

mongodb

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

```
Activities Terminator Mon 05:50
/bin/bash
/bin/bash 144x38

jay@Jay-Patel:~$ sudo apt-get install mongodb
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  linux-headers-4.15.0-29 linux-headers-4.15.0-29-generic linux-image-4.15.0-29-generic linux-modules-4.15.0-29-generic
  linux-modules-extra-4.15.0-29-generic
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  libboost-program-options1.65.1 libgoogle-perftools4 libpcrecpp0v5 libtcmalloc-minimal4 libyaml-cpp0.5v5 mongo-tools mongodb-clients
  mongodb-server mongodb-server-core
The following NEW packages will be installed:
  libboost-program-options1.65.1 libgoogle-perftools4 libpcrecpp0v5 libtcmalloc-minimal4 libyaml-cpp0.5v5 mongo-tools mongodb mongodb-clients
  mongodb-server mongodb-server-core
0 upgraded, 10 newly installed, 0 to remove and 22 not upgraded.
Need to get 53.4 MB of archives.
After this operation, 217 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://in.archive.ubuntu.com/ubuntu bionic/main amd64 libboost-program-options1.65.1 amd64 1.65.1+dfsg-0ubuntu5 [137 kB]
Get:2 http://in.archive.ubuntu.com/ubuntu bionic/main amd64 libtcmalloc-minimal4 amd64 2.5-2.2ubuntu3 [91.6 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu bionic/main amd64 libgoogle-perftools4 amd64 2.5-2.2ubuntu3 [190 kB]
Get:4 http://in.archive.ubuntu.com/ubuntu bionic/main amd64 libpcrecpp0v5 amd64 2:8.39-9 [15.3 kB]
Get:5 http://in.archive.ubuntu.com/ubuntu bionic/universe amd64 libyaml-cpp0.5v5 amd64 0.5.2-4ubuntu1 [150 kB]
Get:6 http://in.archive.ubuntu.com/ubuntu bionic/universe amd64 mongo-tools amd64 3.6.3-0ubuntu1 [12.3 MB]
Get:7 http://in.archive.ubuntu.com/ubuntu bionic-updates/universe amd64 mongodb-clients amd64 1:3.6.3-0ubuntu1.1 [20.2 MB]
Get:8 http://in.archive.ubuntu.com/ubuntu bionic-updates/universe amd64 mongodb-server-core amd64 1:3.6.3-0ubuntu1.1 [20.3 MB]
Get:9 http://in.archive.ubuntu.com/ubuntu bionic-updates/universe amd64 mongodb-server all 1:3.6.3-0ubuntu1.1 [12.6 kB]
Get:10 http://in.archive.ubuntu.com/ubuntu bionic-updates/universe amd64 mongodb amd64 1:3.6.3-0ubuntu1.1 [9,968 B]
Fetched 53.4 MB in 4s (12.3 MB/s)
Selecting previously unselected package libboost-program-options1.65.1:amd64.
(Reading database ... 218346 files and directories currently installed.)
Preparing to unpack .../0-libboost-program-options1.65.1-1.65.1+dfsg-0ubuntu5_amd64.deb ...
Unpacking libboost-program-options1.65.1:amd64 (1.65.1+dfsg-0ubuntu5) ...
Selecting previously unselected package libtcmalloc-minimal4.
Preparing to unpack .../1-libtcmalloc-minimal4-2.5-2.2ubuntu3_amd64.deb ...
Unpacking libtcmalloc-minimal4 (2.5-2.2ubuntu3) ...
Selecting previously unselected package libgoogle-perftools4.
Preparing to unpack .../2-libgoogle-perftools4-2.5-2.2ubuntu3_amd64.deb ...
Unpacking libgoogle-perftools4 (2.5-2.2ubuntu3) ...
Selecting previously unselected package libpcrecpp0v5.
Preparing to unpack .../3-libpcrecpp0v5-2:8.39-9_amd64.deb ...
Unpacking libpcrecpp0v5 (2:8.39-9) ...
Selecting previously unselected package libyaml-cpp0.5v5.
Preparing to unpack .../4-libyaml-cpp0.5v5-0.5.2-4ubuntu1_amd64.deb ...
Unpacking libyaml-cpp0.5v5 (0.5.2-4ubuntu1) ...
Selecting previously unselected package mongo-tools.
Preparing to unpack .../5-mongo-tools-3.6.3-0ubuntu1_amd64.deb ...
Unpacking mongo-tools (3.6.3-0ubuntu1) ...
Selecting previously unselected package mongodb-clients.
Preparing to unpack .../6-mongodb-clients-1:3.6.3-0ubuntu1.1_amd64.deb ...
Unpacking mongodb-clients (1:3.6.3-0ubuntu1.1) ...
Selecting previously unselected package mongodb-server-core.
Preparing to unpack .../7-mongodb-server-core-1:3.6.3-0ubuntu1.1_amd64.deb ...
Unpacking mongodb-server-core (1:3.6.3-0ubuntu1.1) ...
Selecting previously unselected package mongodb-server.
Preparing to unpack .../8-mongodb-server-1:3.6.3-0ubuntu1.1_all.deb ...
Unpacking mongodb-server (1:3.6.3-0ubuntu1.1) ...
Selecting previously unselected package mongodb.
Preparing to unpack .../9-mongodb-1:3.6.3-0ubuntu1.1_amd64.deb ...
Unpacking mongodb (1:3.6.3-0ubuntu1.1) ...
Setting up libboost-program-options1.65.1:amd64 (1.65.1+dfsg-0ubuntu5) ...
Setting up libtcmalloc-minimal4 (2.5-2.2ubuntu3) ...
Setting up libgoogle-perftools4 (2.5-2.2ubuntu3) ...
Setting up libpcrecpp0v5 (2:8.39-9) ...
Setting up libyaml-cpp0.5v5 (0.5.2-4ubuntu1) ...
Setting up mongo-tools (3.6.3-0ubuntu1) ...
Setting up mongodb-clients (1:3.6.3-0ubuntu1.1) ...
Setting up mongodb-server-core (1:3.6.3-0ubuntu1.1) ...
Setting up mongodb-server (1:3.6.3-0ubuntu1.1) ...
Setting up mongodb (1:3.6.3-0ubuntu1.1) ...
```

