

Universidad de San Carlos de Guatemala

Facultad de Ingeniería

Escuela de Ciencias y Sistemas

Sistemas de Bases de Datos 2

Primer Semestre 2022

Aux. Yimmi Pernillo



**USAC**  
TRICENTENARIA  
Universidad de San Carlos de Guatemala

## **Practica #2**

Full Backup & Incremental Backup

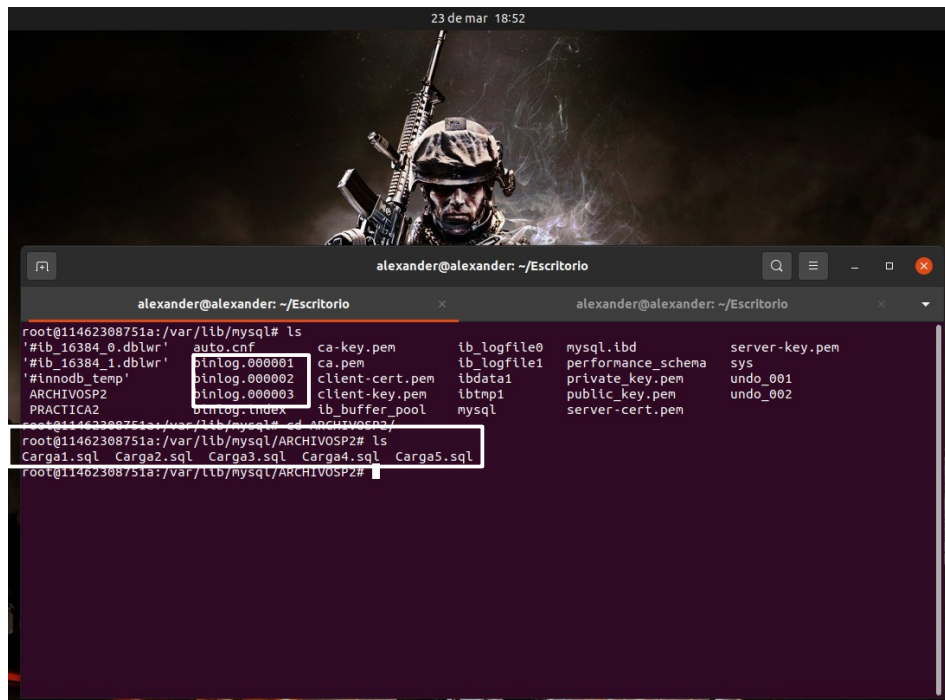
Candidato a Calificar

**Alexander Pacheco 201503746**

## PROCESO DE CARGAS DIARIAS

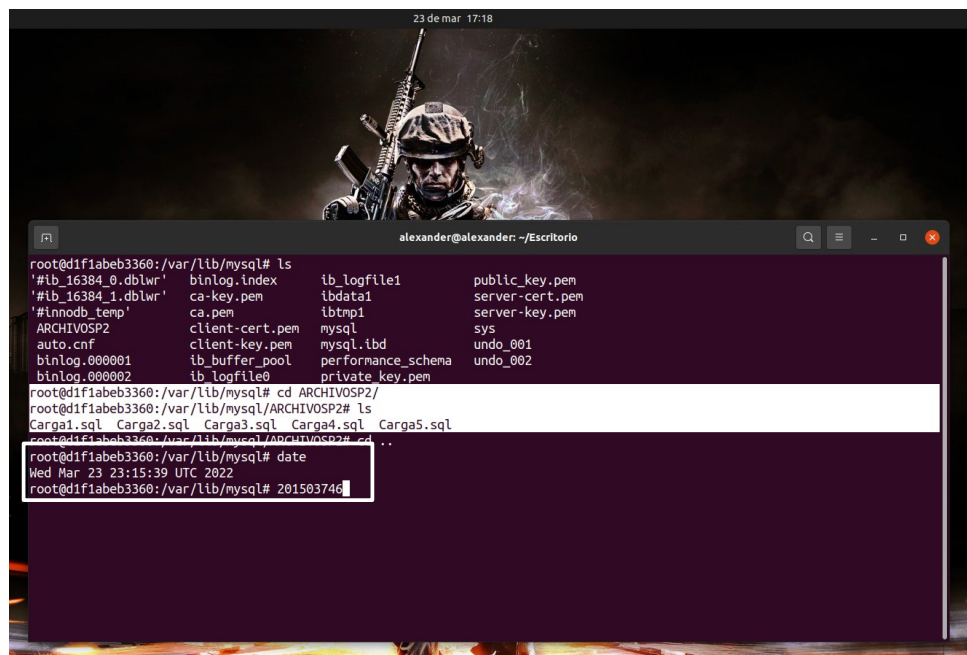
Cargando los datos día a día, en cada día se realizaran cargas de datos sin borrar la información del día anterior. Haciendo por día los backups full e incremental.

