Mysql Master-slave-configuration

Take both machine ip

- Master ip : 172.31.35.248
- Slave ip : 172.31.43.145

Installing My sql on both machines :

To install it, update the package index on your server if you've not done so recently:

- sudo apt update

Then install the mysql-server package:

- sudo apt install mysql-server

Ensure that the server is running using the systemctl start command:

- sudo systemctl start mysql.service

You can refer this doc : click here

Confuguring Master to Slave Replication of mySql

Stop mysql service :

- sudo systemctl stop mysql.service

Open configuration file on slave1 and add following lines then save and exit :

server-id = 2
auto-increment-increment = 2
auto-increment-offset = 2
log-slave-updates
replicate-do-db = test101

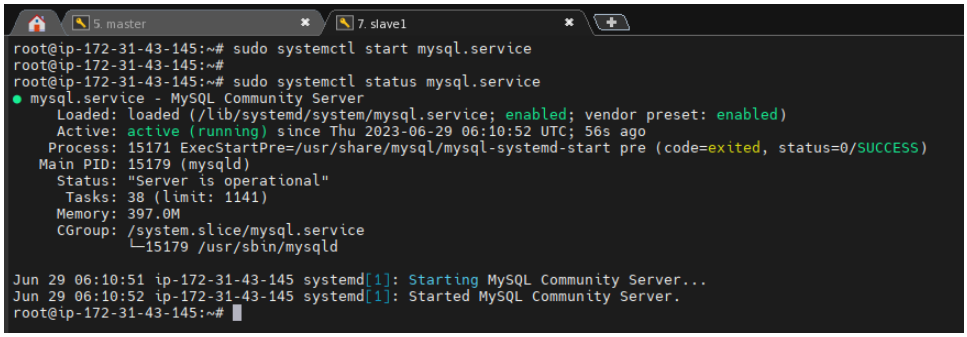
bind-address = 0.0.0.0 .. changed this to this

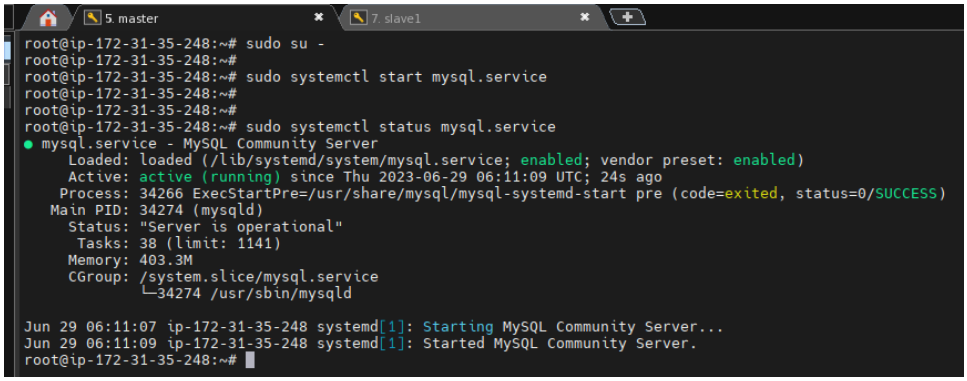
Open configuration file on master and changed following line then save and exit:

server-id = 1 .. Uncomment & changed this to this
bind-address = 0.0.0.0 .. changed this to this

Start mysql service and check status on both machine:

- sudo systemctl start mysql.service
- sudo systemctl status mysql.service





Check the mysql port on which ip it is running on

- netstat -tulpn | grep "mysql"

```
root@ip-172-31-43-145:~# netstat -tulpn | grep "mysql"
tcp        0      0 0.0.0.0:3306            0.0.0.0:*               LISTEN      15293/mysqld
tcp        0      0 127.0.0.1:33060         0.0.0.0:*               LISTEN      15293/mysqld
root@ip-172-31-43-145:~#
```

Create replication user on master :

Slave ip : 172.31.43.145
Slave dns: ip-172-31-43-145.ap-south-1.compute.internal
Replication user: vishal
Replication pass: Replication@123

- Login to my sql on master
- Use and replace below slave query acc. to yours then fire them in mysql

create user 'vishal'@'ip-172-31-43-145.ap-south-1.compute.internal' IDENTIFIED BY 'Replication@123';

grant all privileges on *.* to 'vishal'@'ip-172-31-43-145.ap-south-1.compute.internal' with grant option;

