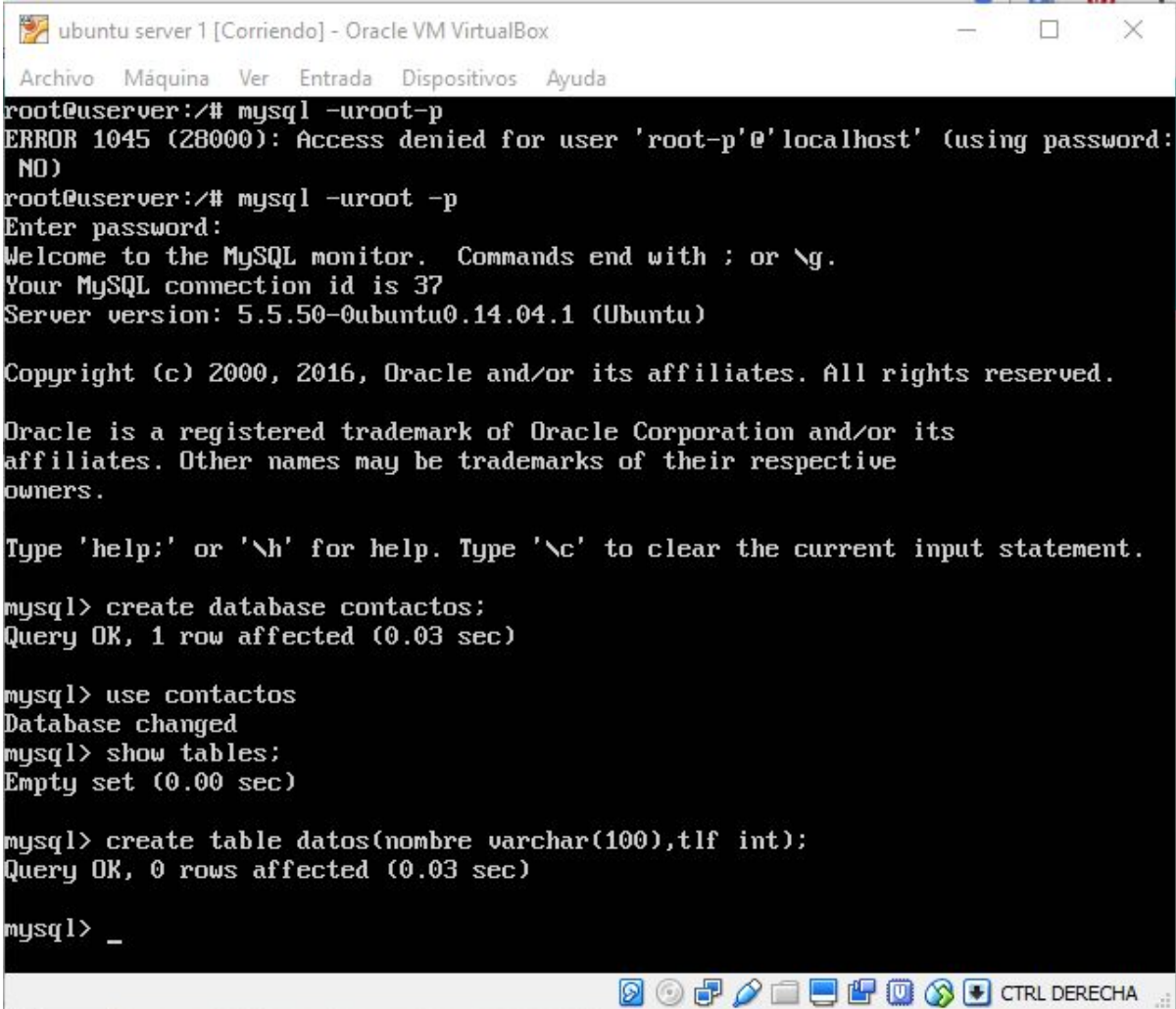


Práctica 5 Replicación de bases de datos MySQL

Creamos una base de datos nueva:



```
ubuntu server 1 [Corriendo] - Oracle VM VirtualBox
Archivo  Máquina  Ver  Entrada  Dispositivos  Ayuda
root@userver:/# mysql -uroot -p
ERROR 1045 (28000): Access denied for user 'root-p'@'localhost' (using password:
NO)
root@userver:/# mysql -uroot -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 37
Server version: 5.5.50-0ubuntu0.14.04.1 (Ubuntu)

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owners.

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

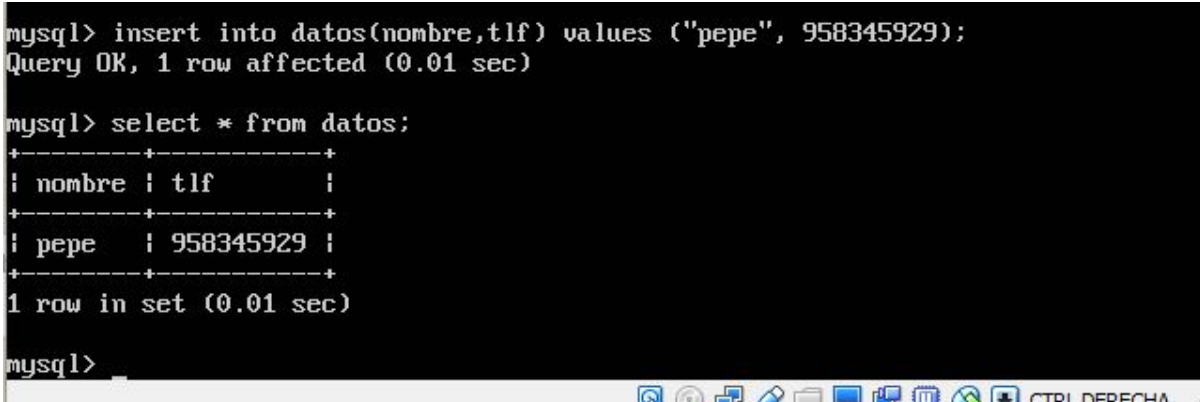