2. Create a database student

```
> use student
switched to db student
> █
```

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

```

> db.student_details.insert([{Name:'Jay',Contact:999888777,City:'Udaipu
-','RollNo:21,Branch:'CSE'}]);
BulkWriteResult({
  "writeErrors" : [ ],
  "writeConcernErrors" : [ ],
  "nInserted" : 1,
  "nUpserted" : 0,
  "nMatched" : 0,
  "nModified" : 0,
  "nRemoved" : 0,
  "upserted" : [ ]
})
> db.student_details.find().pretty()
{
  "_id" : ObjectId("5e531b22c163ca78baffa24a"),
  "Name" : "Jay",
  "Contact" : 999888777,
  "City" : "Udaipur",
  "RollNo" : 21,
  "Branch" : "CSE"
}
> db.student_details.insert([{Name:'Ashu',Contact:999888777,City:'Delhi
',RollNo:33,Branch:'CSE'},{Name:'Ashish',Contact:999888777,City:'UP',Ro
llNo:70,Branch:'CSE'},{Name:'Gaurav',Contact:999888777,City:'Indore',Ro
llNo:53,Branch:'CSE'},{Name:'Ujjawal',Contact:999888777,City:'Haridwar'
,RollNo:52,Branch:'CSE'}]);
BulkWriteResult({
  "writeErrors" : [ ],
  "writeConcernErrors" : [ ],
  "nInserted" : 4,
  "nUpserted" : 0,
  "nMatched" : 0,
  "nModified" : 0,
  "nRemoved" : 0,
  "upserted" : [ ]
})
>

