

# MySQL

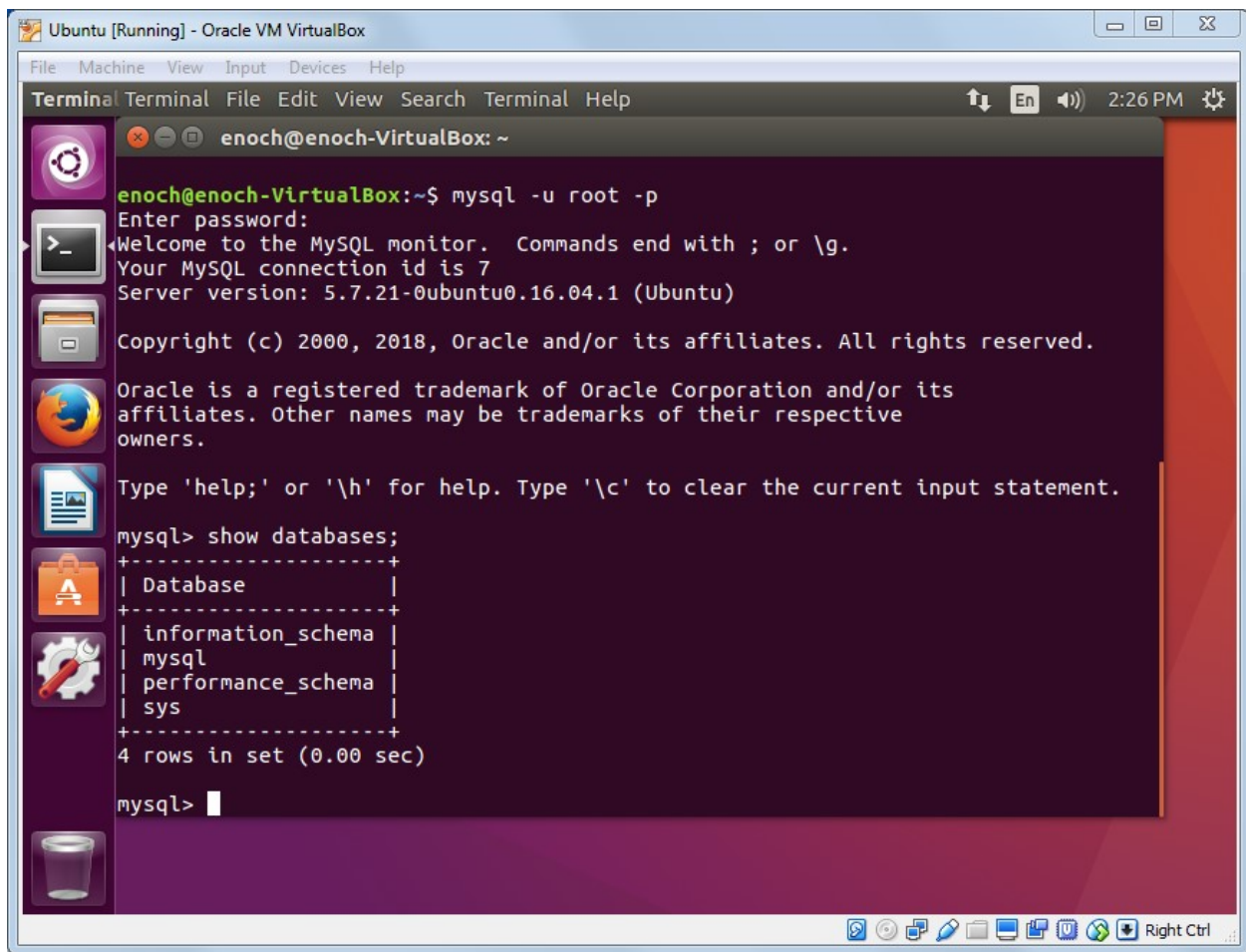
MySQL is a popular free database.

To enter MySQL, from the Linux Terminal window, type the following to login to the root account using the root password.

```
$ sudo mysql -u root -p
...
mysql> exit;
```

After you have created a new mysql user account, you can then login using the following

```
$ mysql -u useraccount -p
...
```



# MySQL Common Commands

MySQL commands **are not** case sensitive, however, the user identifiers that you create **are** case sensitive. In the examples below the mysql keywords are in CAPS.

Commands	Examples
SHOW DATABASES	SHOW DATABASES;
SHOW TABLES	SHOW TABLES;
CREATE DATABASE	CREATE DATABASE sampleDB;
USE	USE sampleDB;
CREATE TABLE	CREATE TABLE Persons (PersonID INT NOT NULL, FirstName VARCHAR(255), LastName VARCHAR(255), PRIMARY KEY (PersonID));  CREATE TABLE Devices (ID INT NOT NULL AUTO_INCREMENT PRIMARY KEY, Mac VARCHAR(255), Description VARCHAR(255));
DESCRIBE	DESCRIBE Persons;
INSERT	INSERT INTO Persons (PersonID, FirstName, LastName) VALUES (1, 'Enoch', 'Hwang');
SELECT	SELECT * FROM Persons;  SELECT LastName FROM Persons WHERE LastName = 'Hwang';
UPDATE	UPDATE Persons SET FirstName = 'Windy' WHERE PersonID = 1;
DELETE	DELETE FROM Persons WHERE PersonID = 1;
ALTER	ALTER TABLE Persons ADD Age INT;  ALTER TABLE Persons DROP LastName;
DROP DATABASE	DROP DATABASE sampleDB;
DROP table	DROP TABLE Persons;
EXIT	

## Administrative commands

Commands	Examples
CREATE USER	CREATE USER test@localhost IDENTIFIED BY 'lsucs123';
DROP USER	DROP USER test@localhost;
GRANT ALL PRIVILEGES	GRANT ALL PRIVILEGES ON sampleDB.* TO test@localhost; GRANT ALL PRIVILEGES ON `test%`.* TO test@localhost;
FLUSH PRIVILEGES	FLUSH PRIVILEGES;
REVOKE ALL PRIVILEGES	REVOKE ALL PRIVILEGES ON sampleDB.* FROM test@localhost;
SHOW GRANTS	SHOW GRANTS FOR test@localhost;

Examples	Comments
SELECT USER FROM MYSQL.USER;	List all users
GRANT ALL PRIVILEGES ON test.* TO test@localhost;	Can only create database named test.
GRANT ALL PRIVILEGES ON `test%`.* TO test@localhost;	Can create any database with name starting with test. Note the back tick around `test%`
REVOKE ALL PRIVILEGES ON *.* FROM TEST@LOCALHOST;	

To run a MySQL script name **script.sql**. The file is just a text file containing MySQL commands.

```
sudo mysql -u root -p < script.sql
```

or

```
mysql -u test -p < script.sql
```

Get the details on the commands [here](#).