- Día 1: Se inicio la practica el día Miércoles 23, en el ultimo día domingo 27 se cargara el 5to archivo y se procederá con la restauración de los backups. Se cargara el archivo Carga1.sql según terminación de carnet 201503746.
  - Carga de Datos



A screenshot of a terminal window titled 'alexander@alexander: ~/Escritorio'. The terminal shows the following commands and output:

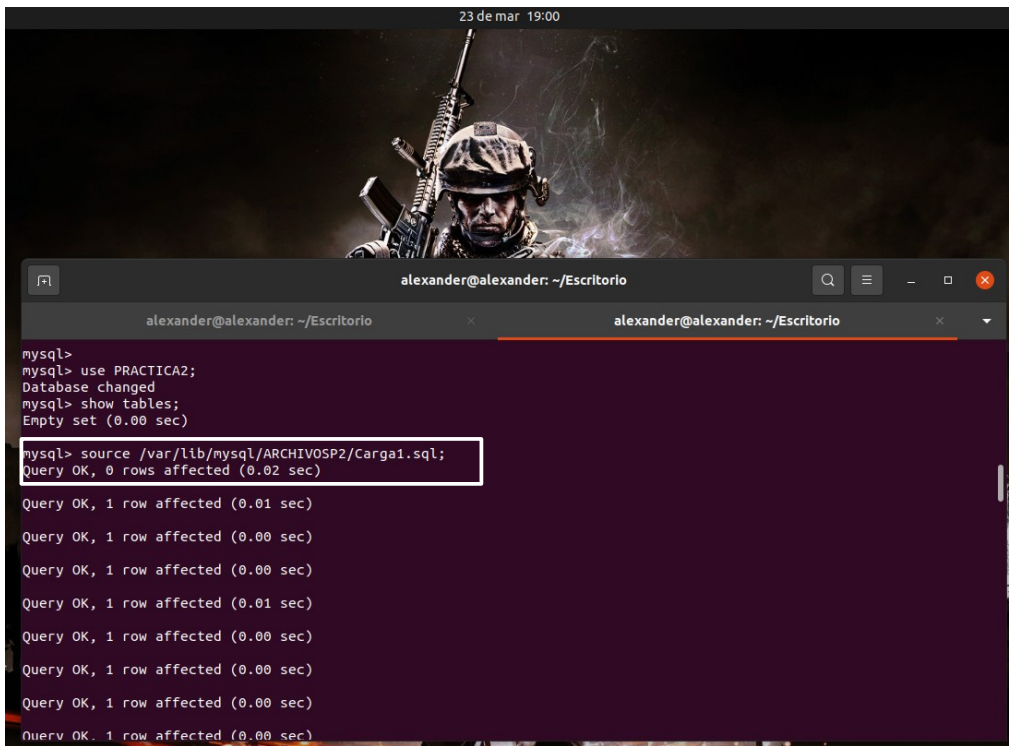
```
root@11462308751a:/var/lib/mysql# ls
'#ib_16384_0.dblwr'  auto.cnf          ca-key.pem        ib_logfile0       mysql.ibd          server-key.pem
'#ib_16384_1.dblwr' binlog.000001     ca.pem            ib_logfile1       performance_schena sys
'#innodb_temp'      binlog.000002     client-cert.pem   ibdata1           private_key.pem    undo_001
ARCHIVOSP2          binlog.000003     client-key.pem    ibtmp1            public_key.pem     undo_002
PRACTICA2          binlog.index      ib_buffer_pool    mysql
root@11462308751a:/var/lib/mysql# cd ARCHIVOSP2/
root@11462308751a:/var/lib/mysql/ARCHIVOSP2# ls
Carga1.sql  Carga2.sql  Carga3.sql  Carga4.sql  Carga5.sql
root@11462308751a:/var/lib/mysql/ARCHIVOSP2#
```



