

1.Install latest version of MySQLDB from apt-get repository

```
ayush-vm@ayushvm-VirtualBox:~$ sudo apt-get install mysql-server
Reading package lists... Done
Building dependency tree
Reading state information... Done
mysql-server is already the newest version (5.7.29-0ubuntu0.18.04.1).
The following packages were automatically installed and are no longer required:
 fonts-liberation2 fonts-opensymbol gir1.2-gst-plugins-base-1.0
 gir1.2-gstreamer-1.0 gir1.2-gudev-1.0 gir1.2-udisks-2.0
 grilo-plugins-0.3-base gstreamer1.0-gtk3 libboost-date-time1.65.1
 libboost-filesystem1.65.1 libboost-iostreams1.65.1 libboost-locale1.65.1
 libcdr-0.1-1 libclucene-contribs1v5 libclucene-core1v5 libcmis-0.5-5v5
 libcolamd2 libdazzle-1.0-0 libe-book-0.1-1 libdataserverui-1.2-2 libeot0
 libepubgen-0.1-1 libetonyek-0.1-1 libevent-2.1-6 libexiv2-14
 libfreerdp-client2-2 libfreerdp2-2 libgc1c2 libgee-0.8-2 libgexiv2-2
 libgom-1.0-0 libgpgmepp6 libgpod-common libgpod4 liblangtag-common
 liblangtag1 liblirc-client0 liblua5.3-0 libmediaart-2.0-0 libmspub-0.1-1
 libodfgen-0.1-1 libqqwing2v5 libraw16 librevenge-0.0-0 libsgutils2-2
 libssh-4 libsuitesparseconfig5 libvncclient1 libwinpr2-2 libxapian30
 libxmlsec1 libxmlsec1-nss lp-solve media-player-info python3-mako
 python3-markupsafe syslinux syslinux-common syslinux-legacy
 usb-creator-common
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 20 not upgraded.
ayush-vm@ayushvm-VirtualBox:~$
```

2.Create a database student

```
mysql> create database student;
Query OK, 1 row affected (0.00 sec)

mysql> use student;
Database changed
mysql>
```

3.Insert operation : 5 students data (Name, Contact, City, Roll No, Branch)

```
mysql> insert into studata values('Aditya', 981289128, 'Gurgaon', 12, 'it');
Query OK, 1 row affected (0.01 sec)

mysql> insert into studata values('Arpit', 98128121, 'Noida', 13, 'mech');
Query OK, 1 row affected (0.00 sec)

mysql> insert into studata values('Ayush', 981281111, 'Dehradun', 14, 'gas');
Query OK, 1 row affected (0.01 sec)

mysql> insert into studata values('Ravi', 981281118, 'Delhi', 15, 'ece');
Query OK, 1 row affected (0.01 sec)

mysql> insert into studata values('Sumit', 981281189, 'Indore', 16, 'aero');
Query OK, 1 row affected (0.01 sec)
```

4.Read operation : All the students belong to a particular city

```
mysql> select * from studata where city='Delhi';
+-----+-----+-----+-----+-----+
| name | contact | city | rollno | branch |
+-----+-----+-----+-----+-----+
| Ravi | 981281118 | Delhi | 15 | ece |
+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

5.Update operation : Update the branch of all the students to CSE

```
mysql> update studata set branch='cse';
Query OK, 5 rows affected (0.00 sec)
Rows matched: 5  Changed: 5  Warnings: 0

mysql> select * from studata;
+-----+-----+-----+-----+-----+
| name | contact | city | rollno | branch |
+-----+-----+-----+-----+-----+
| Aditya | 981289128 | Gurgaon | 12 | cse |
| Arpit | 98128121 | Noida | 13 | cse |
| Ayush | 981281111 | Dehradun | 14 | cse |
| Ravi | 981281118 | Delhi | 15 | cse |
| Sumit | 981281189 | Indore | 16 | cse |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

6. Take dump of the database

```
ayush-vm@ayushvm-VirtualBox:~$ sudo mysqldump -u root student > mysqldumpfile.sql
```

7. Delete operation : Delete the record of last 2 students according to the roll number

```
mysql> delete from studata order by rollno desc limit 2;  
Query OK, 2 rows affected (0.01 sec)
```

```
mysql> select * from studata;
```

name	contact	city	rollno	branch
Aditya	981289128	Gurgaon	12	cse
Arpit	98128121	Noida	13	cse
Ayush	981281111	Dehradun	14	cse

3 rows in set (0.00 sec)

8. Drop the database

```
mysql> drop database student;  
Query OK, 1 row affected (0.03 sec)
```

```
mysql> show databases;
```

Database
information_schema
mysql
performance_schema
sys
wordpress

5 rows in set (0.00 sec)

9. Restore the database again to have the full data

```
mysql> use student;
Database changed
mysql> source mysqldumpfile.sql;
Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected, 1 warning (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)
```

```

Query OK, 5 rows affected (0.01 sec)
Records: 5  Duplicates: 0  Warnings: 0

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected, 1 warning (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

```

```

mysql>
mysql> select * from studata;
+-----+-----+-----+-----+-----+
| name   | contact | city    | rollno | branch |
+-----+-----+-----+-----+-----+
| Aditya | 981289128 | Gurgaon | 12     | cse    |
| Arpit  | 98128121  | Noida   | 13     | cse    |
| Ayush  | 981281111 | Dehradun | 14     | cse    |
| Ravi   | 981281118 | Delhi   | 15     | cse    |
| Sumit  | 981281189 | Indore  | 16     | cse    |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

```

10. Enable authentication on the Mongo

```

mysql> create user 'test'@'%' identified by 'password';
Query OK, 0 rows affected (0.00 sec)

mysql> grant select,insert on user.* to test;
ERROR 1064 (42000): You have an error in your SQL syntax; check the
manual that corresponds to your MySQL version; you probably want to
use near 'select,insert on user.* to test' at line 1
mysql> grant select,insert on user.* to test;
Query OK, 0 rows affected (0.00 sec)

```