



TECNOLÒGICO NACIONAL DE MÈXICO

CAMPUS JEREZ

MATERIA: TALLER DE BASE DE DATOS

DOCENTE: ISC SALVADOR ACEVEDO SANDOVAL

5° SEMESTRE

TEMA 2: LENGUAJE DE MANIPULACIÓN DE DATOS

ACTIVIDAD 4: EJERCICIOS SQL [CONSULTAS CON
AGRUPACIÓN]

ALUMNA: LIZA AREMY SANTANA CONTRERAS

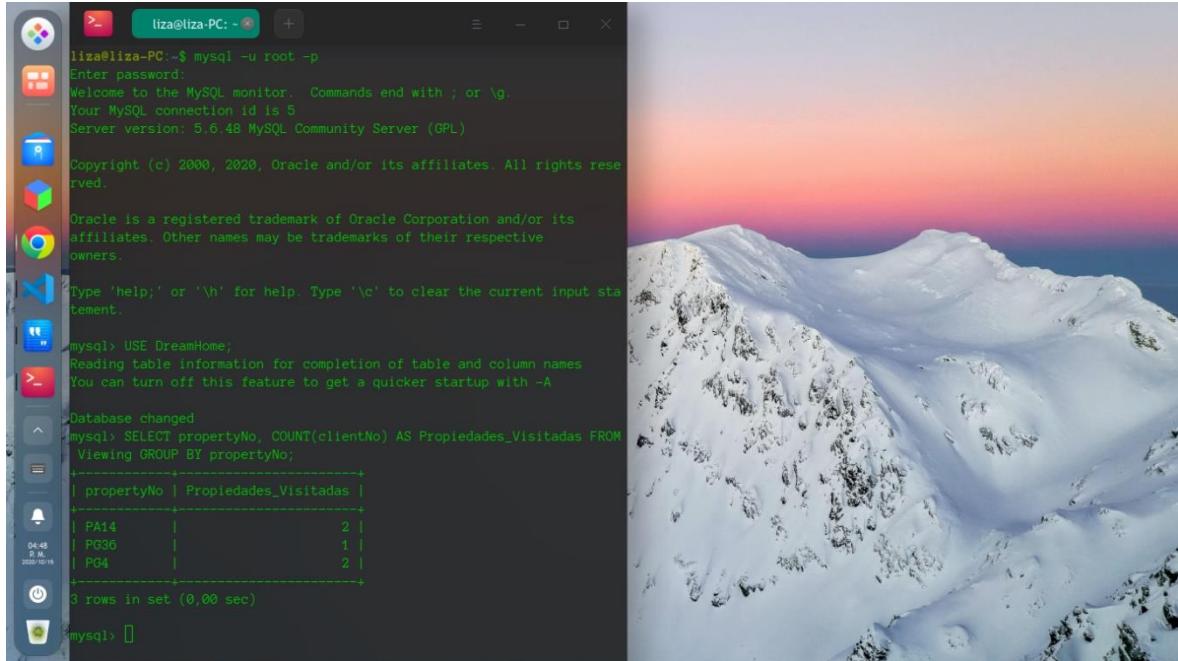
NO. CONTROL: 16070005

16 DE OCTUBRE DE 2020

JEREZ DE GARCIA SALINAS

DREAMHOME - MySQL

1. Crear una consulta que muestre para cada propiedad cuantas personas la han visto



A screenshot of a Linux desktop environment. On the left, a terminal window titled "liza@liza-PC: ~" shows MySQL command-line interface. The user has connected as root and selected the "DreamHome" database. A query is run to count the number of visitors for each property:

```
liza@liza-PC:~$ mysql -u root -p
Enter password:
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 5
Server version: 5.6.48 MySQL Community Server (GPL)

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owners.

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