mysql> create database contactos;
Query OK, 1 row affected (0.03 sec)

mysql> use contactos
Database changed
mysql> show tables;
Empty set (0.00 sec)

mysql> create table datos(nombre varchar(100),tlf int);
Query OK, 0 rows affected (0.03 sec)

mysql> _
```

Insertamos datos nuevos en la tabla creada:

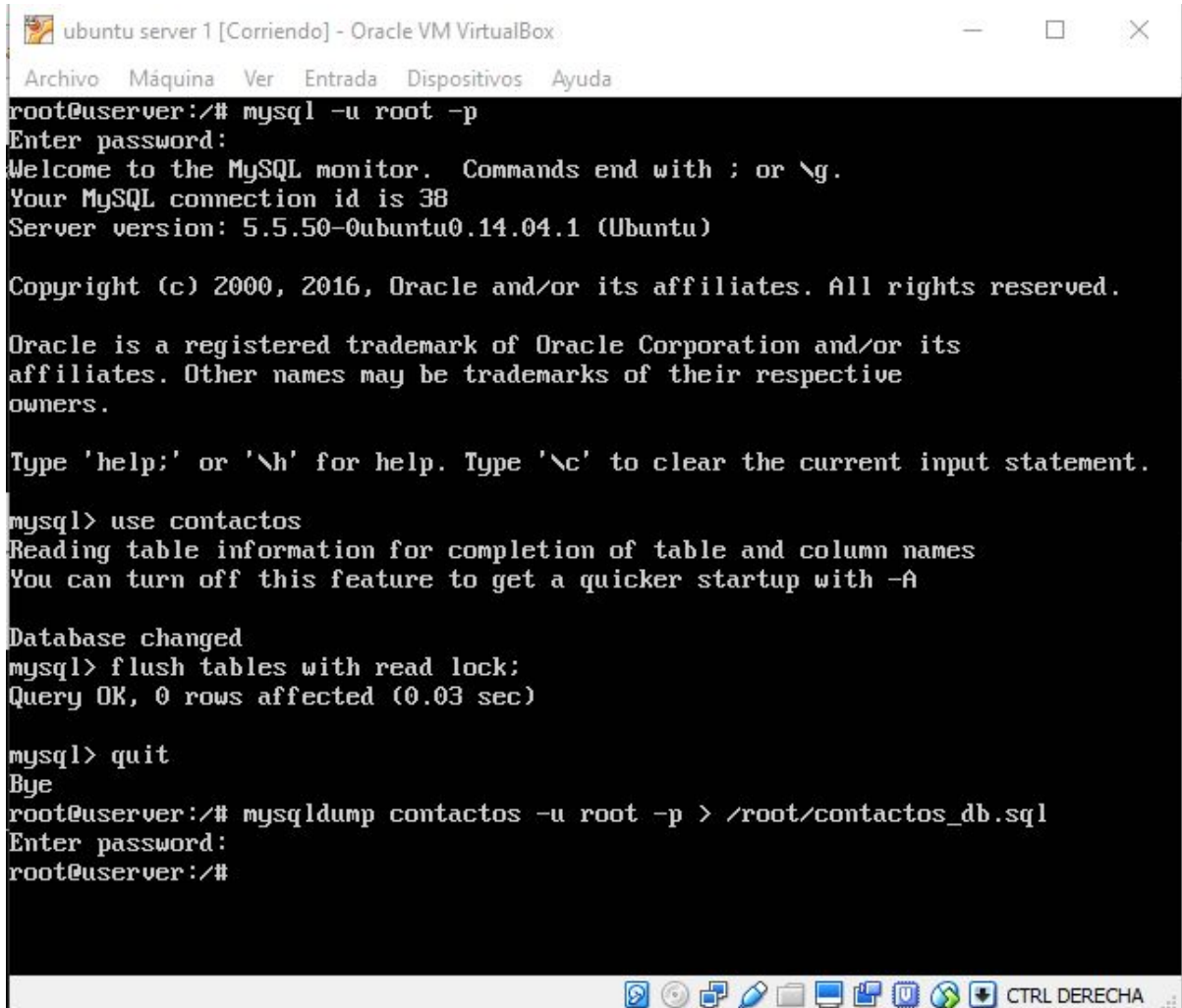


```
mysql> insert into datos(nombre,tlf) values ("pepe", 958345929);
Query OK, 1 row affected (0.01 sec)

mysql> select * from datos;
+-----+-----+
| nombre | tlf      |
+-----+-----+
| pepe   | 958345929 |
+-----+-----+
1 row in set (0.01 sec)

mysql> _
```