A screenshot of a terminal window titled 'alexander@alexander: ~/Escritorio'. The terminal shows the following commands and output:

```
root@d1fiabeb3360:/var/lib/mysql# ls
'#ib_16384_0.dblwr'  binlog.index      ib_logfile1       public_key.pem
'#ib_16384_1.dblwr' ca-key.pem        ibdata1           server-cert.pem
'#innodb_temp'      ca.pem            ibtmp1            server-key.pem
ARCHIVOSP2          client-cert.pem   mysql            sys
auto.cnf            client-key.pem    mysql.ibd         undo_001
binlog.000001       ib_buffer_pool    performance_schema undo_002
binlog.000002       ib_logfile0       private_key.pem
root@d1fiabeb3360:/var/lib/mysql# cd ARCHIVOSP2/
root@d1fiabeb3360:/var/lib/mysql/ARCHIVOSP2# ls
Carga1.sql  Carga2.sql  Carga3.sql  Carga4.sql  Carga5.sql
root@d1fiabeb3360:/var/lib/mysql/ARCHIVOSP2#
root@d1fiabeb3360:/var/lib/mysql# date
Wed Mar 23 23:15:39 UTC 2022
root@d1fiabeb3360:/var/lib/mysql# 201503746
```

23 de mar 19:00

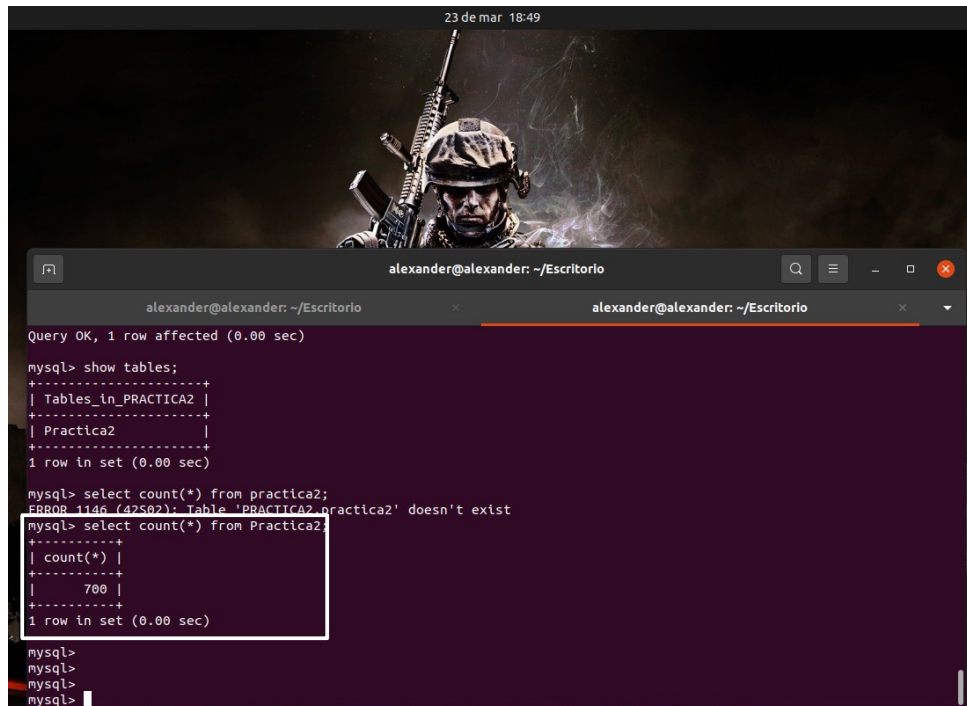


```
mysql>
mysql> use PRACTICA2;
Database changed
mysql> show tables;
Empty set (0.00 sec)

mysql> source /var/lib/mysql/ARCHIVO5P2/Carga1.sql;
Query OK, 0 rows affected (0.02 sec)

Query OK, 1 row affected (0.01 sec)
Query OK, 1 row affected (0.00 sec)
Query OK, 1 row affected (0.00 sec)
Query OK, 1 row affected (0.01 sec)
Query OK, 1 row affected (0.00 sec)
Query OK, 1 row affected (0.00 sec)
Query OK, 1 row affected (0.00 sec)
Query OK, 1 row affected (0.00 sec)
Query OK, 1 row affected (0.00 sec)
```