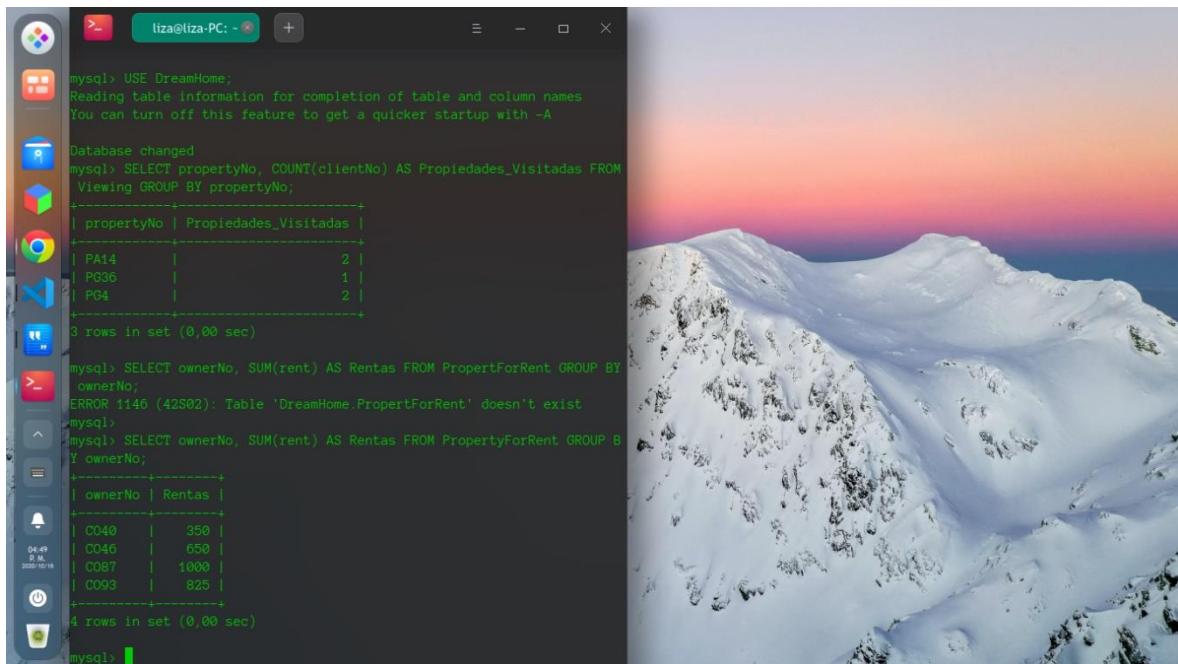
mysql> USE DreamHome;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> SELECT propertyNo, COUNT(clientNo) AS Propiedades_Visitadas FROM
Viewing GROUP BY propertyNo;
+-----+-----+
| propertyNo | Propiedades_Visitadas |
+-----+-----+
| PA14      |          2 |
| PG36      |          1 |
| PG4       |          2 |
+-----+-----+
3 rows in set (0,00 sec)

mysql>
```

The terminal window is part of a desktop environment with a dark theme, and the desktop background features a scenic view of a snow-covered mountain range at sunset.

2. Para cada Propietario, muestre cuanto gana por concepto de rentas



A screenshot of a Linux desktop environment. On the left, a terminal window titled "liza@liza-PC: ~" shows MySQL command-line interface. The user has selected the "DreamHome" database and runs two queries. The first query counts visitors per property, which is then used in a second query to calculate total rents per owner. However, the second query fails due to a table named "PropertyForRent" not existing:

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

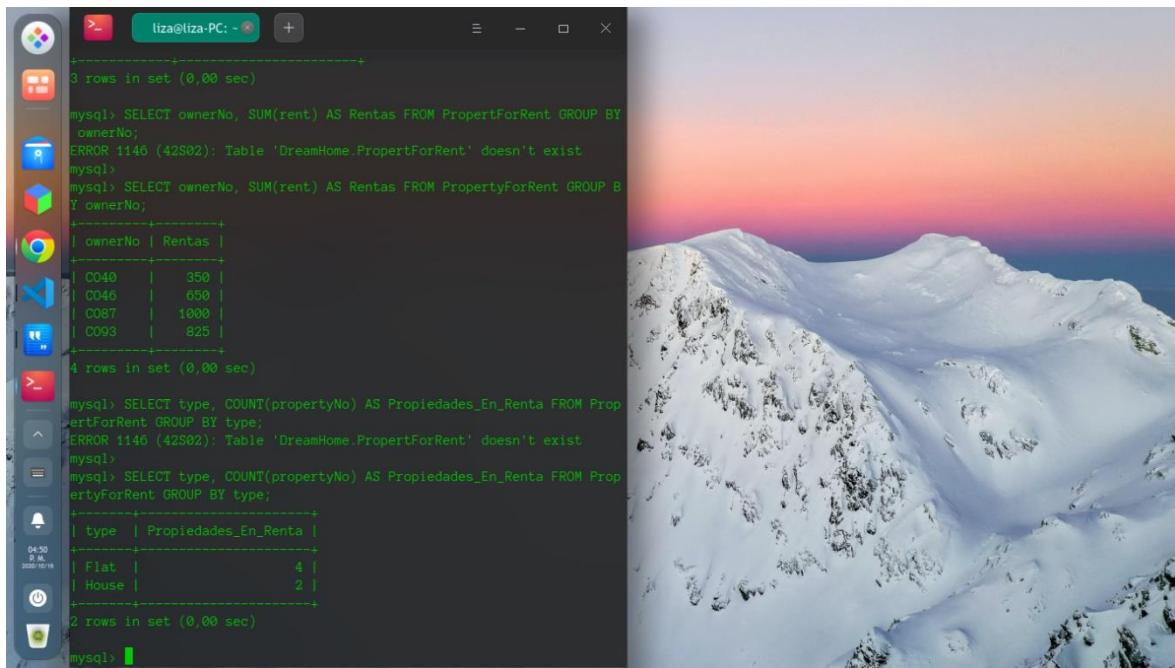
Database changed
mysql> SELECT propertyNo, COUNT(clientNo) AS Propiedades_Visitadas FROM
Viewing GROUP BY propertyNo;
+-----+-----+
| propertyNo | Propiedades_Visitadas |
+-----+-----+
| PA14      |          2 |
| PG36      |          1 |
| PG4       |          2 |
+-----+-----+
3 rows in set (0,00 sec)

mysql> SELECT ownerNo, SUM(rent) AS Rentas FROM PropertyForRent GROUP BY
ownerNo;
ERROR 1146 (42S02): Table 'DreamHome.PropertyForRent' doesn't exist
mysql> SELECT ownerNo, SUM(rent) AS Rentas FROM PropertyForRent GROUP BY
ownerNo;
+-----+-----+
| ownerNo | Rentas |
+-----+-----+
| CO40    |   350 |
| CO46    |   650 |
| CO87    |  1000 |
| CO93    |   825 |
+-----+-----+
4 rows in set (0,00 sec)

mysql>
```

The terminal window is part of a desktop environment with a dark theme, and the desktop background features a scenic view of a snow-covered mountain range at sunset.

3. Muestre cuantas existencias hay para cada tipo de propiedad en renta



The terminal window displays MySQL queries and their results:

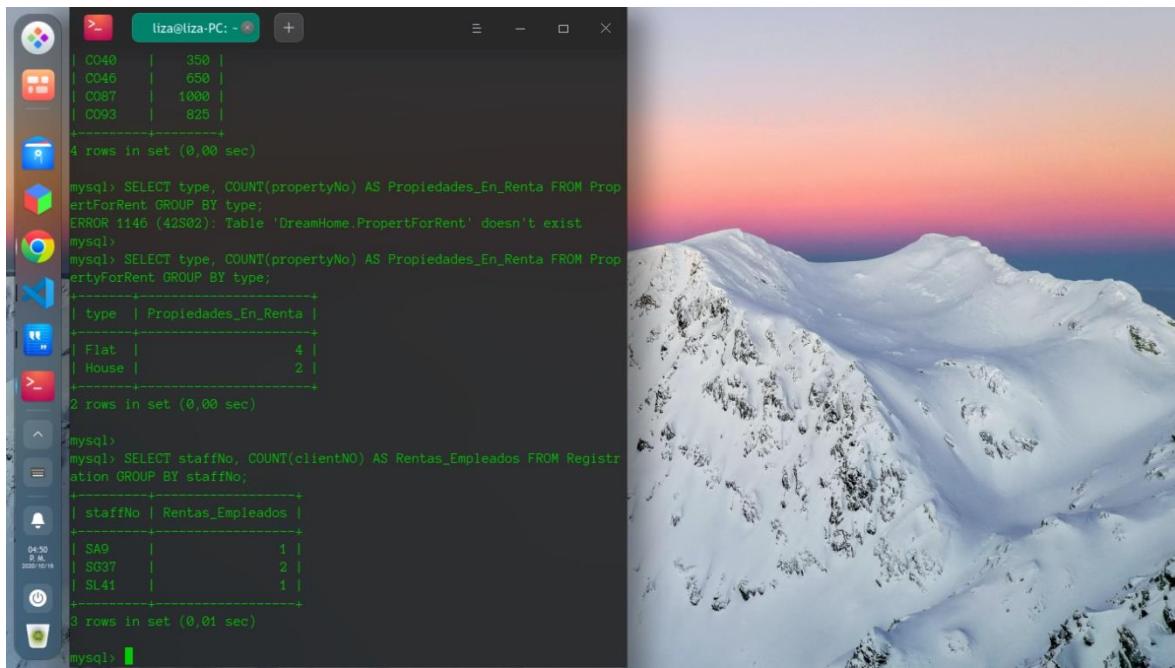
```
liza@liza-PC: ~
+-----+
0 rows in set (0,00 sec)

mysql> SELECT ownerNo, SUM(rent) AS Rentas FROM PropertyForRent GROUP BY ownerNo;
ERROR 1146 (42S02): Table 'DreamHome.PropertyForRent' doesn't exist
mysql> SELECT ownerNo, SUM(rent) AS Rentas FROM PropertyForRent GROUP BY ownerNo;
+-----+
| ownerNo | Rentas |
+-----+
| C040    |   350 |
| C046    |   650 |
| C087    |  1000 |
| C093    |   825 |
+-----+
4 rows in set (0,00 sec)

mysql> SELECT type, COUNT(propertyNo) AS Propiedades_En_Renta FROM PropertyForRent GROUP BY type;
ERROR 1146 (42S02): Table 'DreamHome.PropertyForRent' doesn't exist
mysql> SELECT type, COUNT(propertyNo) AS Propiedades_En_Renta FROM PropertyForRent GROUP BY type;
+-----+
| type   | Propiedades_En_Renta |
+-----+
| Flat   |        4 |
| House  |        2 |
+-----+
2 rows in set (0,00 sec)

mysql>
```

4. Crear un listado que muestre cuantos registros de rentas ha realizado cada empleado



The terminal window displays MySQL queries and their results:

```
liza@liza-PC: ~
+-----+
0 rows in set (0,00 sec)

mysql> SELECT type, COUNT(propertyNo) AS Propiedades_En_Renta FROM PropertyForRent GROUP BY type;
ERROR 1146 (42S02): Table 'DreamHome.PropertyForRent' doesn't exist
mysql> SELECT type, COUNT(propertyNo) AS Propiedades_En_Renta FROM PropertyForRent GROUP BY type;
+-----+
| type   | Propiedades_En_Renta |
+-----+
| Flat   |        4 |
| House  |        2 |
+-----+
2 rows in set (0,00 sec)

mysql>
mysql> SELECT staffNo, COUNT(clientNo) AS Rentas_Empieados FROM Registration GROUP BY staffNo;
+-----+
| staffNo | Rentas_Empieados |
+-----+
| SA9     |         1 |
| SG37    |         2 |
| SL41    |         1 |
+-----+
3 rows in set (0,01 sec)

mysql>
```

5. Para cada sucursal, muestre el numero de empleados que laboran en ella y el total de salarios que se pagan



```
liza@liza-PC: ~ + ⌂ - X
mysql> SELECT type, COUNT(propertyNo) AS Propiedades_En_Renta FROM PropertyForRent GROUP BY type;
+-----+-----+
| type | Propiedades_En_Renta |
+-----+-----+
| Flat | 4 |
| House | 2 |
+-----+-----+
2 rows in set (0,00 sec)

mysql> SELECT staffNo, COUNT(clientNo) AS Rentas_Empleados FROM Registration GROUP BY staffNo;
+-----+-----+
| staffNo | Rentas_Empleados |
+-----+-----+
| SA9 | 1 |
| SG37 | 2 |
| SL41 | 1 |
+-----+-----+
3 rows in set (0,01 sec)

mysql> SELECT branchNo, COUNT(staffNo) AS Empleados_Sucursal, SUM(salary) AS Salario FROM Staff GROUP BY branchNo;
+-----+-----+-----+
| branchNo | Empleados_Sucursal | Salario |
+-----+-----+-----+
| B003 | 3 | 54000 |
| B005 | 2 | 39000 |
| B007 | 1 | 9000 |
+-----+-----+-----+
3 rows in set (0,00 sec)

mysql>
```

EMPRESA - MySQL

1. Mostrar para cada empleado que labore en mas de dos proyectos, la cantidad de proyectos en los que trabaja.

The screenshot shows the MySQL Workbench interface with a query editor titled "CONSULTAS CON AGRUPACION EMPRESA". The query is:

```
1 * SELECT DniEmpleado, COUNT(NomProy) AS Numero_Proyecto FROM Trabaja_En GROUP BY DniEmpleado  
2 HAVING (COUNT(DniEmpleado) >= 2);
```

The result grid displays the following data:

#	DniEmpleado	Numero_Proyecto
1	123456789	2
2	333445555	4
3	455454545	2
4	887884321	2
5	887867987	2
6	999887777	2

The action output shows two rows of activity:

Action	Time	Action	Message	Duration / Patch
1	23-08-08 10:44:02	SELECT DniEmpleado, COUNT(NomProy) AS Numero_Proyecto FROM Trabaja_En GROUP BY DniEmpleado	8 rows(s) returned	0.00021 sec / 0.000...
2	23-08-08 10:44:02	SELECT DniEmpleado, COUNT(NomProy) AS Numero_Proyecto FROM Trabaja_En GROUP BY DniEmpleado HAVING (COUNT(DniEmpleado) >= 2);	8 rows(s) returned	0.00045 sec / 0.000...

2. Crear una consulta que muestre para cada empleado su numero y cantidad de subordinados siempre y cuando tenga mas de 1 familiar como subordinado.

The screenshot shows the MySQL Workbench interface with a query editor titled "CONSULTAS CON AGRUPACION EMPRESA". The query is:

```
1 * SELECT DniEmpleado, COUNT(NomSubordinado) AS Numero_Subordinado FROM Subordinado GROUP BY DniEmpleado  
2 HAVING (COUNT(DniRelacion) > 1);
```

The result grid displays the following data:

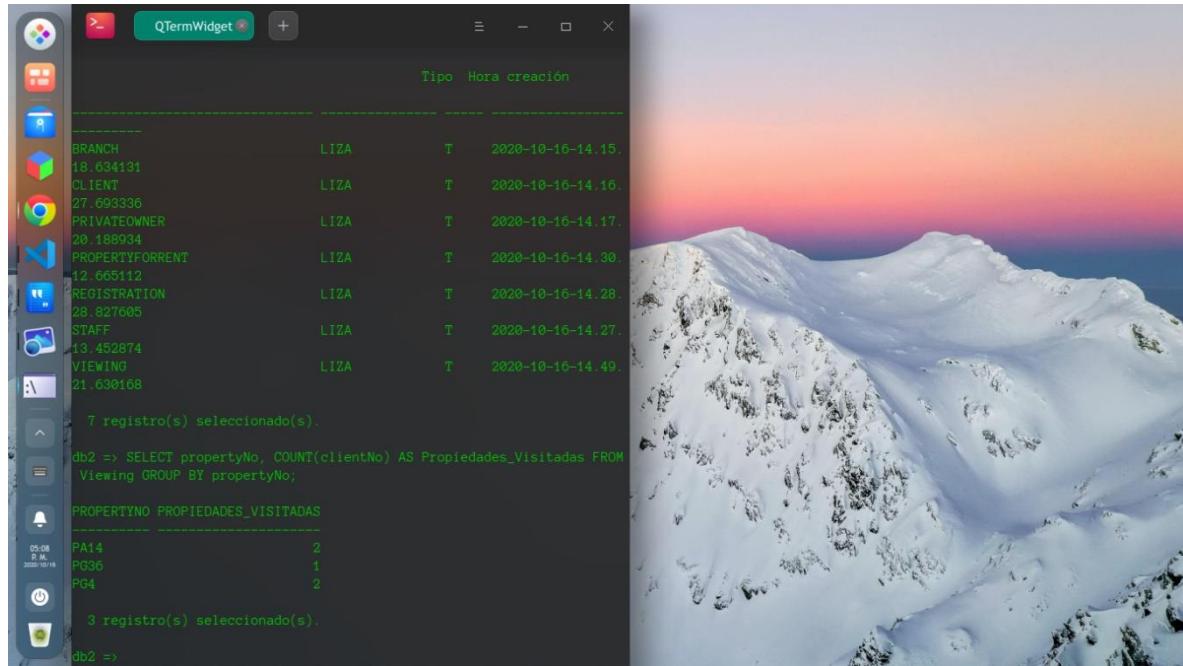
#	DniEmpleado	Numero_Subordinado
1	123456789	2
2	333445555	2

The action output shows one row of activity:

Action	Time	Action	Message	Duration / Patch
1	23-08-08 10:44:02	SELECT DniEmpleado, COUNT(NomSubordinado) AS Numero_Subordinado FROM Subordinado GROUP BY DniEmpleado HAVING (COUNT(DniRelacion) > 1);	8 rows(s) returned	0.00021 sec / 0.000...

DREAMHOME – DB2

1. Crear una consulta que muestre para cada propiedad cuantas personas la han visto



```
QTermWidget
+ ─ ┐ ×
      Tipo Hora creación
      -----
BRANCH          LIZA    T   2020-10-16-14.15.
18.634131      LIZA    T   2020-10-16-14.16.
CLIENT          LIZA    T   2020-10-16-14.17.
27.693336      LIZA    T   2020-10-16-14.17.
PRIVATEOWNER    LIZA    T   2020-10-16-14.17.
20.188934      LIZA    T   2020-10-16-14.17.
PROPERTYFORRENT LIZA    T   2020-10-16-14.30.
12.665112      LIZA    T   2020-10-16-14.28.
REGISTRATION    LIZA    T   2020-10-16-14.27.
28.827605      LIZA    T   2020-10-16-14.27.
STAFF           LIZA    T   2020-10-16-14.27.
13.452874      LIZA    T   2020-10-16-14.49.
VIEWING         LIZA    T   2020-10-16-14.49.
21.630168      LIZA    T   2020-10-16-14.49.

7 registro(s) seleccionado(s).

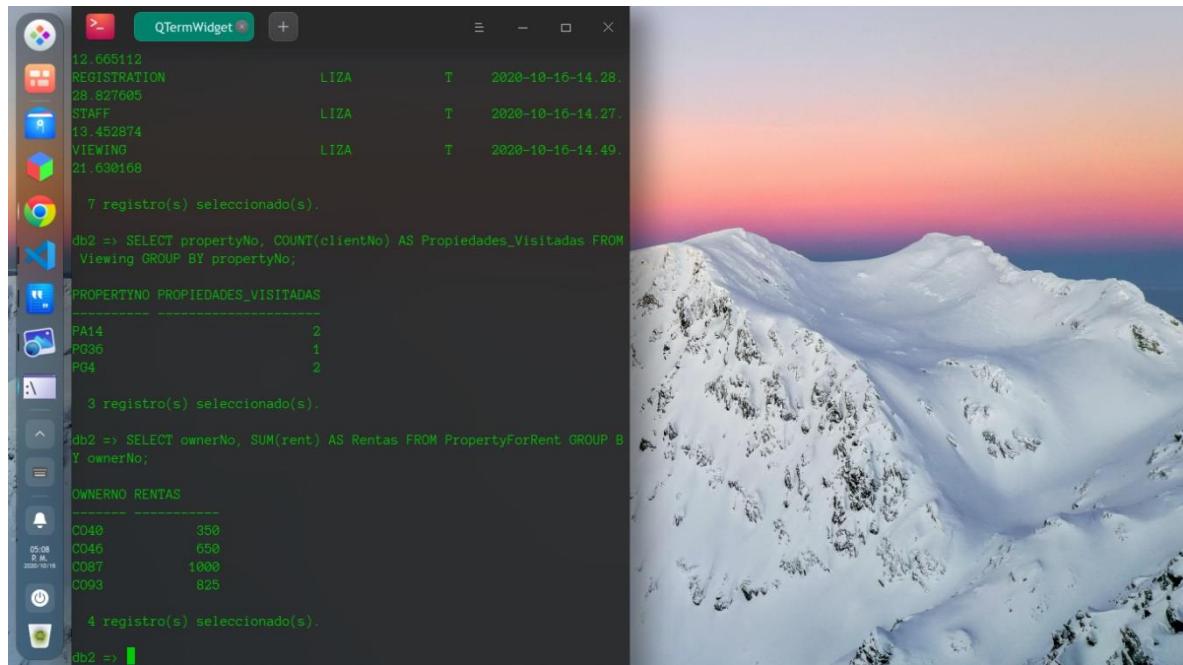
db2 => SELECT propertyNo, COUNT(clientNo) AS Propiedades_Visitadas FROM Viewing GROUP BY propertyNo;