```

```

> db.student_details.find().pretty()
{
  "_id" : ObjectId("5e531b22c163ca78baffa24a"),
  "Name" : "Jay",
  "Contact" : 999888777,
  "City" : "Udaipur",
  "RollNo" : 21,
  "Branch" : "CSE"
}
{
  "_id" : ObjectId("5e531be1c163ca78baffa24b"),
  "Name" : "Ashu",
  "Contact" : 999888777,
  "City" : "Delhi",
  "RollNo" : 33,
  "Branch" : "CSE"
}
{
  "_id" : ObjectId("5e531be1c163ca78baffa24c"),
  "Name" : "Ashish",
  "Contact" : 999888777,
  "City" : "UP",
  "RollNo" : 70,
  "Branch" : "CSE"
}
{
  "_id" : ObjectId("5e531be1c163ca78baffa24d"),
  "Name" : "Gaurav",
  "Contact" : 999888777,
  "City" : "Indore",
  "RollNo" : 53,
  "Branch" : "CSE"
}
{
  "_id" : ObjectId("5e531be1c163ca78baffa24e"),
  "Name" : "Ujjawal",
  "Contact" : 999888777,
  "City" : "Haridwar",
  "RollNo" : 52
}

```

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

```
> db.student_details.find({"City":"Udaipur"}).pretty()
{
  "_id" : ObjectId("5e531b22c163ca78baffa24a"),
  "Name" : "Jay",
  "Contact" : 999888777,
  "City" : "Udaipur",
  "RollNo" : 21,
  "Branch" : "CSE"
}
```

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

```

> db.student_details.updateMany({}, {$set: {Branch:"CSE-CSF"}})
{ "acknowledged" : true, "matchedCount" : 5, "modifiedCount" : 5 }
> db.student_details.find().pretty()
{
  "_id" : ObjectId("5e531b22c163ca78baffa24a"),
  "Name" : "Jay",
  "Contact" : 999888777,
  "City" : "Udaipur",
  "RollNo" : 21,
  "Branch" : "CSE-CSF"
}
{
  "_id" : ObjectId("5e531be1c163ca78baffa24b"),
  "Name" : "Ashu",
  "Contact" : 999888777,
  "City" : "Delhi",
  "RollNo" : 33,
  "Branch" : "CSE-CSF"
}
{
  "_id" : ObjectId("5e531be1c163ca78baffa24c"),
  "Name" : "Ashish",
  "Contact" : 999888777,
  "City" : "UP",
  "RollNo" : 70,
  "Branch" : "CSE-CSF"
}
{
  "_id" : ObjectId("5e531be1c163ca78baffa24d"),
  "Name" : "Gaurav",
  "Contact" : 999888777,
  "City" : "Indore",
  "RollNo" : 53,
  "Branch" : "CSE-CSF"
}
{
  "_id" : ObjectId("5e531be1c163ca78baffa24e"),
  "Name" : "Ujjawal",

```

6. Take dump of the database

```

jay@Jay-Patel:~$ sudo mongodump --db student --out ~/Documents/.
2020-02-24T06:19:00.071+0530 writing student.student_details to
2020-02-24T06:19:00.073+0530 done dumping student.student_details (5
documents)
jay@Jay-Patel:~$ █

```

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

```
> db.student_details.find().sort({"RollNo": -1}).limit(2).forEach(function(doc){db.getCollection("student_details").remove({_id: doc._id})})
> db.student_details.find().pretty()
{
  "_id" : ObjectId("5e531b22c163ca78baffa24a"),
  "Name" : "Jay",
  "Contact" : 999888777,
  "City" : "Udaipur",
  "RollNo" : 21,
  "Branch" : "CSE-CSF"
}
{
  "_id" : ObjectId("5e531be1c163ca78baffa24b"),
  "Name" : "Ashu",
  "Contact" : 999888777,
  "City" : "Delhi",
  "RollNo" : 33,
  "Branch" : "CSE-CSF"
}
{
  "_id" : ObjectId("5e531be1c163ca78baffa24e"),
  "Name" : "Ujjawal",
  "Contact" : 999888777,
  "City" : "Haridwar",
  "RollNo" : 52,
  "Branch" : "CSE-CSF"
}
> █
```

