for auto-completion... Press ^C to stop.  
MySQL localhost:33060+ ssl mysql SQL >  
MySQL localhost:33060+ ssl mysql SQL > SELECT user from user;  
+-----+  
| user |  
+-----+  
| mysql.infoschema |  
| mysql.session |  
| mysql.sys |  
| root |  
+-----+  
4 rows in set (0.0006 sec)  
MySQL localhost:33060+ ssl mysql SQL >
```

## CREATING A NEW USER

**COMMAND :** CREATE USER <USERNAME> IDENTIFIED BY  
<PASSWORD>;

It creates a user with the username and with the specified password.

By Default, the new user will not have any privileges, We have to assign privileges for them using the **GRANT command**.

```

Select MySQL Shell
MySQL localhost:33060+ ssl mysql SQL >
MySQL localhost:33060+ ssl mysql SQL > SELECT user FROM user;
+-----+
| user |
+-----+
| mysql.infoschema |
| mysql.session |
| mysql.sys |
| root |
+-----+
4 rows in set (0.0006 sec)
MySQL localhost:33060+ ssl mysql SQL > CREATE USER soorya@localhost IDENTIFIED BY 'sooryapassword';
Query OK, 0 rows affected (0.0419 sec)
MySQL localhost:33060+ ssl mysql SQL > SELECT user FROM user;
+-----+
| user |
+-----+
| mysql.infoschema |
| mysql.session |
| mysql.sys |
| root |
| soorya |
+-----+
5 rows in set (0.0006 sec)
MySQL localhost:33060+ ssl mysql SQL >

```

## VIEWING GRANTS FOR A USER

**COMMAND :** SHOW GRANTS FOR <USERNAME>;

It displays all the grants (privileges) for a particular user.

```

MySQL Shell
MySQL localhost:33060+ ssl mysql SQL >
MySQL localhost:33060+ ssl mysql SQL > SELECT user FROM user;
+-----+
| user |
+-----+
| mysql.infoschema |
| mysql.session |
| mysql.sys |
| root |
| soorya |
+-----+
5 rows in set (0.0321 sec)
MySQL localhost:33060+ ssl mysql SQL > SHOW GRANTS FOR soorya@localhost;
+-----+
| Grants for soorya@localhost |
+-----+
| GRANT USAGE ON *.* TO `soorya`@`localhost` |
+-----+
1 row in set (0.0005 sec)

```

## LOGIN AS A NEW USER

Here I logged into as a new user (soorya), the user has no grants and so the **SHOW DATABASES;** did not display the 'hondacars' database.

```
MySQL Shell
MySQL SQL >
MySQL SQL >
MySQL SQL > \connect soorya@localhost
Creating a session to 'soorya@localhost'
Please provide the password for 'soorya@localhost': *****
Save password for 'soorya@localhost'? [Y]es/[N]o/[N]ever (default No):
Fetching schema names for autocompletion... Press ^C to stop.
Your MySQL connection id is 37 (X protocol)
Server version: 8.0.28 MySQL Community Server - GPL
No default schema selected; type \use <schema> to set one.
MySQL localhost:33060+ ssl SQL >
MySQL localhost:33060+ ssl SQL > show databases;
+-----+
| Database |
+-----+
| information_schema |
+-----+
1 row in set (0.0009 sec)
MySQL localhost:33060+ ssl SQL >
```

## GRANTING PRIVILAGES TO A USER

**COMMAND :** GRANT <PRIVILAGES> ON <DATABASE | TABLE>  
FOR <USERNAME>;

It grants the mentioned privileges on the database or tables to the mentioned user.

**ALL** can be placed at <PRIVILAGES> to specify all the privileges.

Here, I have granted all the privileges on the **hondacars database** for the user (soorya).

ALWAYS grant from the user that has privileges (eg.root user) that are to be given to the new user.