23 de mar 18:49



```
Query OK, 1 row affected (0.00 sec)

mysql> show tables;
+-----+
| Tables_in_PRACTICA2 |
+-----+
| Practica2            |
+-----+
1 row in set (0.00 sec)

mysql> select count(*) from practica2;
ERROR 1146 (42S02): Table 'PRACTICA2.practica2' doesn't exist

mysql> select count(*) from Practica2;
+-----+
| count(*) |
+-----+
|       700 |
+-----+
1 row in set (0.00 sec)

mysql>
mysql>
mysql>
mysql>
```

- Full Backup

```

root@11462308751a: /var/lib/mysql# ls
'#ib_16384_0.dblwr'  auto.cnf          ca-key.pem        ib_logfile0       mysql.ibd          server-key.pem
'#ib_16384_1.dblwr'  binlog.000001     ca.pem            ib_logfile1       performance_schema sys              undo_001
'#innodb_temp'       binlog.000002     client-cert.pem   ibdata1           private_key.pem    undo_002
ARCHIVOSP2           binlog.000003     client-key.pem    ibtmp1            public_key.pem
PRACTICA2            binlog.index      ib_buffer_pool    mysql              server-cert.pem

root@11462308751a: /var/lib/mysql# mysqlbackup -u root -p "PRACTICA2">FULLD1.sql
Enter password:
root@11462308751a: /var/lib/mysql# ls
'#ib_16384_0.dblwr'  PRACTICA2         binlog.index      ib_buffer_pool    mysql              server-cert.pem
'#ib_16384_1.dblwr'  auto.cnf           ca-key.pem        ib_logfile0       mysql.ibd          server-key.pem
'#innodb_temp'       binlog.000001     ca.pem            ib_logfile1       performance_schema sys              undo_001
'#innodb_temp'       binlog.000002     client-cert.pem   ibdata1           private_key.pem    undo_002
FULLD1.sql           binlog.000003     client-key.pem    ibtmp1            public_key.pem
root@11462308751a: /var/lib/mysql#