8. Drop the database

```
> db.dropDatabase()
{ "dropped" : "student", "ok" : 1 }
>
> █
```


9. Restore the database again to have the full data

```
jay@Jay-Patel:~ $ sudo mongorestore -d student_details ~/Documents/student/
2020-02-24T06:28:27.559+0530 the --db and --collection args should only be used when restoring from a BSON file. Other uses are deprecated and will not exist in the future; use --nsInclude instead
2020-02-24T06:28:27.559+0530 building a list of collections to restore from /home/jay/Documents/student dir
2020-02-24T06:28:27.560+0530 reading metadata for student_details.student_details from /home/jay/Documents/student/student_details.metadata.json
2020-02-24T06:28:27.571+0530 restoring student_details.student_details from /home/jay/Documents/student/student_details.bson
2020-02-24T06:28:27.574+0530 no indexes to restore
2020-02-24T06:28:27.574+0530 finished restoring student_details.student_details (5 documents)
2020-02-24T06:28:27.574+0530 done
jay@Jay-Patel:~ $
```

10. Enable authentication on the Mongo

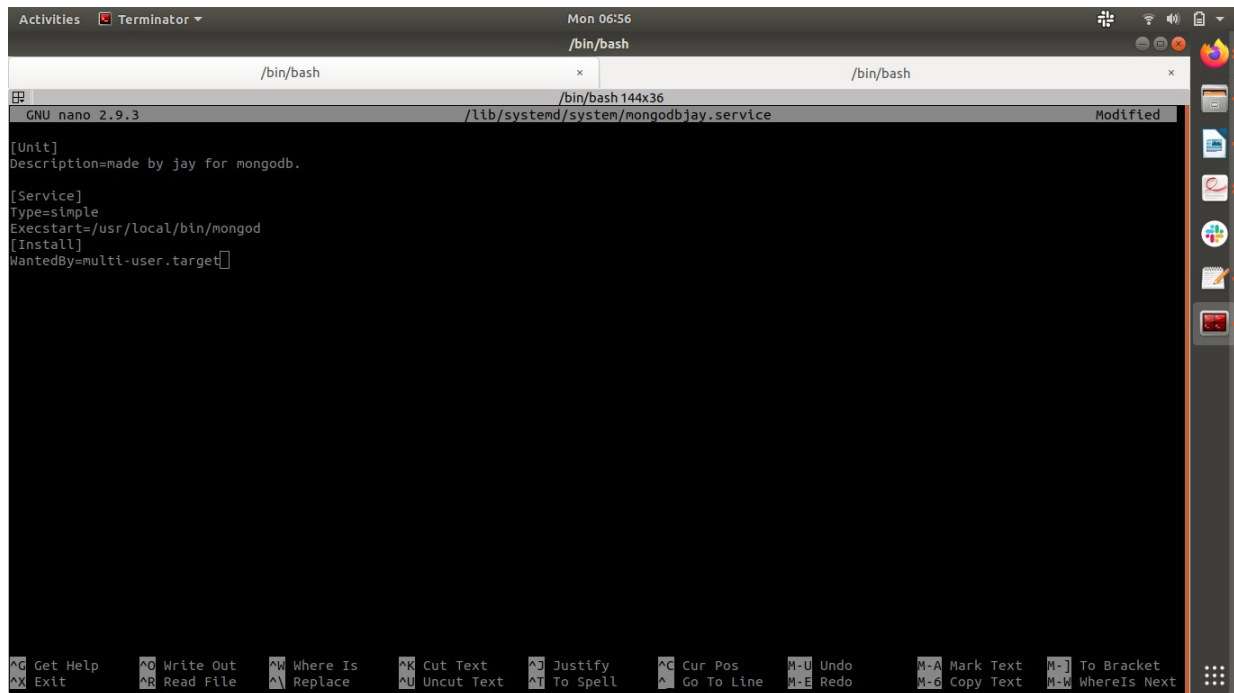
```
> db.createUser({user: "jay",pwd: "password",roles: [{ role: "userAdminAnyDatabase", db: "admin" }]}))
Successfully added user: {
  "user" : "jay",
  "roles" : [
    {
      "role" : "userAdminAnyDatabase",
      "db" : "admin"
    }
  ]
}
>
```

```
jay@Jay-Patel:~ $ mongo -u "jay" -p "password" --authenticationDatabase "admin"
MongoDB shell version v3.6.3
connecting to: mongodb://127.0.0.1:27017
MongoDB server version: 3.6.3
Server has startup warnings:
2020-02-24T05:49:51.223+0530 I STORAGE [initandlisten]
2020-02-24T05:49:51.223+0530 I STORAGE [initandlisten] ** WARNING: Using the XFS filesystem is strongly recommended with the WiredTiger storage engine
2020-02-24T05:49:51.223+0530 I STORAGE [initandlisten] ** See http://dochub.mongodb.org/core/prodnotes-filesystem
2020-02-24T05:49:51.661+0530 I CONTROL [initandlisten]
2020-02-24T05:49:51.661+0530 I CONTROL [initandlisten] ** WARNING: Access control is not enabled for the database.
2020-02-24T05:49:51.661+0530 I CONTROL [initandlisten] ** Read and write access to data and configuration is unrestricted.
2020-02-24T05:49:51.661+0530 I CONTROL [initandlisten]
> █
```


