**MySQL Commands**

## Login to MySQL

# mysql -u root -p

## View a List of MySQL Users

MYSQL> SELECT User,Host FROM mysql.user;

1. **To find the privilege(s) granted to a particular MySQL account:**

mysql> show grants for 'root'@'%';

## How to Create a New User

Mysql> CREATE USER 'newuser'@'localhost' IDENTIFIED BY 'password';

Full permission

Mysql> grant all privileges on \*.\* to 'newuser'@'localhost' IDENTIFIED BY 'password';

1. **How to Create a New User with All Privilages**

Mysql > GRANT ALL PRIVILEGES ON \*.\* to user@’localhost’ identified by 'suniluser';

Mysql > GRANT ALL PRIVILEGES ON \*.\* to user@’192.168.1.101’ identified by 'suniluser';

1. **How To Grant Different User Permissions**

Here is a short list of other common possible permissions that users can enjoy.

* ALL PRIVILEGES- as we saw previously, this would allow a MySQL user all access to a designated database (or if no database is selected, across the system)
* CREATE- allows them to create new tables or databases
* DROP- allows them to them to delete tables or databases
* DELETE- allows them to delete rows from tables
* INSERT- allows them to insert rows into tables
* SELECT- allows them to use the Select command to read through databases
* UPDATE- allow them to update table rows
* GRANT OPTION- allows them to grant or remove other users' privileges.

Mysql> GRANT [type of permission] ON [database name].[table name] TO ‘[username]’@'localhost’;

Mysql> REVOKE [type of permission] ON [database name].[table name] FROM ‘[username]’@‘localhost’;

1. **Remove a MySQL User**

MYSQL> DROP USER 'testuser'@'localhost';

### How to set MySQL Root password?

# mysqladmin -u root password **YOURNEWPASSWORD**

### How to Change MySQL Root/Regular User password?

Mysql> mysqladmin -u root -p**123456** password '**xyz123**'

Mysql> mysqladmin -u amit -p'newpass' password vrushu

# mysql\_secure\_installation

### How to check MySQL Server is running?

# mysqladmin -u root -p ping

Enter password:

**mysqld is alive**

### How to Check which MySQL version I am running?

# mysqladmin -u root -p version

### How to Find out current Status of MySQL server?

# mysqladmin -u root –p tmppassword status

Enter password:

### How to check status of all MySQL Server Variable’s and value’s?

# mysqladmin -u root -p extended-status

Enter password:

### How to see all MySQL server Variables and Values?

# mysqladmin -u root -p variables

Enter password:

### How to check all the running Process of MySQL server?

# mysqladmin -u root -p processlist

Enter password:

### 16. How to create a Database in MySQL server?

# mysqladmin -u root -p create databasename

Enter password:

### How to drop a Database in MySQL server?

# mysqladmin -u root -p drop databasename

Enter password:

### How to reload/refresh MySQL Privileges?

# mysqladmin -u root -p reload;

# mysqladmin -u root -p refresh

### How to shutdown MySQL server Safely?

# mysqladmin -u root -p shutdown

Enter password:

# service mysqld stop

### How to Connect Remote mysql server

# mysqladmin -h 172.16.25.126 –p

# mysql -u username -h 192.168.1.162 –p password

### How to execute command on remote MySQL server

# mysqladmin -h 172.16.25.126 -u root -p status

### How to start/stop MySQL replication on a slave server?

# mysqladmin -u root -p start-slave

# mysqladmin -u root -p stop-slave

# MySQL Database Backup and Restore Commands

### How to Backup MySQL Database?

# mysqldump -u [username] –p [password] [database\_name] > [dump\_file.sql]

#### How to Backup a Single MySQL Database?

# mysqldump -u root –p tecmint rsyslog > rsyslog.sql

#### How to Backup Multiple MySQL Databases?

# mysqldump -u root –p tecmint --databases rsyslog syslog > rsyslog\_syslog.sql

#### How to Backup All MySQL Databases?

# mysqldump -u root –p tecmint --all-databases > all-databases.sql

#### How to Backup MySQL Database Structure Only?

# mysqldump -u root –p tecmint -–no-data rsyslog > rsyslog\_structure.sql

#### How to Backup MySQL Database Data Only?

# mysqldump -u root –p tecmint --no-create-db --no-create-info rsyslog > rsyslog\_data.sql

#### How to Backup Single Table of Database?

# mysqldump -u root –p tecmint wordpress wp\_posts > wordpress\_posts.sql

#### How to Backup Multiple Tables of Database?

# mysqldump -u root –p tecmint wordpress wp\_posts wp\_comments > wordpress\_posts\_comments.sql

#### How to Backup Remote MySQL Database

# mysqldump -h 172.16.25.126 -u root –p tecmint gallery > gallery.sql

### How to Restore MySQL Database?

# mysql -u [username] –p[password] [database\_name] < [dump\_file.sql]

#### How to Restore Single MySQL Database

# mysql -u root –p tecmint rsyslog < rsyslog.sql

If you want to restore a database that already exist on targeted machine, then you will need to use the **mysqlimport** command.