```

MySQL Shell
MySQL localhost:33060+ ssl SQL >
MySQL localhost:33060+ ssl SQL > show databases;
+-----+
| Database |
+-----+
| information_schema |
+-----+
1 row in set (0.0009 sec)
MySQL localhost:33060+ ssl SQL > \disconnect
MySQL SQL >
MySQL SQL >
MySQL SQL > \connect root@localhost
Creating a session to 'root@localhost'
Please provide the password for 'root@localhost': *****
Save password for 'root@localhost'? [Y]es/[N]o/[e]ver (default No):
Fetching schema names for autocompletion... Press ^C to stop.
Your MySQL connection id is 38 (X protocol)
Server version: 8.0.28 MySQL Community Server - GPL
No default schema selected; type \use <schema> to set one.
MySQL localhost:33060+ ssl SQL >
MySQL localhost:33060+ ssl SQL > GRANT ALL ON hondacars.* TO soorya@localhost;
Query OK, 0 rows affected (0.0346 sec)
MySQL localhost:33060+ ssl SQL >

```

## VIEWING THE PRIVILAGES AFTER GRANTING ALL

```

MySQL Shell
MySQL localhost:33060+ ssl mysql SQL >
MySQL localhost:33060+ ssl mysql SQL >
MySQL localhost:33060+ ssl mysql SQL > SHOW GRANTS FOR soorya@localhost;
+-----+
| Grants for soorya@localhost |
+-----+
| GRANT USAGE ON *.* TO `soorya`@`localhost` |
| GRANT ALL PRIVILEGES ON `hondacars`.* TO `soorya`@`localhost` |
+-----+
2 rows in set (0.0005 sec)
MySQL localhost:33060+ ssl mysql SQL >

```

## AFTER GRANTING..

**NOTE:** We have to **grant from the user (eg. root) that already has those privileges.**

Here I granted from **root user**.

To see the changes, We connect to the new user (soorya).

Now, You can see that **hondacars** database is displayed on SHOW DATABASES; command.

```
MySQL Shell
MySQL SQL >
MySQL SQL >
MySQL SQL > \connect soorya@localhost
Creating a session to 'soorya@localhost'
Please provide the password for 'soorya@localhost': *****
Save password for 'soorya@localhost'? [Y]es/[N]o/[v]er (default No):
Fetching schema names for autocompletion... Press ^C to stop.
Your MySQL connection id is 40 (X protocol)
Server version: 8.0.28 MySQL Community Server - GPL
No default schema selected; type \use <schema> to set one.
MySQL localhost:33060+ ssl SQL >
MySQL localhost:33060+ ssl SQL > show databases;
+-----+
| Database |
+-----+
| hondacars |
| information_schema |
+-----+
2 rows in set (0.0010 sec)
MySQL localhost:33060+ ssl SQL >
```

## ACCESSING THE HONDACARS DB AS A NEW USER (SOORYA)

You can notice that I am able to perform a SELECT query on the hondacars database.

```

MySQL Shell
MySQL SQL >
MySQL SQL >
MySQL SQL > \connect soorya@localhost
Creating a session to 'soorya@localhost'
Please provide the password for 'soorya@localhost': *****
Save password for 'soorya@localhost'? [Y]es/[N]o/[N]ever (default No):
Fetching schema names for autocompletion... Press ^C to stop.
Your MySQL connection id is 40 (X protocol)
Server version: 8.0.28 MySQL Community Server - GPL
No default schema selected; type \use <schema> to set one.
MySQL localhost:33060+ ssl SQL >
MySQL localhost:33060+ ssl SQL > show databases;
+-----+
| Database |
+-----+
| hondacars |
| information_schema |
+-----+
2 rows in set (0.0010 sec)
MySQL localhost:33060+ ssl SQL > use hondacars;
Default schema set to `hondacars`.
Fetching table and column names from `hondacars` for auto-completion... Press ^C to stop.
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL > SHOW TABLES;
+-----+
| Tables_in_hondacars |
+-----+
| models |
| truncate_me |
+-----+
2 rows in set (0.0015 sec)
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+----+-----+-----+-----+-----+-----+
| id | name | fuel | BS4 | seats | launched_year |
+----+-----+-----+-----+-----+-----+
| 10 | City | Petrol | Y | 5 | 2014 |
| 22 | Civic | Petrol | Y | 5 | 2006 |
| 51 | Amaze | Petrol | N | 5 | 2013 |
| 62 | Brio | Diesel | Y | 5 | 2011 |
| 86 | Jazz | Gas/Petrol | N | 5 | 2009 |
+----+-----+-----+-----+-----+-----+
5 rows in set (0.0328 sec)
MySQL localhost:33060+ ssl hondacars SQL >

```

## REVOKE A GRANT

**COMMAND :** REVOKE <PRIVILAGES> ON <DATABASE | TABLE> FROM <USERNAME>;

It revokes (removes) the specified privileges on the database or table from the specified user.

**NOTE:** We run the REVOKE command in the user (root) where we granted privileges to another user (new user).

Here I granted privileges to the new user (soorya) from user (root). So I revoked privileges from the new user (soorya) by running the REVOKE command in the user (root) account.

```

MySQL Shell
MySQL localhost:33060+ ssl SQL >
MySQL localhost:33060+ ssl SQL > REVOKE ALL ON hondacars.* FROM soorya@localhost;
ERROR: 1044: Access denied for user 'soorya'@'localhost' to database 'hondacars'
MySQL localhost:33060+ ssl SQL > show databases;
+-----+
| Database |
+-----+
| hondacars |
| information_schema |
+-----+
2 rows in set (0.0012 sec)
MySQL localhost:33060+ ssl SQL > \disconnect
MySQL SQL > \connect root@localhost
Creating a session to 'root@localhost'
Please provide the password for 'root@localhost': *****
Save password for 'root@localhost'? [Y]es/[N]o/[e]xit (default No):
Fetching schema names for autocompletion... Press ^C to stop.
Your MySQL connection id is 43 (X protocol)
Server version: 8.0.28 MySQL Community Server - GPL
No default schema selected; type \use <schema> to set one.
MySQL localhost:33060+ ssl SQL >
MySQL localhost:33060+ ssl SQL > REVOKE ALL ON hondacars.* FROM soorya@localhost;
Query OK, 0 rows affected (0.0404 sec)
MySQL localhost:33060+ ssl SQL >

```

## LETS TEST AFTER REVOKING,

Notice that there is **no hondacars database** by running the command SHOW DATABASES; from the new user (soorya).

```

MySQL Shell
MySQL localhost:33060+ ssl SQL >
MySQL localhost:33060+ ssl SQL > REVOKE ALL ON hondacars.* FROM soorya@localhost;
Query OK, 0 rows affected (0.0404 sec)
MySQL localhost:33060+ ssl SQL >
MySQL localhost:33060+ ssl SQL >
MySQL localhost:33060+ ssl SQL > \disconnect
MySQL SQL > \connect soorya@localhost
Creating a session to 'soorya@localhost'
Please provide the password for 'soorya@localhost': *****
Save password for 'soorya@localhost'? [Y]es/[N]o/[e]xit (default No):
Fetching schema names for autocompletion... Press ^C to stop.
Your MySQL connection id is 44 (X protocol)
Server version: 8.0.28 MySQL Community Server - GPL
No default schema selected; type \use <schema> to set one.
MySQL localhost:33060+ ssl SQL >
MySQL localhost:33060+ ssl SQL >
MySQL localhost:33060+ ssl SQL > SHOW DATABASES;
+-----+
| Database |
+-----+
| information_schema |
+-----+
1 row in set (0.0009 sec)
MySQL localhost:33060+ ssl SQL >

```

## GRANTING A SPECIFIC PRIVILEGE.

Now I have granted only the **SELECT** privilege to the new user (soorya).