11. Install another version of MongoDB from source (Version 2.6.3) and run it on port 27009

```
tar -zxvf mongodb-linux*-4.2.3.tgz
cd Downloads/
tar -zxvf mongodb-linux*-4.2.3.tgz
sudo cp <mongodb-install-directory>/bin/* /usr/local/bin/
sudo cp Downloads/bin/* /usr/local/bin/
ll
sudo cp mongo-linux-x86_64-ubuntu1804-4.2.3/bin/* /usr/local/bin/
sudo cp mongodb-linux-x86_64-ubuntu1804-4.2.3/bin/* /usr/local/bin/
sudo mkdir -p /var/lib/mongo
sudo mkdir -p /var/log/mongodb
sudo chown `whoami` /var/lib/mongo
sudo chown `whoami` /var/log/mongodb
mongod --dbpath /var/lib/mongo --logpath /var/log/mongodb/mongod.log --fork
mongo
mongo --port 27009
mongo --port 2709
mongod --dbpath /var/lib/mongo --logpath /var/log/mongodb/mongod.log --fork
cd
mongod --dbpath /var/lib/mongo --logpath /var/log/mongodb/mongod.log --fork
sudo mongod --dbpath /var/lib/mongo --logpath /var/log/mongodb/mongod.log --fork
sudo mongod --dbpath /var/lib/mongo --logpath /var/log/mongodb/mongod.log
sudo mongod --dbpath /var/lib/mongo --logpath /var/log/mongodb/mongod.log --fork
mongo --port 2709
mongo
sudo mongod --dbpath /var/lib/mongo --logpath /var/log/mongodb/mongod.log
sudo mongod --dbpath /var/lib/mongo
systemctl stop mongod
sudo mongod --dbpath /var/lib/mongo --logpath /var/log/mongodb/mongod.log
sudo mongod --dbpath /var/lib/mongo --logpath /var/log/mongodb/mongod.log --fork
mongo --port 2709
```

12. Create init service of Mongo installed later*

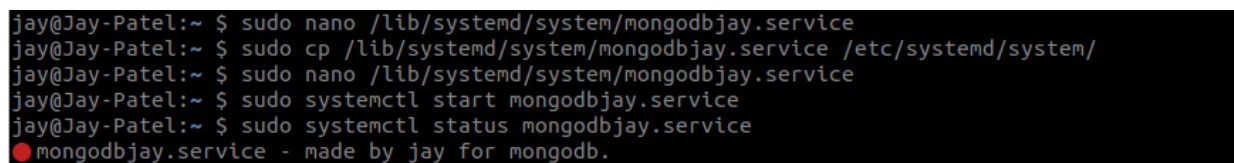


The screenshot shows a terminal window with the nano editor open, editing the file `/lib/systemd/system/mongodbjay.service`. The editor's status bar at the top indicates "GNU nano 2.9.3" and "Modified". The content of the file is as follows:

```
[Unit]
Description=made by jay for mongodb.

[Service]
Type=simple
ExecStart=/usr/local/bin/mongod
[Install]
WantedBy=multi-user.target
```

The bottom of the terminal window displays a series of keyboard shortcuts for nano, such as `^G Get Help`, `^O Write Out`, `^W Where Is`, etc.