ALTER USER 'vishal'@'ip-172-31-43-145.ap-south-1.compute.internal' IDENTIFIED WITH mysql_native_password BY 'Replication@123';

```
5. master   7. slave1
root@ip-172-31-35-248:~#
root@ip-172-31-35-248:~# netstat -tulpn | grep "mysql"
tcp        0      0 127.0.0.1:33060         0.0.0.0:*               LISTEN      34355/mysqld
tcp        0      0 0.0.0.0:3306            0.0.0.0:*               LISTEN      34355/mysqld
root@ip-172-31-35-248:~# mysql
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.0.33-0ubuntu0.20.04.2 (Ubuntu)

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owners.

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

mysql> create user 'vishal'@'ip-172-31-43-145.ap-south-1.compute.internal' IDENTIFIED BY 'Replication@123';
Query OK, 0 rows affected (0.02 sec)

mysql> grant all privileges on *.* to 'vishal'@'ip-172-31-43-145.ap-south-1.compute.internal' with grant option;
Query OK, 0 rows affected (0.00 sec)

mysql> ALTER USER 'vishal'@'ip-172-31-43-145.ap-south-1.compute.internal' IDENTIFIED WITH mysql_native_password BY 'Replication@
123';
Query OK, 0 rows affected (0.01 sec)

mysql>
```
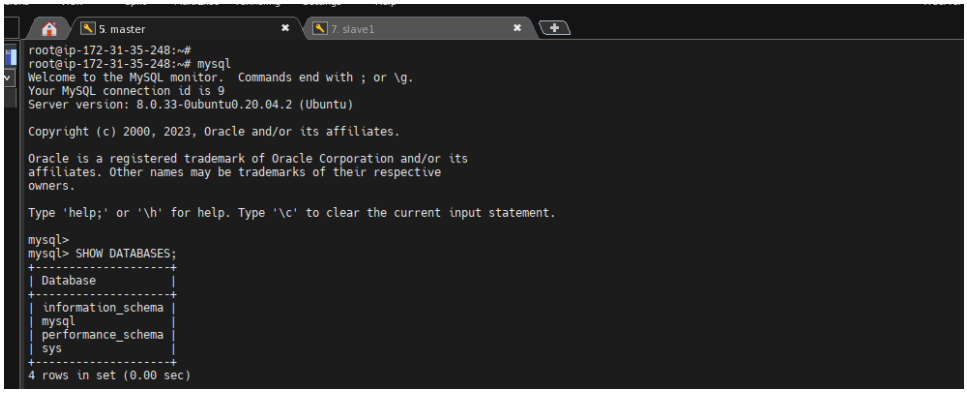
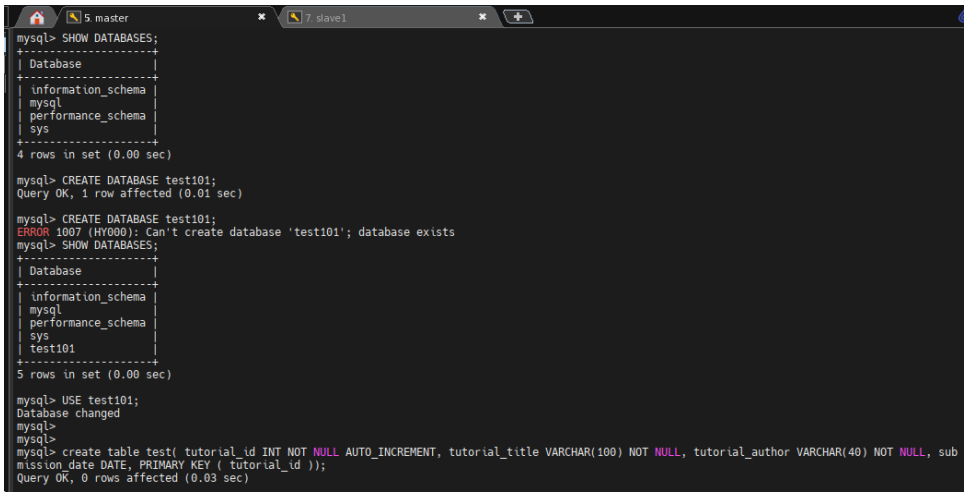

Check iist of tables and create one and insert data in table on Master :