```

- Incremental Backup: el primer backup incremental inicia en el archivo binlog.000003

```

mysql> use PRACTICA2;
Database changed
mysql> show tables;
+-----+
| Tables_in_PRACTICA2 |
+-----+
| Practica2            |
+-----+
1 row in set (0.00 sec)

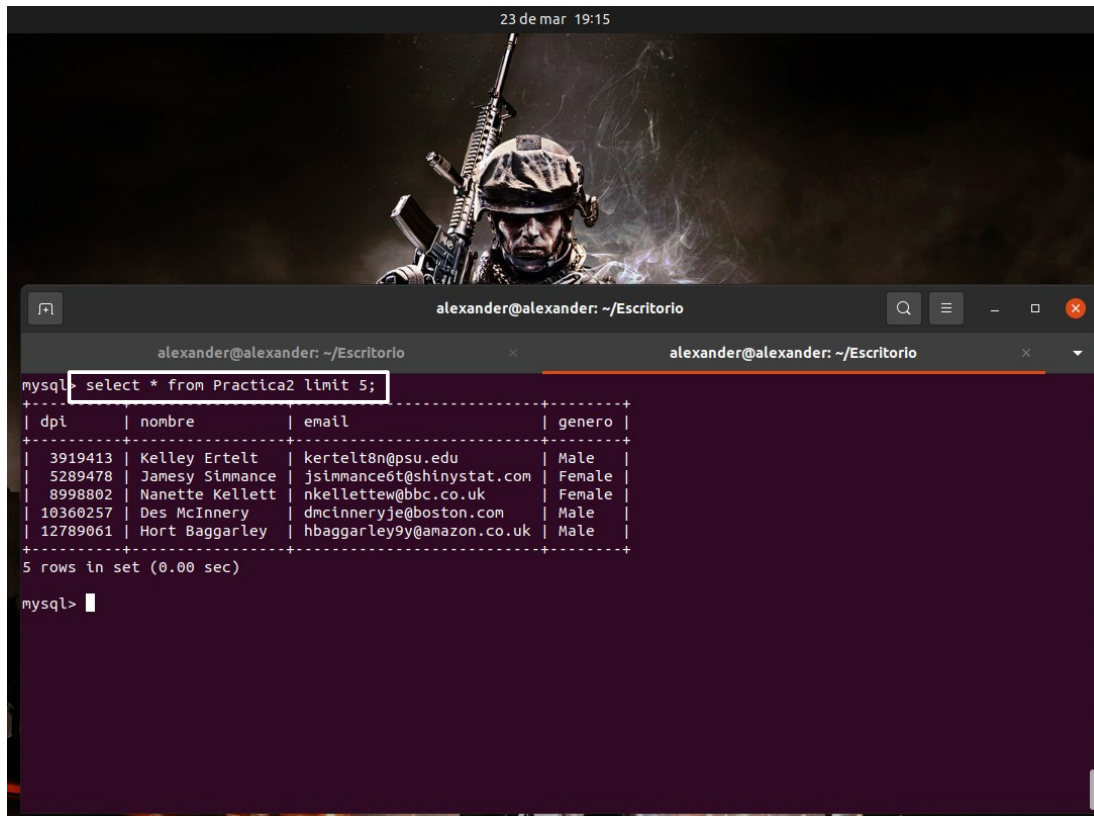
mysql> flush logs;
Query OK, 0 rows affected (0.02 sec)

mysql> exit
Bye
root@11462308751a: /var/lib/mysql# ls
'#ib_16384_0.dblwr'  auto.cnf          ca-key.pem        ib_logfile1       private_key.pem    undo_002
'#ib_16384_1.dblwr'  binlog.000001     ca.pem            ibdata1           public_key.pem     server-cert.pem
'#innodb_temp'       binlog.000002     client-cert.pem   ibtmp1            mysql              server-key.pem
ARCHIVOSP2           binlog.000003     client-key.pem    ib_buffer_pool    mysql.ibd          sys              undo_001
FULLD1.sql           binlog.000004     ib_logfile0      performance_schema
PRACTICA2            binlog.index      ib_logfile0
root@11462308751a: /var/lib/mysql#

```



- Captura de 'select \* from Practica2 limit 5'