# mysqlimport -u root –p tecmint rsyslog < rsyslog.sql

1. **Show and Open Database and Tables**

Mysql> show databases;

Mysql> use <DB\_Name>;

Mysql> drop database <Database\_name>;

Mysql> show tables;

Mysql> select \* from <tableName>;

`**MYSQL - ALTER, DROP, RENAME, MODIFY**

<http://www.guru99.com/alter-drop-rename.html>

* **Alter- syntax :-**

The basic syntax used to add a column to an already existing table is shown below

ALTER TABLE `table\_name` ADD COLUMN `column\_name` `data\_type`;

* **WHAT IS THE DROP COMMAND :-**

The DROP command is used to

Delete a database from MySQL server

Delete an object (like Table , Column)from a database.

ALTER TABLE `members` DROP COLUMN `credit\_card\_number`;

* **DROP TABLE**

The syntax to DROP a table from Database is as follow –

DROP TABLE `sample\_table`;

* **Create MySQL Tables**

Syntax:

CREATE TABLE table\_name (column\_name column\_type);

* **Drop MySQL Tables**

Syntax:

DROP TABLE table\_name ;

* **MySQL Insert Query**

Syntax:

Here is generic SQL syntax of INSERT INTO command to insert data into MySQL table:

INSERT INTO table\_name ( field1, field2,...fieldN )VALUES( value1, value2,...valueN );

* **MySQL Select Query**

The SQL SELECT command is used to fetch data from MySQL database. You can use this command at mysql> prompt as well as in any script like PHP.

Syntax:

Here is generic SQL syntax of SELECT command to fetch data from MySQL table:

SELECT field1, field2,...fieldN table\_name1, table\_name2...

[WHERE Clause]

[OFFSET M ][LIMIT N]

We have seen SQL SELECT command to fetch data from MySQL table. We can use a conditional clause called WHERE clause to filter out results. Using WHERE clause, we can specify a selection criteria to select required records from a table.

* **MySQL WHERE Clause**

Syntax:

Here is generic SQL syntax of SELECT command with WHERE clause to fetch data from MySQL table:

SELECT field1, field2,...fieldN table\_name1, table\_name2...

[WHERE condition1 [AND [OR]] condition2.....

* **MySQL UPDATE Query**

There may be a requirement where existing data in a MySQL table needs to be modified. You can do so by using SQL UPDATE command. This will modify any field value of any MySQL table.

Syntax:

Here is generic SQL syntax of UPDATE command to modify data into MySQL table:

UPDATE table\_name SET field1=new-value1, field2=new-value2

[WHERE Clause]

* **MySQL DELETE Query**

If you want to delete a record from any MySQL table, then you can use SQL command DELETE FROM. You can use this command at mysql> prompt as well as in any script like PHP.

Syntax:

Here is generic SQL syntax of DELETE command to delete data from a MySQL table:

DELETE FROM table\_name [WHERE Clause]

* [**Select specific row from mysql table**](http://stackoverflow.com/questions/10457458/select-specific-row-from-mysql-table) **:-**

select \* from customer where row\_number() = 3

or

SELECT column1, column2, ...

FROM $table

WHERE column1= (some criterion)

* **Different Types of SQL JOINs :-**

Here are the different types of the JOINs in SQL:

**(INNER) JOIN**: Returns records that have matching values in both tables

**LEFT (OUTER) JOIN**: Return all records from the left table, and the matched records from the right table

**RIGHT (OUTER) JOIN**: Return all records from the right table, and the matched records from the left table

**FULL (OUTER) JOIN**: Return all records when there is a match in either left or right table

## SQL INNER JOIN Keyword

SELECT column\_name(s)  
FROM table1  
INNER JOIN table2 ON table1.column\_name = table2.column\_name;

1. **Super Key :-**

Super key is a set of one or more than one keys that can be used to identify a record uniquely in a table.**Example :** Primary key, Unique key, Alternate key are subset of Super Keys.

1. **Candidate Key :-**

A Candidate Key is a set of one or more fields/columns that can identify a record uniquely in a table. There can be multiple Candidate Keys in one table. Each Candidate Key can work as Primary Key.

**Example:** In below diagram ID, RollNo and EnrollNo are Candidate Keys since all these three fields can be work as Primary Key.

1. **Primary Key :-**

Primary key is a set of one or more fields/columns of a table that uniquely identify a record in database table. It can not accept null, duplicate values. Only one Candidate Key can be Primary Key. It is a unique identifier, such as a driver license number, telephone number (including area code), or vehicle identification number.

1. **Secondary Key :-**

**A primary key is a unique identifier for a discrete object on a table, and a secondary key provides a second reference point for objects whose primary keys do not adequately distinguish them for reference purposes.** The two are vital to the functions of databases, list tables and other archival tools.

1. **Alternate key :-**

A Alternate key is a key that can be work as a primary key. Basically it is a candidate key that currently is not primary key.

1. **Composite/Compound Key :-**

Composite Key is a combination of more than one fields/columns of a table. It can be a Candidate key, Primary key.

1. **Unique Key :-**

Uniquekey is a set of one or more fields/columns of a table that uniquely identify a record in database table. It is like Primary key but it can accept only one null value and it can not have duplicate values.

1. **Foreign Key :-**

Foreign Key is a field in database table that is Primary key in another table. It can accept multiple null, duplicate values. **Example :** We can have a DeptID column in the Employee table which is pointing to DeptID column in a department table where it a primary key.



