MySQL Tutorial: Install, Create DB and Table, Insert and Select Records

This MySQL jumpstart guide will get you running quickly on the basics. This explains how to install MySQL, create a sample database, create a table, insert records into the table, and select records from the table.

1. Install and Configure MySQL

Go to the MySQL download page, and select your appropriate platform to download the latest version of MySQL community server.

- If you are installing on RedHat based distro (for example: CentOS), follow this article: Install MySQL on Linux using rpm
- You can also use yum groupinstall to install the MySQL Database group.

2. Create MySQL Database

Once MySQL is installed, connect to it using MySQL root user and create the database as shown below.

```
# mysql -u root -p
Enter password:
mysql>
```

After connecting as MySQL root user, execute the following command from the “mysql> ” prompt to create a database.

The following command will create the database called “thegeekstuff”.

```
mysql> create database thegeekstuff
```

Use “show databases” command to verify that the database was created successfully.

```
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| thegeekstuff       |
+--------------------+
3 rows in set (0.00 sec)
```

3. Create MySQL Table

Connect to the newly created database using “use” command before you can perform any operation in the database.

To connect to the database, do the following.

```
mysql> use thegeekstuff;
Database changed
```

The following example creates a employee table.

```
create table employee (
id INT AUTO_INCREMENT PRIMARY KEY,
name varchar(20),
dept varchar(10),
salary int(10)
);
```

When you copy-paste the above create table command in the “mysql> ” prompt, it will display the continuation prompt “->” starting from the 2nd line, which indicates that the command is still not over. The end of a SQL command is identified by a semi-colon.

```
mysql> create table employee (
    -> id INT AUTO_INCREMENT PRIMARY KEY,
    -> name varchar(20),
    -> dept varchar(10),
    -> salary int(10)
    -> );
Query OK, 0 rows affected (0.00 sec)
```

You can also use any one of the following data types.

- dcode SMALLINT
- mcode MEDIUMIN
- project_start DATE
- loggedon TIME

Do the following to view all the tables available in the database.

```
mysql> show tables;
+------------------------+
| Tables_in_thegeekstuff |
+------------------------+
| employee               |
+------------------------+
1 row in set (0.00 sec)
```

To view the table description, do the following.

```
mysql> desc employee;
+--------+-------------+------+-----+---------+----------------+
| Field  | Type        | Null | Key | Default | Extra          |
+--------+-------------+------+-----+---------+----------------+
| id     | int(11)     | NO   | PRI | NULL    | auto_increment |
| name   | varchar(20) | YES  |     | NULL    |                |
| dept   | varchar(10) | YES  |     | NULL    |                |
| salary | int(10)     | YES  |     | NULL    |                |
+--------+-------------+------+-----+---------+----------------+
4 rows in set (0.01 sec)
```

4. Insert Records into a Table

Use the following sample insert commands to insert some records to the employee table. While inserting values to all the columns in the table, you don't need to specify the column name. Just specify the values in the same sequence as the column names.

```
insert into employee values(100,'Thomas','Sales',5000);
insert into employee values(200,'Jason','Technology',5500);
insert into employee values(300,'Mayla','Technology',7000);
insert into employee values(400,'Nisha','Marketing',9500);
insert into employee values(500,'Randy','Technology',6000);
```

To insert values only to specific columns, you should specify the column names as shown below.

```
mysql> insert into employee(name,dept) values('Ritu', 'Accounting');
Query OK, 1 row affected (0.01 sec)
```

Note: You can also upload data from a text file to MySQL database using mysqlimport command.

5. Query Records from a Table

To view all the records from a table, use the following select statement.

```
mysql> select * from employee;
+-----+--------+------------+--------+
| id  | name   | dept       | salary |
+-----+--------+------------+--------+
| 100 | Thomas | Sales      |   5000 |
| 200 | Jason  | Technology |   5500 |
| 300 | Mayla  | Technology |   7000 |
| 400 | Nisha  | Marketing  |   9500 |
| 500 | Randy  | Technology |   6000 |
| 501 | Ritu   | Accounting |   NULL |
+-----+--------+------------+--------+
6 rows in set (0.00 sec)
```

To view only a specific columns from a table, specify the column names in the select command.

```
mysql>  select name, dept from employee;
```

The following select statement has a where condition which displays the employee records who belong to Technology department and getting a salary >= 7000.

```
mysql> select * from employee where dept = 'Technology' and salary >= 6000;
+-----+--------+------------+--------+
| id  | name   | dept       | salary |
+-----+--------+------------+--------+
| 300 | Mayla  | Technology |   7000 |
| 500 | Randy  | Technology |   6000 |
+-----+--------+------------+--------+
2 rows in set (0.00 sec)
```