

# Mysql

04 October 2021 02:40 PM

**Use below commands to install**

```
sudo apt update
sudo mysql_secure_installation utility
(2 y n n n y)
sudo apt update
sudo apt upgrade
(Y)
```

**To start mysql.**

```
sudo systemctl start mysql
sudo mysql -u root
```

**Create USER 'username'@'localhost' identified by 'welcome';** to create a user who's name is user @ localhost, we use identified means assigning the password to newly created user.

**GRANT ALL PRIVILEGES ON database\_name.\* TO 'username'@'localhost';** in our case username is nayan and database is \* so it will be (\*.\*)

Use **exit** to exit the mysql server.

Use **sudo mysql -u nayan -p** to enter in database we just using password.

```
user@user-virtual-machine:~$ sudo mysql -u nayan -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 13
Server version: 8.0.26-0ubuntu0.20.04.3 (Ubuntu)

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owners.

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

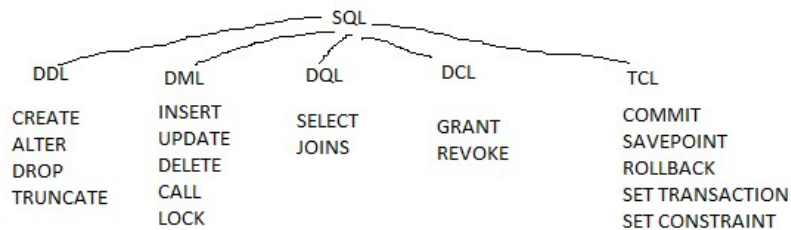
mysql> 
```

Use **SELECT USER();** to check which user I am using right now.

```
mysql> SELECT USER();
+-----+
| USER() |
+-----+
| root@localhost |
+-----+
1 row in set (0.00 sec)
```

Use **SELECT DATABASE();** to see which database I am currently using.

```
mysql> USE demo;
Database changed
mysql> SELECT DATABASE();
+-----+
| DATABASE() |
+-----+
| demo      |
+-----+
1 row in set (0.00 sec)
```



**CREATE DATABASE database;** to create a new database.

**USE databasename;** to use the database we created.

Use **ctrl L** or **clear scr**; to clear the screen.

```
mysql> CREATE DATABASE temp1;
Query OK, 1 row affected (0.02 sec)

mysql> USE temp1;
Database changed
mysql> SELECT DATABASE();
+-----+
| DATABASE() |
+-----+
| temp1      |
+-----+
1 row in set (0.00 sec)
```

**CREATE TABLE EmpData (Emp\_id int, Fname varchar (70), Lname varchar (70), city varchar (200), Cnumber int, Salary int, email varchar(100), Gender varchar (70), Dep varchar (100) );** to create a table with table name given in parenthesis.

```
mysql> CREATE TABLE EmpData(Emp_id int, Fname varchar(70), Lname varchar(70), city varchar(200), Cnumber int, Salary int, email varchar(100), Gender varchar(70), Dep varchar (100) );
```

Insert into EmpData values (1, 'Nayan', 'Gadhari', 'Mumbai', 1234567890, 25000, 'gadharinayan@gmail.com', 'Male', 'IT');

```
mysql> INSERT into EmpData values (1,'nayan','gadhari','mumbai',7718005783,25000,'gadharinayan@gmail.com','male','IT');
ERROR 1264 (22003): Out of range value for column 'Cnumber' at row 1
mysql> INSERT into EmpData values (1,'nayan','gadhari','mumbai',420,25000,'gadharinayan@gmail.com','male','IT');
Query OK, 1 row affected (0.01 sec)

mysql> SELECT * FROM EmpData;
+-----+-----+-----+-----+-----+-----+-----+
| Emp_id | Fname | Lname  | city   | Cnumber | Salary | email                                     |
| Gender | Dep   |
+-----+-----+-----+-----+-----+-----+-----+
| 1      | nayan | gadhari | mumbai | 420     | 25000  | gadharinayan@gmail.com                 |
| male   | IT    |
+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

UPDATE EmpData set Emp\_id =1; where Fname = 'Nayan' and Lname = 'Gadhari'