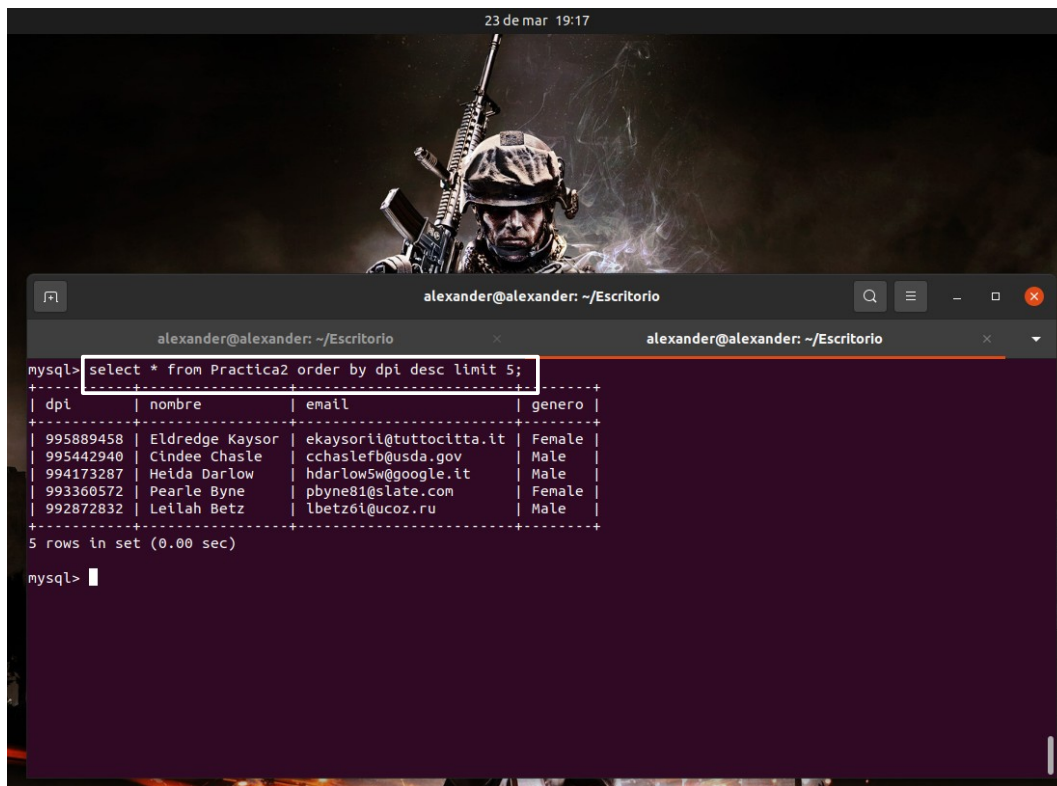


A screenshot of a terminal window titled 'alexander@alexander: ~/Escritorio'. The terminal shows a MySQL prompt 'mysql>' followed by the command 'select \* from Practica2 limit 5;'. The output is a table with 5 rows and 4 columns: 'dpi', 'nombre', 'email', and 'genero'. The data is as follows:

dpi	nombre	email	genero
3919413	Kelley Ertelt	kertelt8n@psu.edu	Male
5289478	Jamesy Simmance	jsimmance6t@shinytstat.com	Female
8998802	Nanette Kellett	nkellettew@bbc.co.uk	Female
10360257	Des McInnery	dmcinneryje@boston.com	Male
12789061	Hort Baggarley	hbaggarley9y@amazon.co.uk	Male

Below the table, it says '5 rows in set (0.00 sec)'. The prompt 'mysql>' is shown again at the bottom.

- Captura de 'select \* from Practica2 order by dpi desc limit 5'



A screenshot of a terminal window titled 'alexander@alexander: ~/Escritorio'. The terminal shows a MySQL prompt 'mysql>' followed by the command 'select \* from Practica2 order by dpi desc limit 5;'. The output is a table with 5 rows and 4 columns: 'dpi', 'nombre', 'email', and 'genero'. The data is as follows:

dpi	nombre	email	genero
995889458	Eldredge Kaysor	ekaysoril@tuttocitta.it	Female
995442940	Cindee Chasle	cchaslefb@usda.gov	Male
994173287	Heida Darlow	hdarlow5w@google.it	Male
993360572	Pearle Byne	pbyne8i@slate.com	Female
992872832	Lellah Betz	lbetz6l@ucoz.ru	Male

Below the table, it says '5 rows in set (0.00 sec)'. The prompt 'mysql>' is shown again at the bottom.

- Día 2: Se cargara el archivo Carga2.sql según terminación de carnet 201503746.
  - Carga de Datos
  - Full Backup
  - Incremental Backup
  - Captura de 'select \* from Practica2 limit 5'
  - Captura de 'select \* from Practica2 order by dpi desc limit 5'
- Día 3: Se cargara el archivo Carga3.sql según terminación de carnet 201503746.
  - Carga de Datos
  - Full Backup
  - Incremental Backup
  - Captura de 'select \* from Practica2 limit 5'
  - Captura de 'select \* from Practica2 order by dpi desc limit 5'
- Día 4: Se cargara el archivo Carga4.sql según terminación de carnet 201503746.
  - Carga de Datos
  - Full Backup
  - Incremental Backup
  - Captura de 'select \* from Practica2 limit 5'
  - Captura de 'select \* from Practica2 order by dpi desc limit 5'
- Día 5: Se cargara el archivo Carga5.sql según terminación de carnet 201503746.
  - Carga de Datos
  - Full Backup
  - Incremental Backup
  - Captura de 'select \* from Practica2 limit 5'
  - Captura de 'select \* from Practica2 order by dpi desc limit 5'

## **RESTAURACIÓN FULL BACKUPS**

Se procederá a la restauración de los backup full & backup incremental.

- Día 1
- Día 2:
- Día 3:
- Día 4:
- Día 5:

