

# How to Install MySQL on Ubuntu

- MySQL is a widely used relational database management system (RDBMS).
- MySQL is free and open-source.
- MySQL is ideal for both small and large applications.

## Update/Upgrade Package Repository

1. Open the terminal and run the following command:

```
Sudo apt-get update
```

2. Install mysql

```
root@UBUNTU:~# sudo apt-get install mysql-server
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  libaio1 libevent-core-2.1-6 libhtml-template-perl mysql-client
  mysql-client-core-5.7 mysql-common mysql-server-5.7 mysql-se
```

3. Check mysql server status

```
root@UBUNTU:~#
root@UBUNTU:~# systemctl status mysql
● mysql.service - MySQL Community Server
   Loaded: loaded (/lib/systemd/system/mysql.service; enabled; vendor preset: e
   Active: active (running) since Wed 2023-08-09 12:13:07 IST; 10min ago
     Main PID: 16852 (mysqld)
        Tasks: 28 (limit: 2323)
       CGroup: /system.slice/mysql.service
               └─16852 /usr/sbin/mysqld --daemonize --pid-file=/run/mysqld/mysqld.p

Aug 09 12:13:06 UBUNTU systemd[1]: Starting MySQL Community Server...
Aug 09 12:13:07 UBUNTU systemd[1]: Started MySQL Community Server.
```

4. Login into MySql Server

```
root@UBUNTU:~# sudo mysql -u root
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 5
Server version: 5.7.42-0ubuntu0.18.04.1 (Ubuntu)

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owners.

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

mysql> █
```

Create database:

```
mysql> Create database Jacquin;
Query OK, 1 row affected (0.00 sec)

mysql> use database Jacquin;
ERROR 1049 (42000): Unknown database 'database'
mysql> create table Personal_detail(Mobile_num int,age int,gender varchar(20),fav_actor varchar(20));
Query OK, 0 rows affected (0.01 sec)

mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| Jacquin |
| Student |
| mysql |
| performance_schema |
| sys |
| ubuntu |
+-----+
```

Create TABLE:

```
mysql> Create table Personal_detail (user_id int ,passwd varchar(20));
Query OK, 0 rows affected (0.01 sec)

mysql> show tables;
+-----+
| Tables_in_Jacquin |
+-----+
| Personal_detail |
+-----+
```

Show table:

```
mysql> show tables;
+-----+
| Tables_in_ubuntu |
+-----+
| Personal_detail |
| Staff_detail |
+-----+
2 rows in set (0.00 sec)

mysql> describe personal_detail;
ERROR 1146 (42S02): Table 'ubuntu.personal_detail' doesn't exist
mysql> describe Personal_detail;
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| Mobile_num | int(11) | YES | | NULL | |
| age | int(11) | YES | | NULL | |
| gender | varchar(20) | YES | | NULL | |
| fav_actor | varchar(20) | YES | | NULL | |
+-----+
4 rows in set (0.01 sec)
```

Alter Table :Add column:

```
mysql> Alter table Personal_detail Add Address varchar(50);
Query OK, 0 rows affected (0.03 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> describe Personal_detail;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Mobile_num | int(11) | YES | | NULL | |
| age | int(11) | YES | | NULL | |
| gender | varchar(20) | YES | | NULL | |
| fav_actor | varchar(20) | YES | | NULL | |
| Address | varchar(50) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

Add column after one column:

```
mysql> Alter table Personal_detail Add Adhar_num varchar(50) after gender;
Query OK, 0 rows affected (0.02 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> describe Personal_detail;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Mobile_num | int(11) | YES | | NULL | |
| age | int(11) | YES | | NULL | |
| gender | varchar(20) | YES | | NULL | |
| Adhar_num | varchar(50) | YES | | NULL | |
| fav_actor | varchar(20) | YES | | NULL | |
| Address | varchar(50) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

Delete column:

```
mysql> Alter table personal_detail drop column fav_actor;
ERROR 1146 (42S02): Table 'ubuntu.personal_detail' doesn't exist
mysql> Alter table Personal_detail drop column fav_actor;
Query OK, 0 rows affected (0.02 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> describe Personal_detail;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Mobile_num | int(11) | YES | | NULL | |
| age | int(11) | YES | | NULL | |
| gender | varchar(20) | YES | | NULL | |
| Adhar_num | varchar(50) | YES | | NULL | |
| Address | varchar(50) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

## Rename

```
mysql> Alter table Personal detail rename Personal info;  
Query OK, 0 rows affected (0.00 sec)  
  
mysql> describe Personal_detail;  
ERROR 1146 (42S02): Table 'ubuntu.Personal_detail' doesn't exist  
mysql> describe Personal_info;  
+-----+-----+-----+-----+-----+-----+  
| Field | Type | Null | Key | Default | Extra |  
+-----+-----+-----+-----+-----+-----+  
| Mobile_num | int(11) | YES | | NULL | |  
| age | int(11) | YES | | NULL | |  
| gender | varchar(20) | YES | | NULL | |  
| Adhar_num | varchar(50) | YES | | NULL | |  
| Address | varchar(50) | YES | | NULL | |  
+-----+-----+-----+-----+-----+-----+  
5 rows in set (0.00 sec)
```