how to perform master and slave replication on centos 6?

requirements:

1.virtual box
2.operating system base os
3.internet or mysql-server and mysql package

procedure:

1.create 2 virtual machines (one for master db and slave db)
2.install both vms with centos
3.configure networking

>>>>>>>change hostnames in /etc/sysconfig/network
>>>>>>>both vms should have different ips bridged or natted.

Working Linux OS like CentOS 6.3, RedHat 6.3 or Fedora 17
Master and Slave are CentOS 6.3 Linux Servers.
Master IP Address is: 192.168.56.116
Slave IP Address is: 192.168.56.115
Master and Slave are on the same LAN network.
Master and Slave has MySQL version installed.
Master allow remote MySQL connections on port 3306

We have two servers, one is Master with IP (192.168.56.116) and other is Slave as (192.168.56.115).

Let's start the replication setup process

Configure Master Server (192.168.56.116) for replication:

1.yum install mysql-server mysql
2.vi /etc/my.cnf
>>>>>>>>>>>>>>>>>>>>>Add the following entries under [mysqld] section and don't forget to replace
tecmint with database name that you would like to replicate on Slave.

server-id = 1
binlog-do-db=tecmint   ---------------------------------->(combined database name)
relay-log = /var/lib/mysql/mysql-relay-bin
relay-log-index = /var/lib/mysql/mysql-relay-bin.index
log-error = /var/lib/mysql/mysql.err
master-info-file = /var/lib/mysql/mysql-master.info
relay-log-info-file = /var/lib/mysql/mysql-relay-log.info
log-bin = /var/lib/mysql/mysql-bin

3./etc/init.d/mysqld restart

4.mysql -u root -p

5.mysql> GRANT REPLICATION SLAVE ON *.* TO 'slave_user'@'%' IDENTIFIED BY 'your_password';

6.mysql> FLUSH PRIVILEGES;

7.mysql> FLUSH TABLES WITH READ LOCK;

8.mysql> SHOW MASTER STATUS;

9.quit;

10.mysqldump -u root -p --all-databases --master-data > /root/dbdump.db

--------------> taking dump of database to /root note down (mysql-bin.000003) and Position (11128001)
numbers.

11.mysql -u root -p

12.mysql> UNLOCK TABLES;

13.mysql> quit;

14.scp /root/dbdump.db root@192.168.1.2:/root/   -----------> Upload the database dump file on Slave
Server (192.168.56.115) using SCP command.

Configure Slave Server (192.168.56.115) for replication:

1.yum install mysql-server mysql

2.vi /etc/my.cnf

------------------->Add the following entries under [mysqld] section and don't forget to replace IP
address of Master server, tecmint with database name etc, that you would like to replicate with Master.

```
server-id = 2
master-host=192.168.1.1
master-connect-retry=60
master-user=slave_user
master-password=lsnworks -------------> your password
replicate-do-db=tecmint
relay-log = /var/lib/mysql/mysql-relay-bin
relay-log-index = /var/lib/mysql/mysql-relay-bin.index
log-error = /var/lib/mysql/mysql.err
master-info-file = /var/lib/mysql/mysql-master.info
relay-log-info-file = /var/lib/mysql/mysql-relay-log.info
log-bin = /var/lib/mysql/mysql-bin
```

3. mysql -u root -p < /root/dbdump.db

4. /etc/init.d/mysqld restart

5.mysql -u root -p

6.mysql> slave stop;

7.mysql> CHANGE MASTER TO MASTER_HOST='192.168.1.1', MASTER_USER='slave_user',
MASTER_PASSWORD='yourpassword', MASTER_LOG_FILE='mysql-bin.000003', MASTER_LOG_POS=11128001;

----------------> enter master mysql-bin.000003 and master position.

8.mysql> slave start;

9.mysql> show slave status\G;

sample output

```
*************************** 1. row ***************************
               Slave_IO_State: Waiting for master to send event
                  Master_Host: 192.168.1.1
                  Master_User: slave_user
                  Master_Port: 3306
                Connect_Retry: 60
              Master_Log_File: mysql-bin.000003
          Read_Master_Log_Pos: 12345100
               Relay_Log_File: mysql-relay-bin.000002
                Relay_Log_Pos: 11381900
        Relay_Master_Log_File: mysql-bin.000003
             Slave_IO_Running: Yes
            Slave_SQL_Running: Yes
              Replicate_Do_DB: tecmint
          Replicate_Ignore_DB:
           Replicate_Do_Table:
       Replicate_Ignore_Table:
      Replicate_Wild_Do_Table:
  Replicate_Wild_Ignore_Table:
```

```
                  Last_Errno: 0
                  Last_Error:
               Skip_Counter: 0
        Exec_Master_Log_Pos: 12345100
            Relay_Log_Space: 11382055
            Until_Condition: None
             Until_Log_File:
              Until_Log_Pos: 0
          Master_SSL_Allowed: No
          Master_SSL_CA_File:
          Master_SSL_CA_Path:
             Master_SSL_Cert:
           Master_SSL_Cipher:
              Master_SSL_Key:
       Seconds_Behind_Master: 0
Master_SSL_Verify_Server_Cert: No
              Last_IO_Errno: 0
              Last_IO_Error:
             Last_SQL_Errno: 0
             Last_SQL_Error:
1 row in set (0.00 sec)
```

```
*************************************************
```

Verifying MySQL Replication on Master and Slave Server

ON MASTER:

```
mysql> create database tecmint;
mysql> use tecmint;
mysql> CREATE TABLE employee (c int);
mysql> INSERT INTO employee (c) VALUES (1);
mysql> SELECT * FROM employee;
```

sample output:

```
+------+
| c    |
+------+
| 1    |
+------+
1 row in set (0.00 sec)
```

ON SLAVE:

```
mysql> use tecmint;
mysql> SELECT * FROM employee;
```

sample output:

```
+------+
| c    |
+------+
| 1    |
+------+
1 row in set (0.00 sec)
```