```
+-----+-----+-----+-----+-----+-----+-----+
| Emp_id | Fname | Lname  | city   | Cnumber | Salary | email                                     |
| Gender | Dep   |
+-----+-----+-----+-----+-----+-----+-----+
| 1      | nayan | gadhari | mumbai | 420     | 25000  | gadharinayan@gmail.com                 |
| male   | IT    |
+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> UPDATE Empdata set email = 'nayan_gadhari@thbs.com' WHERE Emp_id = 1;
ERROR 1146 (42S02): Table 'temp1.Empdata' doesn't exist
mysql> UPDATE EmpData set email = 'nayan_gadhari@thbs.com' WHERE Emp_id = 1;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> SELECT * FROM EmpData;
+-----+-----+-----+-----+-----+-----+-----+
| Emp_id | Fname | Lname  | city   | Cnumber | Salary | email                                     |
| Gender | Dep   |
+-----+-----+-----+-----+-----+-----+-----+
| 1      | nayan | gadhari | mumbai | 420     | 25000  | nayan_gadhari@thbs.com                 |
| male   | IT    |
+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

SELECT \* FROM EmpData ORDER BY Salary Desc; to sort table according to salary in descending order.



```
mysql>
mysql> SELECT * FROM EmpData ORDER BY Salary Desc;
+-----+-----+-----+-----+-----+-----+-----+
| Emp_id | Fname  | Lname  | city          | Cnumber | Salary | email          |
|-----+-----+-----+-----+-----+-----+-----+
|      6 | Steve  | Rogers | Brooklyn     |      987 | 7697800 | setee_r  
rs@gmail.com | M      | Accounts |
|      9 | Tony   | Stark  | New York     |      225 | 169290  | tony_st  
gmail.com    | M      | Finance  |
|      3 | Natasha | Romanof | St. Petersburg |      783 | 100000  | natasha  
anof@gmail.com | F      | HR        |
|      5 | Bruse  | Banner | Kolkata      |      536 | 76900   | bruse_b  
r@gmail.com  | M      | BOD       |
|      2 | barry  | allen  | mumbai       |      783 | 67000   | barry_a  
@gmail.com   | M      | Opreation |
|      1 | nayan  | gadhari | mumbai       |      420 | 25000   | nayan_g  
ri@thbs.com  | male   | IT        |
|      4 | Hope   | Wasp   | New Jersy    |      783 | 10000   | hope_wa  
mail.com     | F      | IT        |
+-----+-----+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)
```

SELECT COUNT(city) FROM EmpData WHERE Salary >= 25000 and Dep = 'IT';

```
mysql> SELECT COUNT(Salary) FROM EmpData WHERE Salary >= 25000 and Dep = 'IT';
+-----+
| COUNT(Salary) |
+-----+
|              1 |
+-----+
1 row in set (0.01 sec)
```

SELECT SUM(Salary) AS 'Total Salary' FROM EmpData;  
 SELECT AVG(Salary) AS 'Average Salary' FROM EmpData;  
 SELECT MIN(Salary) AS 'Minimum Salary' FROM EmpData;  
 SELECT MAX(Salary) AS 'Maximum Salary' FROM EmpData;

```
mysql> SELECT MAX(Salary) AS 'MAXIMUM SALARY' FROM EmpData;
+-----+
| MAXIMUM SALARY |
+-----+
|      7697800   |
+-----+
1 row in set (0.00 sec)
```

SELECT \* FROM EmpData WHERE Salary = (SELECT MIN(Salary) FROM EmpData) ;

```
mysql> SELECT * FROM EmpData WHERE Salary = (SELECT MAX(Salary) FROM EmpData);
+-----+-----+-----+-----+-----+-----+-----+
| Emp_id | Fname | Lname  | city    | Cnumber | Salary | email                               |
| Gender | Dep    |         |         |         |         |                                     |
+-----+-----+-----+-----+-----+-----+-----+
|      6 | Steve | Rogers | Brooklyn |      987 | 7697800 | setee_roggers@gmail.com |
| M      | Accounts |         |         |         |         |                                     |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```