Ahora vamos a replicar una base de datos con mysqldump, creamos un backup en el master de la base de datos con mysqldump:



```
root@userver:/# mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 38
Server version: 5.5.50-0ubuntu0.14.04.1 (Ubuntu)

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affiliates. Other names may be trademarks of their respective
owners.

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

mysql> use contactos
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> flush tables with read lock;
Query OK, 0 rows affected (0.03 sec)

mysql> quit
Bye
root@userver:/# mysqldump contactos -u root -p > /root/contactos_db.sql
Enter password:
root@userver:/#
```

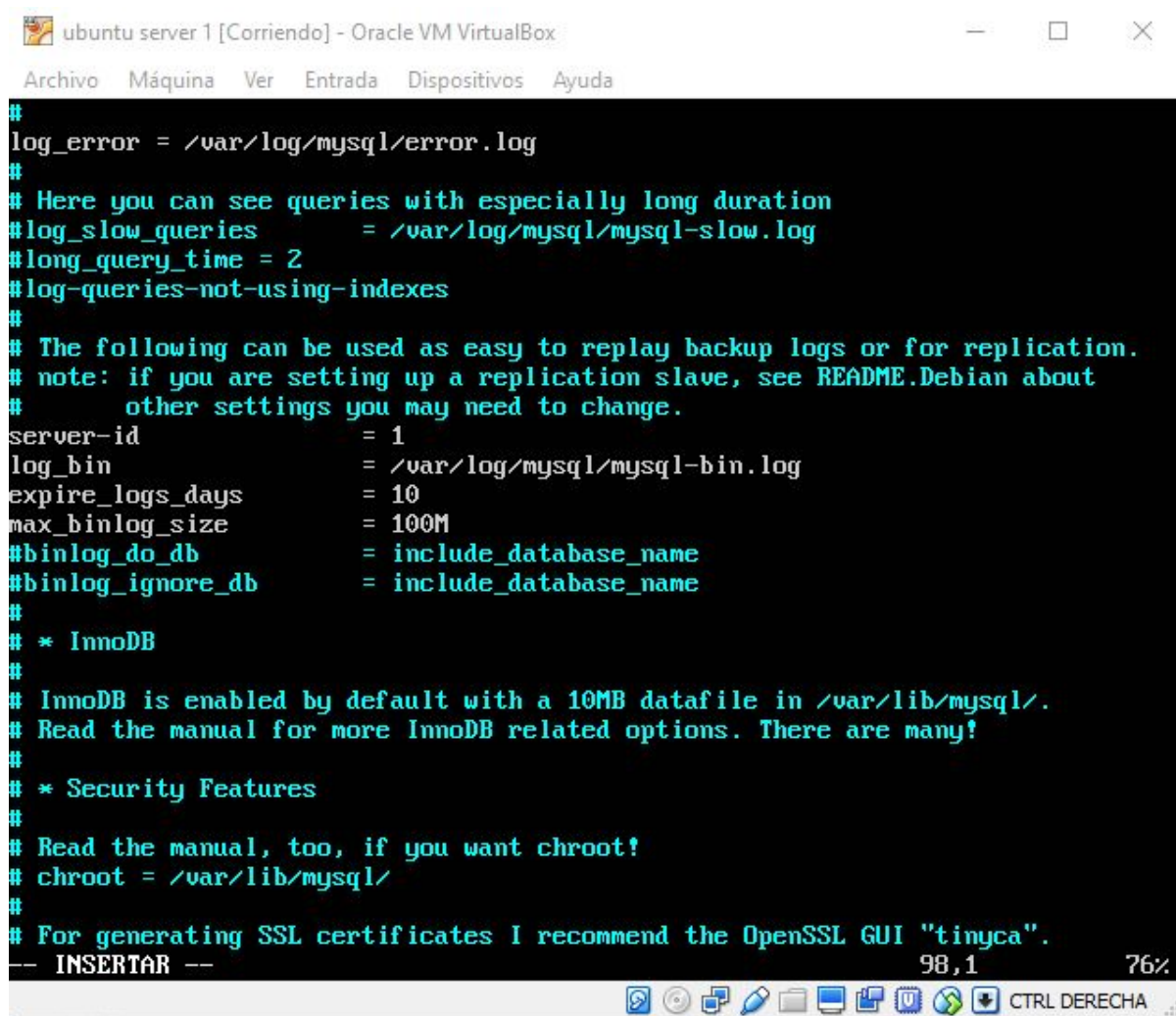
Y ya podemos ir al esclavo y hacer el comando:



```
root@userver:/home/userver# scp userver@192.168.56.103:/root/contactos_db.sql /r
oot/
scp: /root/contactos_db.sql: Permission denied
root@userver:/home/userver# _
```