```
MySQL Shell
MySQL localhost:33060+ ssl mysql SQL >
MySQL localhost:33060+ ssl mysql SQL > GRANT SELECT ON hondacars.* TO soorya@localhost;
Query OK, 0 rows affected (0.0382 sec)
MySQL localhost:33060+ ssl mysql SQL > \disconnect
MySQL SQL >
MySQL SQL > \connect soorya@localhost
Creating a session to 'soorya@localhost'
Please provide the password for 'soorya@localhost': *****
Save password for 'soorya@localhost'? [Y]es/[N]o/[N]ever (default No):
Fetching schema names for autocompletion... Press ^C to stop.
Your MySQL connection id is 46 (X protocol)
Server version: 8.0.28 MySQL Community Server - GPL
No default schema selected; type \use <schema> to set one.
MySQL localhost:33060+ ssl SQL >
MySQL localhost:33060+ ssl SQL > SHOW DATABASES;
+-----+
| Database |
+-----+
| hondacars |
| information_schema |
+-----+
2 rows in set (0.0009 sec)
MySQL localhost:33060+ ssl SQL > SHOW TABLES;
ERROR: 1046: No database selected
MySQL localhost:33060+ ssl SQL > USE hondacars;
Default schema set to `hondacars`.
Fetching table and column names from `hondacars` for auto-completion... Press ^C to stop.
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL > SHOW TABLES;
+-----+
| Tables_in_hondacars |
+-----+
| models |
| truncate_me |
+-----+
2 rows in set (0.0014 sec)
MySQL localhost:33060+ ssl hondacars SQL >
```

## RESULT of adding a specific privilege:

The new user can **ONLY RUN** the SELECT command.

**NOTE** the **error message** while running the **UPDATE** command.

```

MySQL Shell
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL > SHOW TABLES;
+-----+
| Tables_in_hondacars |
+-----+
| models               |
| truncate_me          |
+-----+
2 rows in set (0.0014 sec)
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+----+-----+-----+-----+-----+-----+
| id | name  | fuel  | BS4 | seats | launched_year |
+----+-----+-----+-----+-----+-----+
| 10 | City  | Petrol | Y   | 5     | 2014          |
| 22 | Civic | Petrol | Y   | 5     | 2006          |
| 51 | Amaze | Petrol | N   | 5     | 2013          |
| 62 | Brio  | Diesel | Y   | 5     | 2011          |
| 86 | Jazz  | Gas/Petrol | N   | 5     | 2009          |
+----+-----+-----+-----+-----+-----+
5 rows in set (0.0321 sec)
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL > START TRANSACTION;
Query OK, 0 rows affected (0.0004 sec)
MySQL localhost:33060+ ssl hondacars SQL > UPDATE models SET name = 'updates all';
ERROR: 1142: UPDATE command denied to user 'soorya'@'localhost' for table 'models'
MySQL localhost:33060+ ssl hondacars SQL >

```

## GRANTING 1 MORE SPECIFIC PRIVILAGE

Here I granted privilege for INSERT command.

Now the new user (soorya) has privileges for

- 1) **SELECT**
- 2) **INSERT**

```

MySQL Shell
MySQL localhost:33060+ ssl mysql SQL > GRANT INSERT ON hondacars.* TO soorya@localhost;
Query OK, 0 rows affected (0.0375 sec)
MySQL localhost:33060+ ssl mysql SQL > \disconnect
MySQL SQL > \connect soorya@localhost
Creating a session to 'soorya@localhost'
Please provide the password for 'soorya@localhost': *****
Save password for 'soorya@localhost'? [Y]es/[N]o/[N]ever (default No):
Fetching schema names for autocompletion... Press ^C to stop.
Your MySQL connection id is 48 (X protocol)
Server version: 8.0.28 MySQL Community Server - GPL
No default schema selected; type \use <schema> to set one.
MySQL localhost:33060+ ssl SQL >
MySQL localhost:33060+ ssl SQL > SHOW DATABASES;
+-----+
| Database |
+-----+
| hondacars |
| information_schema |
+-----+
2 rows in set (0.0009 sec)
MySQL localhost:33060+ ssl SQL > USE hondacars;
Default schema set to `hondacars`.
Fetching table and column names from `hondacars` for auto-completion... Press ^C to stop.
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+-----+-----+-----+-----+-----+-----+
| id | name | fuel | BS4 | seats | launched_year |
+-----+-----+-----+-----+-----+-----+
| 10 | City | Petrol | Y | 5 | 2014 |
| 22 | Civic | Petrol | Y | 5 | 2006 |
| 51 | Amaze | Petrol | N | 5 | 2013 |
| 62 | Brio | Diesel | Y | 5 | 2011 |
| 86 | Jazz | Gas/Petrol | N | 5 | 2009 |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.0009 sec)
MySQL localhost:33060+ ssl hondacars SQL > INSERT INTO models (id,name,fuel,bs4,seats,launched_year) VALUES
-> (95,'WR-V','Petrol','N',4,2015);
Query OK, 1 row affected (0.0336 sec)
MySQL localhost:33060+ ssl hondacars SQL >

```

```

MySQL Shell
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+-----+-----+-----+-----+-----+-----+
| id | name | fuel | BS4 | seats | launched_year |
+-----+-----+-----+-----+-----+-----+
| 10 | City | Petrol | Y | 5 | 2014 |
| 22 | Civic | Petrol | Y | 5 | 2006 |
| 51 | Amaze | Petrol | N | 5 | 2013 |
| 62 | Brio | Diesel | Y | 5 | 2011 |
| 86 | Jazz | Gas/Petrol | N | 5 | 2009 |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.0009 sec)
MySQL localhost:33060+ ssl hondacars SQL > INSERT INTO models (id,name,fuel,bs4,seats,launched_year) VALUES
-> (95,'WR-V','Petrol','N',4,2015);
Query OK, 1 row affected (0.0336 sec)
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+-----+-----+-----+-----+-----+-----+
| id | name | fuel | BS4 | seats | launched_year |
+-----+-----+-----+-----+-----+-----+
| 10 | City | Petrol | Y | 5 | 2014 |
| 22 | Civic | Petrol | Y | 5 | 2006 |
| 51 | Amaze | Petrol | N | 5 | 2013 |
| 62 | Brio | Diesel | Y | 5 | 2011 |
| 86 | Jazz | Gas/Petrol | N | 5 | 2009 |
| 95 | WR-V | Petrol | N | 4 | 2015 |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.0322 sec)
MySQL localhost:33060+ ssl hondacars SQL >

```



## REVOKING ONLY A SPECIFIC PRIVILEGE.

I have revoked (removed) only the INSERT privilege from the new user (soorya).

See the result of **SHOW GRANTS** command before and after revoking INSERT the privilege.

Now the new user (soorya) has **only privilege** to perform **SELECT** command **on** the **hondacars** database.

```
MySQL Shell
MySQL localhost:33060+ ssl hondacars SQL >
MySQL localhost:33060+ ssl hondacars SQL > \disconnect
MySQL SQL > \connect root@localhost
Creating a session to 'root@localhost'
Please provide the password for 'root@localhost': *****
Save password for 'root@localhost'? [Y]es/[N]o/[N]ever (default No):
Fetching schema names for autocompletion... Press ^C to stop.
Your MySQL connection id is 49 (X protocol)
Server version: 8.0.28 MySQL Community Server - GPL
No default schema selected; type \use <schema> to set one.
MySQL localhost:33060+ ssl SQL >
MySQL localhost:33060+ ssl SQL > SHOW GRANTS FOR soorya@localhost;
+-----+
| Grants for soorya@localhost |
+-----+
| GRANT USAGE ON *.* TO `soorya`@`localhost` |
| GRANT SELECT, INSERT ON `hondacars`.* TO `soorya`@`localhost` |
+-----+
2 rows in set (0.0004 sec)
MySQL localhost:33060+ ssl SQL > REVOKE INSERT ON hondacars.* FROM soorya@localhost;
Query OK, 0 rows affected (0.0415 sec)
MySQL localhost:33060+ ssl SQL >
MySQL localhost:33060+ ssl SQL > SHOW GRANTS FOR soorya@localhost;
+-----+
| Grants for soorya@localhost |
+-----+
| GRANT USAGE ON *.* TO `soorya`@`localhost` |
| GRANT SELECT ON `hondacars`.* TO `soorya`@`localhost` |
+-----+
2 rows in set (0.0005 sec)
MySQL localhost:33060+ ssl SQL >
```



NOTE the **error** when I tried to perform **INSERT** command after that privilege is revoked (removed).

```
MySQL Shell
MySQL localhost:33060+ ssl SQL > \disconnect
MySQL SQL >
MySQL SQL >
MySQL SQL >
MySQL SQL > \connect soorya@localhost
Creating a session to 'soorya@localhost'
Please provide the password for 'soorya@localhost': *****
Save password for 'soorya@localhost'? [Y]es/[N]o/[Ne]ver (default No):
Fetching schema names for autocompletion... Press ^C to stop.
Your MySQL connection id is 51 (X protocol)
Server version: 8.0.28 MySQL Community Server - GPL
No default schema selected; type \use <schema> to set one.
MySQL localhost:33060+ ssl SQL > SHOW DATABASES;
+-----+
| Database |
+-----+
| hondacars |
| information_schema |
+-----+
2 rows in set (0.0007 sec)
MySQL localhost:33060+ ssl SQL > USE hondacars;
Default schema set to 'hondacars'.
Fetching table and column names from 'hondacars' for auto-completion... Press ^C to stop.
MySQL localhost:33060+ ssl hondacars SQL > SELECT * FROM models;
+----+-----+-----+-----+-----+-----+
| id | name | fuel | BS4 | seats | launched_year |
+----+-----+-----+-----+-----+-----+
| 10 | City | Petrol | Y | 5 | 2014 |
| 22 | Civic | Petrol | Y | 5 | 2006 |
| 51 | Amaze | Petrol | N | 5 | 2013 |
| 62 | Brio | Diesel | Y | 5 | 2011 |
| 86 | Jazz | Gas/Petrol | N | 5 | 2009 |
| 95 | WR-V | Petrol | N | 4 | 2015 |
+----+-----+-----+-----+-----+-----+
6 rows in set (0.0006 sec)
MySQL localhost:33060+ ssl hondacars SQL > INSERT INTO models (id,name,fuel,bs4,seats,launched_year) VALUES (100,'City','Petrol','Y',5,2014);
ERROR: 1142: INSERT command denied to user 'soorya'@'localhost' for table 'models'
MySQL localhost:33060+ ssl hondacars SQL >
```

## DROPPING A USER

**COMMAND :** DROP USER <USERNAME>;

It drops (completely removes) a user from the MySQL Database.

NOTE the differences in the Users list before and after dropping a user.

Here I dropped the user 'soorya'.

MySQL Shell

```
MySQL localhost:33060+ ssl mysql SQL >  
MySQL localhost:33060+ ssl mysql SQL >  
MySQL localhost:33060+ ssl mysql SQL >  
MySQL localhost:33060+ ssl mysql SQL > SELECT user from user;
```

user
mysql.infoschema
mysql.session
mysql.sys
root
soorya

5 rows in set (0.0009 sec)

```
MySQL localhost:33060+ ssl mysql SQL >  
MySQL localhost:33060+ ssl mysql SQL > DROP USER soorya@localhost;
```

Query OK, 0 rows affected (0.0478 sec)

```
MySQL localhost:33060+ ssl mysql SQL >  
MySQL localhost:33060+ ssl mysql SQL > SELECT user from user;
```

user
mysql.infoschema
mysql.session
mysql.sys
root

4 rows in set (0.0321 sec)

```
MySQL localhost:33060+ ssl mysql SQL >
```