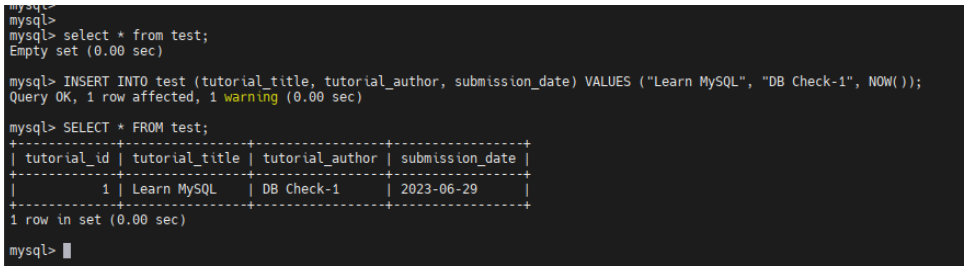
As I mentioned table in slave configuration file: test101
Create same on master and slave by login on to them



SHOW DATABASES;
CREATE DATABASE test101;
USE test101;
create table test(tutorial_id INT NOT NULL AUTO_INCREMENT, tutorial_title VARCHAR(100) NOT NULL, tutorial_author VARCHAR(40) NOT NULL, submission_date DATE, PRIMARY KEY (tutorial_id));



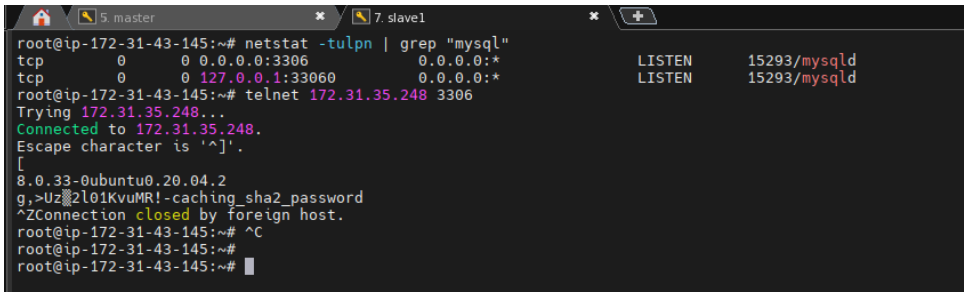
select * from test;
INSERT INTO test (tutorial_title, tutorial_author, submission_date) VALUES ("Learn MySQL", "DB Check-1", NOW());



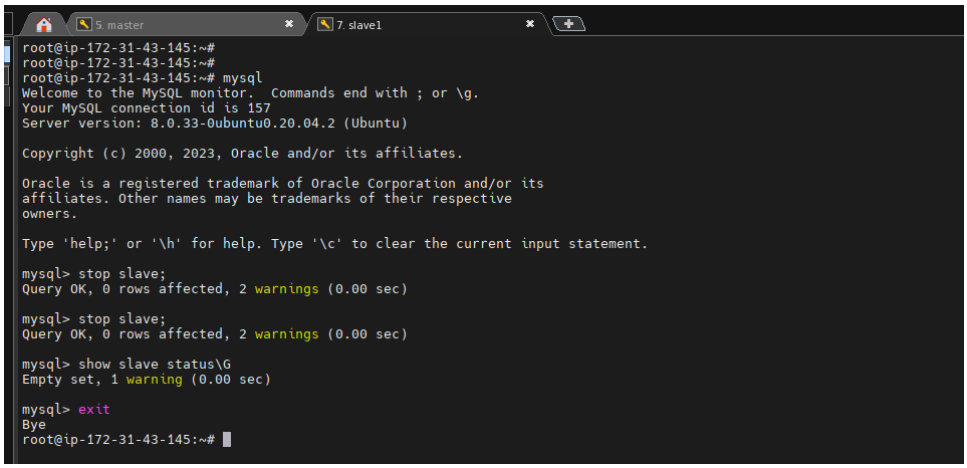
Move to the slave machine :

Master ip : 172.31.35.248

- Check whether you are able to reach to the master over ip and 3306 port:
- telnet 172.31.35.248 3306