Aquí es donde me da fallo y no se porque pero debería de funcionar el siguiente paso sería usar el comando `mysql -u root -p contactos_db < /root/contactos_db.sql` para restaurar los datos.

Ahora pasamos a replicar los datos de manera automática, el primer paso es configurar la máquina master en el archivo `/etc/mysql/my.cnf`:




```
#  
log_error = /var/log/mysql/error.log  
#  
# Here you can see queries with especially long duration  
#log_slow_queries = /var/log/mysql/mysql-slow.log  
#long_query_time = 2  
#log-queries-not-using-indexes  
#  
# The following can be used as easy to replay backup logs or for replication.  
# note: if you are setting up a replication slave, see README.Debian about  
# other settings you may need to change.  
server-id = 1  
log_bin = /var/log/mysql/mysql-bin.log  
expire_logs_days = 10  
max_binlog_size = 100M  
#binlog_do_db = include_database_name  
#binlog_ignore_db = include_database_name  
#  
# * InnoDB  
#  
# InnoDB is enabled by default with a 10MB datafile in /var/lib/mysql/.  
# Read the manual for more InnoDB related options. There are many!  
#  
# * Security Features  
#  
# Read the manual, too, if you want chroot!  
# chroot = /var/lib/mysql/  
#  
# For generating SSL certificates I recommend the OpenSSL GUI "tinyca".  
-- INSERTAR --  
98,1 76%
```

Cambiamos:

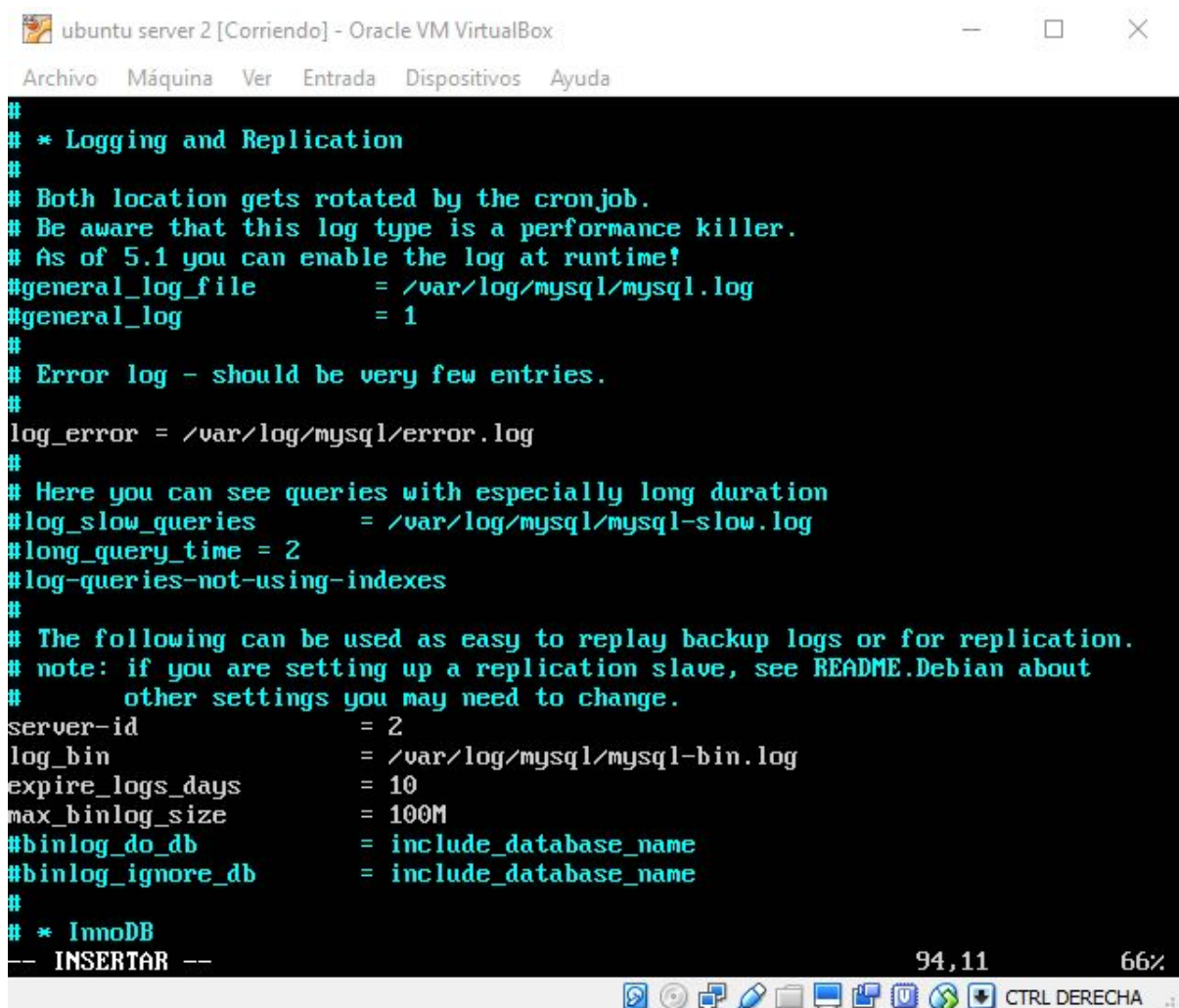
```
#bind-address 127.0.0.1  
log_error = /var/log/mysql/error.log  
server_id = 1
```

Una vez hecho esto reseteamos:



```
root@userver:/home/userver# /etc/init.d/mysql restart  
mysql stop/waiting  
mysql start/running, process 1431  
root@userver:/home/userver#
```

Y pasamos a configurar la máquina slave en el mismo archivo /etc/mysql/my.cnf:



ubuntu server 2 [Corriendo] - Oracle VM VirtualBox

Archivo Máquina Ver Entrada Dispositivos Ayuda

```
#
# * Logging and Replication
#
# Both location gets rotated by the cronjob.
# Be aware that this log type is a performance killer.
# As of 5.1 you can enable the log at runtime!
#general_log_file      = /var/log/mysql/mysql.log
#general_log           = 1
#
# Error log - should be very few entries.
#
log_error = /var/log/mysql/error.log
#
# Here you can see queries with especially long duration
#log_slow_queries      = /var/log/mysql/mysql-slow.log
#long_query_time = 2
#log-queries-not-using-indexes
#
# The following can be used as easy to replay backup logs or for replication.
# note: if you are setting up a replication slave, see README.Debian about
#       other settings you may need to change.
server-id             = 2
log_bin               = /var/log/mysql/mysql-bin.log
expire_logs_days      = 10
max_binlog_size        = 100M
#binlog_do_db          = include_database_name
#binlog_ignore_db       = include_database_name
#
# * InnoDB
-- INSERTAR --
```