The screenshot shows a terminal window with the following commands and output:

```
jay@Jay-Patel:~ $ sudo nano /lib/systemd/system/mongodbjay.service
jay@Jay-Patel:~ $ sudo cp /lib/systemd/system/mongodbjay.service /etc/systemd/system/
jay@Jay-Patel:~ $ sudo nano /lib/systemd/system/mongodbjay.service
jay@Jay-Patel:~ $ sudo systemctl start mongodbjay.service
jay@Jay-Patel:~ $ sudo systemctl status mongodbjay.service
● mongodbjay.service - made by jay for mongodb.
```

MySQL

13. Install latest version of MongoDB from apt-get repository

```
jay@Jay-Patel:~$ sudo apt-get install mariadb-server
Reading package lists... Done
Building dependency tree
Reading state information... Done
mariadb-server is already the newest version (1:10.1.44-0ubuntu0.18.04.1).
The following packages were automatically installed and are no longer required:
  linux-headers-4.15.0-29 linux-headers-4.15.0-29-generic linux-image-4.15.0-29-generic linux-modules-4.15.0-29-generic
  linux-modules-extra-4.15.0-29-generic
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 22 not upgraded.
jay@Jay-Patel:~$
```

14. Create a database student

```
MariaDB [student]> insert into student_details(Name,Contact,city,Roll_no,branch) values ('jay',999888777,'udaipur',51,'CSE');
Query OK, 1 row affected (0.04 sec)

MariaDB [student]>
MariaDB [student]> insert into student_details(Name,Contact,city,Roll_no,branch) values ('ashu',999888777,'delhi',33,'CSE');
Query OK, 1 row affected (0.01 sec)

MariaDB [student]> insert into student_details(Name,Contact,city,Roll_no,branch) values ('apoorva',999888777,'delhi',29,'CSE');
Query OK, 1 row affected (0.03 sec)

MariaDB [student]> insert into student_details(Name,Contact,city,Roll_no,branch) values ('shiro',999888777,'delhi',38,'CSE');
Query OK, 1 row affected (0.00 sec)

MariaDB [student]> insert into student_details(Name,Contact,city,Roll_no,branch) values ('dabba',999888777,'delhi',005,'CSE');
Query OK, 1 row affected (0.01 sec)

MariaDB [student]> insert into student_details(Name,Contact,city,Roll_no,branch) values ('ashish',999888777,'delhi',70,'CSE');
Query OK, 1 row affected (0.01 sec)
```

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

```
MariaDB [student]> insert into student_details(Name,Contact,city,Roll_no,branch) values ('jay',999888777,'udaipur',51,'CSE');
Query OK, 1 row affected (0.04 sec)

MariaDB [student]>
MariaDB [student]> insert into student_details(Name,Contact,city,Roll_no,branch) values ('ashu',999888777,'delhi',33,'CSE');
Query OK, 1 row affected (0.01 sec)

MariaDB [student]> insert into student_details(Name,Contact,city,Roll_no,branch) values ('apoorva',999888777,'delhi',29,'CSE');
Query OK, 1 row affected (0.03 sec)

MariaDB [student]> insert into student_details(Name,Contact,city,Roll_no,branch) values ('shiro',999888777,'delhi',38,'CSE');
Query OK, 1 row affected (0.00 sec)

MariaDB [student]> insert into student_details(Name,Contact,city,Roll_no,branch) values ('dabba',999888777,'delhi',005,'CSE');
Query OK, 1 row affected (0.01 sec)

MariaDB [student]> insert into student_details(Name,Contact,city,Roll_no,branch) values ('ashish',999888777,'delhi',70,'CSE');
Query OK, 1 row affected (0.01 sec)
```

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

```
MariaDB [student]> select * from student_details where city='delhi';
+-----+-----+-----+-----+-----+
| Name   | contact | city  | Roll_no | branch |
+-----+-----+-----+-----+-----+
| ashu   | 999888777 | delhi | 33      | CSE    |
| apoorva | 999888777 | delhi | 29      | CSE    |
| shiro  | 999888777 | delhi | 38      | CSE    |
| dabba  | 999888777 | delhi | 5       | CSE    |
| ashish | 999888777 | delhi | 70      | CSE    |
+-----+-----+-----+-----+-----+
5 rows in set (0.01 sec)
```