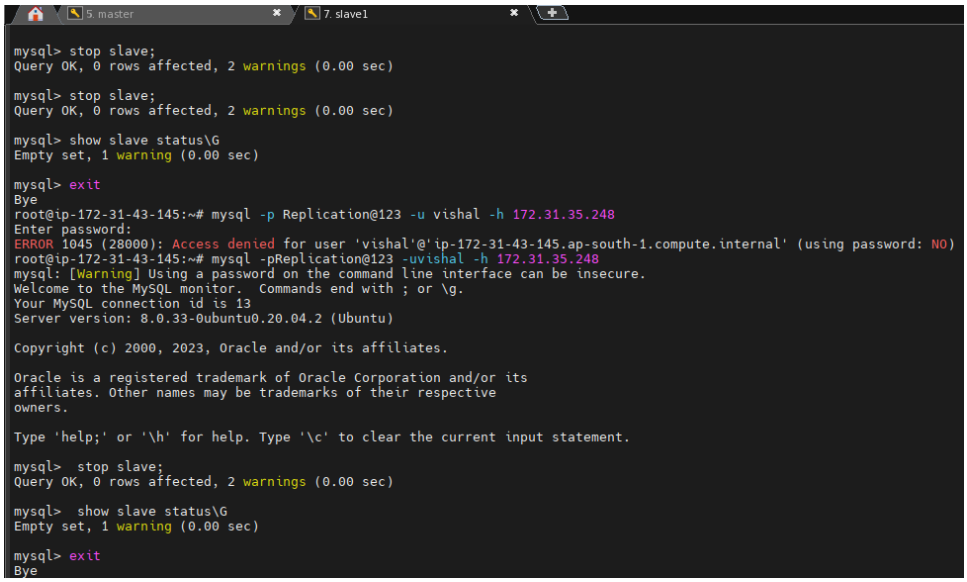
- Login to mysql
- Fire below queries
  - stop slave;
  - show slave status\G
  - exit



Now login on slave using master replication user credential

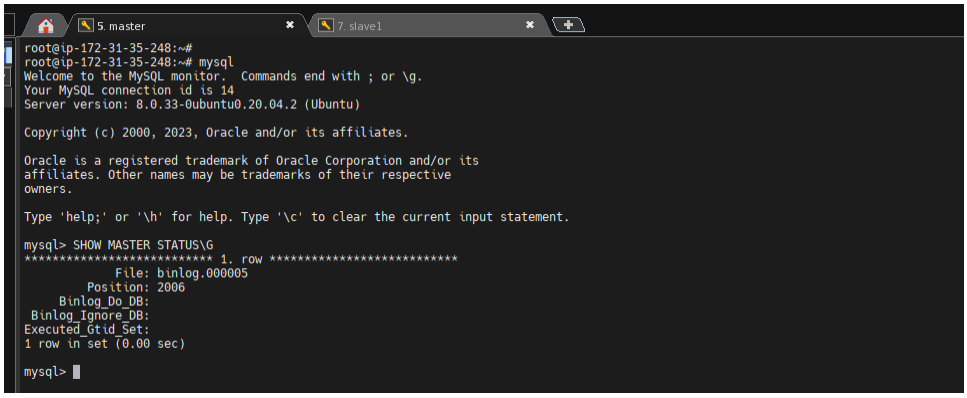
Master ip : 172.31.35.248
Replication user: vishal
Replication pass: Replication@123

- mysql -p Replication@123 -uvishal -h 172.31.35.248
- stop slave;
- show slave status\G
- exit



On master slave get below details by firing below query:

- Get file name and position
- File: binlog.000005
- Position: 2006

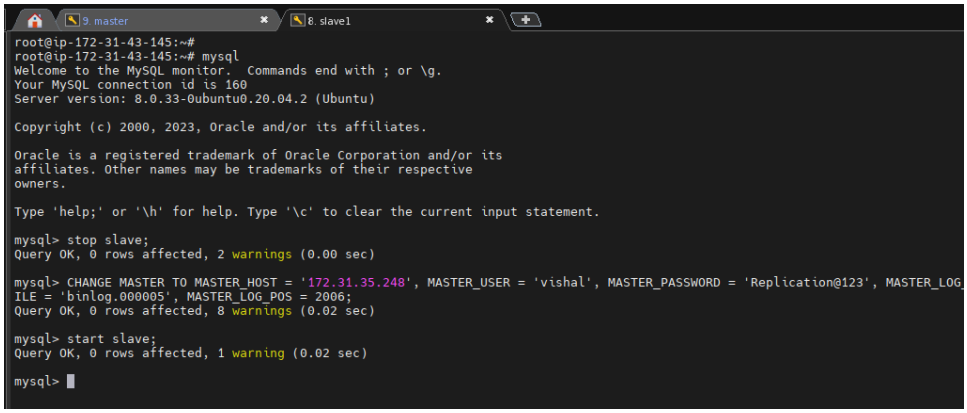


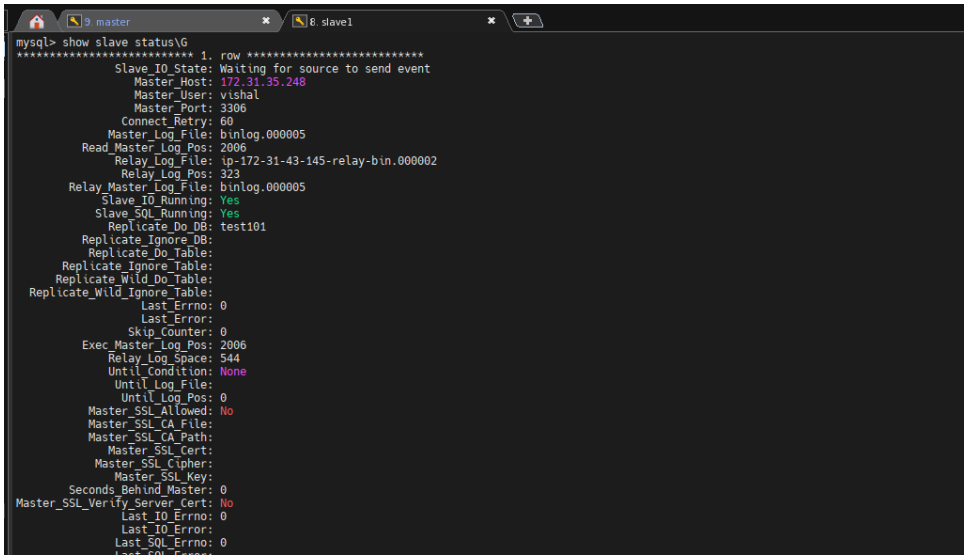
Now login in mysql using slave credential on slave machine

Fire below quries copy and paste details aquired from master machine :

- Master ip : 172.31.35.248'
- FIle name: binlog.000005
- Position: 2006

CHANGE MASTER TO MASTER_HOST = '172.31.35.248', MASTER_USER = 'vishal', MASTER_PASSWORD = 'Replication@123', MASTER_LOG_FILE = 'binlog.000005', MASTER_LOG_POS = 2006;



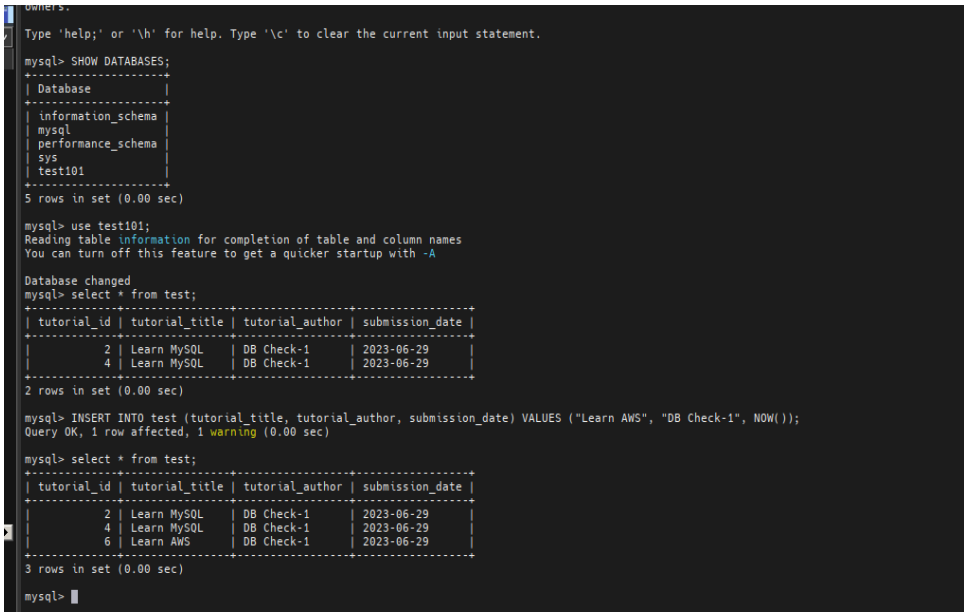


Check replication :

On master ADD another entry under test101 database:

- SHOW DATABASES;

- use test101;
- select * from test;
- INSERT INTO test (tutorial_title, tutorial_author, submission_date) VALUES ("Learn AWS", "DB Check-1", NOW());
- select * from test;



Check with slave now

It has to replicate