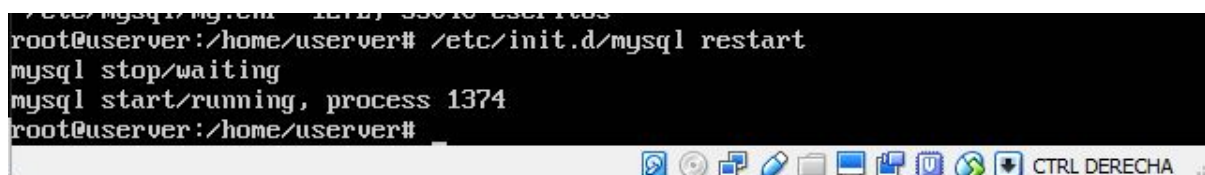
94,11 66%

CTRL DERECHA

Cambiamos:

```
#bind-address 127.0.0.1
log_error = /var/log/mysql/error.log
server_id = 2
```

Reseteamos la máquina 2:



```
root@userver:/home/userver# /etc/init.d/mysql restart
mysql stop/waiting
mysql start/running, process 1374
root@userver:/home/userver#
```

CTRL DERECHA

Ahora creamos el esclavo:

```
mysql> create user esclavo identified by 'esclavo';
mysql> grant replication slave on *.* to 'esclavo'@'%' identified by 'esclavo';
mysql> flush privileges;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that
corresponds to your MySQL server version for the right syntax to use near 'privi
legies' at line 1
mysql> flush privileges;
mysql> flush tables;
mysql> flush tables with read lock;
mysql>
```

Y finalizamos la configuración mostrando su status:

```
mysql> show master status;
File      Position      Binlog_Do_DB  Binlog_Ignore_DB
mysql-bin.000001      501
mysql>
```

Configuramos la máquina 2 correctamente ahora:

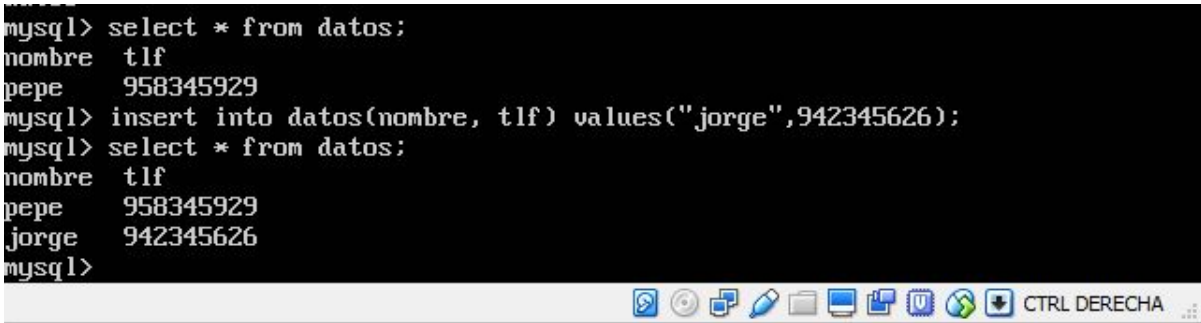
```
mysql> change master to master_host='192.168.56.103', master_user='esclavo', mas
ter_password='esclavo', master_log_file='mysql-bin.000001', master_log_pos=501,
master_port=3306;
mysql>
```

Comprobamos que seconds_behind_master es distinto de null:

```
Seconds_Behind_Master: 0
ster_SSL_Verify_Server_Cert: No
Last_IO_Errno: 0
Last_IO_Error:
Last_SQL_Errno: 0
Last_SQL_Error:
Replicate_Ignore_Server_Ids:
Master_Server_Id: 1
ERROR:
query specified
mysql>
```


Ahora insertamos un dato en master y vemos si se replica en la máquina 2:

```
mysql> select * from datos;
nombre  tlf
pepe    958345929
mysql> insert into datos(nombre, tlf) values("jorge",942345626);
mysql> select * from datos;
nombre  tlf
pepe    958345929
jorge   942345626
mysql>
```



En mi caso me sigue sin replicar al igual que tampoco me funcionaba el `mysqldump` porque decía que tenía el permiso denegado, en este caso no me sale ningún error y aún así no se replica correctamente:

```
mysql> show tables;
mysql> select * from datos;
ERROR 1146 (42S02): Table 'contactos.datos' doesn't exist
mysql> use contactos;
mysql> show tables;
mysql> select * from datos;
ERROR 1146 (42S02): Table 'contactos.datos' doesn't exist
mysql> quit
root@userver:/home/userver#
```