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

```
MariaDB [student]> update student_details set branch = 'CSE-CSF';
Query OK, 6 rows affected (0.03 sec)
Rows matched: 6  Changed: 6  Warnings: 0

MariaDB [student]> select * from student_details;
+-----+-----+-----+-----+-----+
| Name   | contact | city  | Roll_no | branch  |
+-----+-----+-----+-----+-----+
| jay    | 999888777 | udaipur | 51      | CSE-CSF |
| ashu   | 999888777 | delhi  | 33      | CSE-CSF |
| apoorva | 999888777 | delhi  | 29      | CSE-CSF |
| shiro  | 999888777 | delhi  | 38      | CSE-CSF |
| dabba  | 999888777 | delhi  | 5       | CSE-CSF |
| ashish | 999888777 | delhi  | 70      | CSE-CSF |
+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)

MariaDB [student]>
```

18.Take dump of the database

```
jay@Jay-Patel:~$ sudo mysqldump -u root student > ~/Documents/student.sql
jay@Jay-Patel:~$ cat ~/Documents/student.sql
-- MySQL dump 10.16  Distrib 10.1.44-MariaDB, for debian-linux-gnu (x86_64)
--
-- Host: localhost    Database: student
--
-- Server version      10.1.44-MariaDB-0ubuntu0.18.04.1

/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!40101 SET NAMES utf8mb4 */;
/*!40103 SET @OLD_TIME_ZONE=@@TIME_ZONE */;
/*!40103 SET TIME_ZONE='+00:00' */;
/*!40014 SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0 */;
/*!40014 SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0 */;
/*!40101 SET @OLD_SQL_MODE=@@SQL_MODE, SQL_MODE='NO_AUTO_VALUE_ON_ZERO' */;
/*!40111 SET @OLD_SQL_NOTES=@@SQL_NOTES, SQL_NOTES=0 */;
--
```

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

```
MariaDB [student]> delete from student_details order by roll_no Desc limit 2;
Query OK, 2 rows affected (0.04 sec)

MariaDB [student]> select * from student_deatils
-> ;
ERROR 1146 (42S02): Table 'student.student_deatils' doesn't exist
MariaDB [student]> select * from student_details
-> ;
+-----+-----+-----+-----+-----+
| Name   | contact | city  | Roll_no | branch |
+-----+-----+-----+-----+-----+
| ashu   | 999888777 | delhi | 33      | CSE-CSF |
| apoorva | 999888777 | delhi | 29      | CSE-CSF |
| shiro  | 999888777 | delhi | 38      | CSE-CSF |
| dabba  | 999888777 | delhi | 5       | CSE-CSF |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

20.Drop the database

```
MariaDB [student]> drop database student;
Query OK, 1 row affected (0.01 sec)
```

21.Restore the database again to have the full data

```
jay@Jay-Patel:~ $ sudo mysqldump -u root student < ~/Documents/student.sql
-- MySQL dump 10.16  Distrib 10.1.44-MariaDB, for debian-linux-gnu (x86_64)
--
-- Host: localhost    Database: student
--
-- Server version      10.1.44-MariaDB-0ubuntu0.18.04.1

/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!40101 SET NAMES utf8mb4 */;
/*!40103 SET @OLD_TIME_ZONE=@@TIME_ZONE */;
/*!40103 SET TIME_ZONE='+00:00' */;
/*!40014 SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0 */;
/*!40014 SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0 */;
/*!40101 SET @OLD_SQL_MODE=@@SQL_MODE, SQL_MODE='NO_AUTO_VALUE_ON_ZERO' */;
```

22.Enable authentication on the Mongo

```
MariaDB [(none)]> grant all privileges on *.* to 'user'@'localhost' identified by 'password'
-> ;
Query OK, 0 rows affected (0.00 sec)

MariaDB [(none)]> flush privileges;
Query OK, 0 rows affected (0.00 sec)

MariaDB [(none)]> exit
Bye
jay@Jay-Patel:~ $ mysql -u user -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 4
Server version: 10.1.44-MariaDB-0ubuntu0.18.04.1 Ubuntu 18.04

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

MariaDB [(none)]> █
```