PROPERTYNO PROPIEDADES_VISITADAS
-----
PA14            2
PG36            1
PG4             2

3 registro(s) seleccionado(s).

db2 =>
```

2. Para cada Propietario, muestre cuanto gana por concepto de rentas



```
QTermWidget
+ ─ ┐ ×
      Tipo Hora creación
      -----
12.665112      LIZA    T   2020-10-16-14.28.
REGISTRATION    LIZA    T   2020-10-16-14.27.
28.827605      LIZA    T   2020-10-16-14.27.
STAFF           LIZA    T   2020-10-16-14.27.
13.452874      LIZA    T   2020-10-16-14.49.
VIEWING         LIZA    T   2020-10-16-14.49.
21.630168      LIZA    T   2020-10-16-14.49.

7 registro(s) seleccionado(s).

db2 => SELECT propertyNo, COUNT(clientNo) AS Propiedades_Visitadas FROM Viewing GROUP BY propertyNo;

PROPERTYNO PROPIEDADES_VISITADAS
-----
PA14            2
PG36            1
PG4             2

3 registro(s) seleccionado(s).

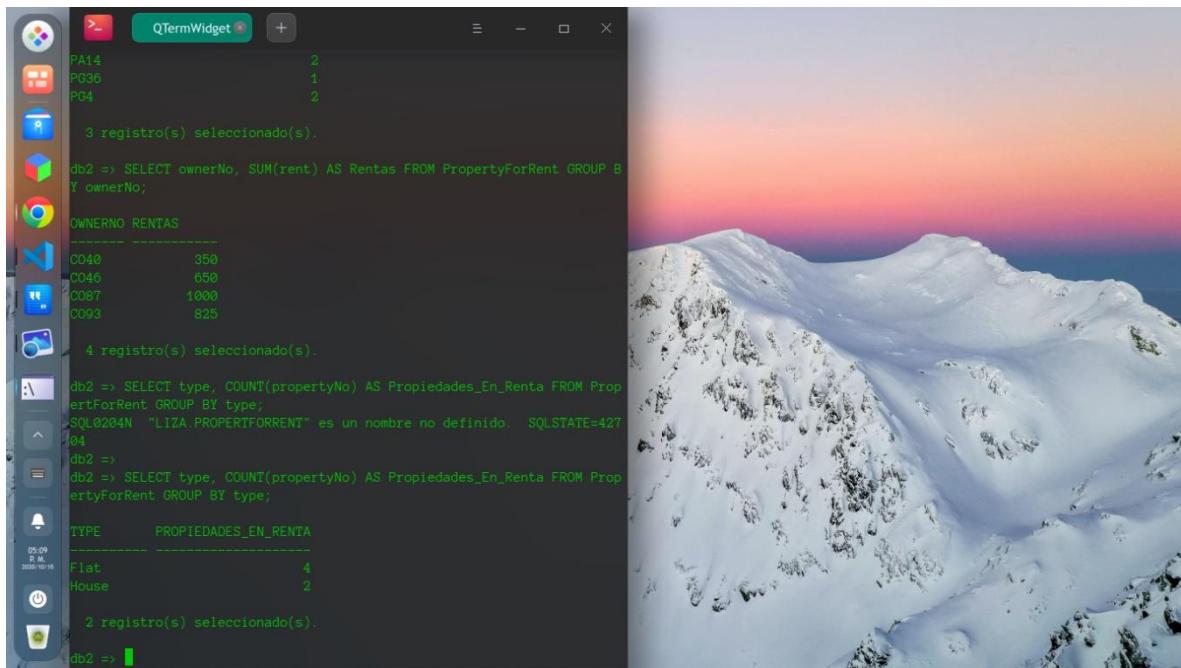
db2 => SELECT ownerNo, SUM(rent) AS Rentas FROM PropertyForRent GROUP BY ownerNo;

OWNERNO RENTAS
-----
C040            350
C046            650
C087            1000
C093            825

4 registro(s) seleccionado(s).

db2 =>
```

3. Muestre cuantas existencias hay para cada tipo de propiedad en renta



```
PA14          2
PG36          1
PG4           2

 3 registro(s) seleccionado(s).

db2 => SELECT ownerNo, SUM(rent) AS Rentas FROM PropertyForRent GROUP BY ownerNo;

OWNERNO RENTAS
CO40        350
CO46        650
CO87       1000
CO93        825

 4 registro(s) seleccionado(s).

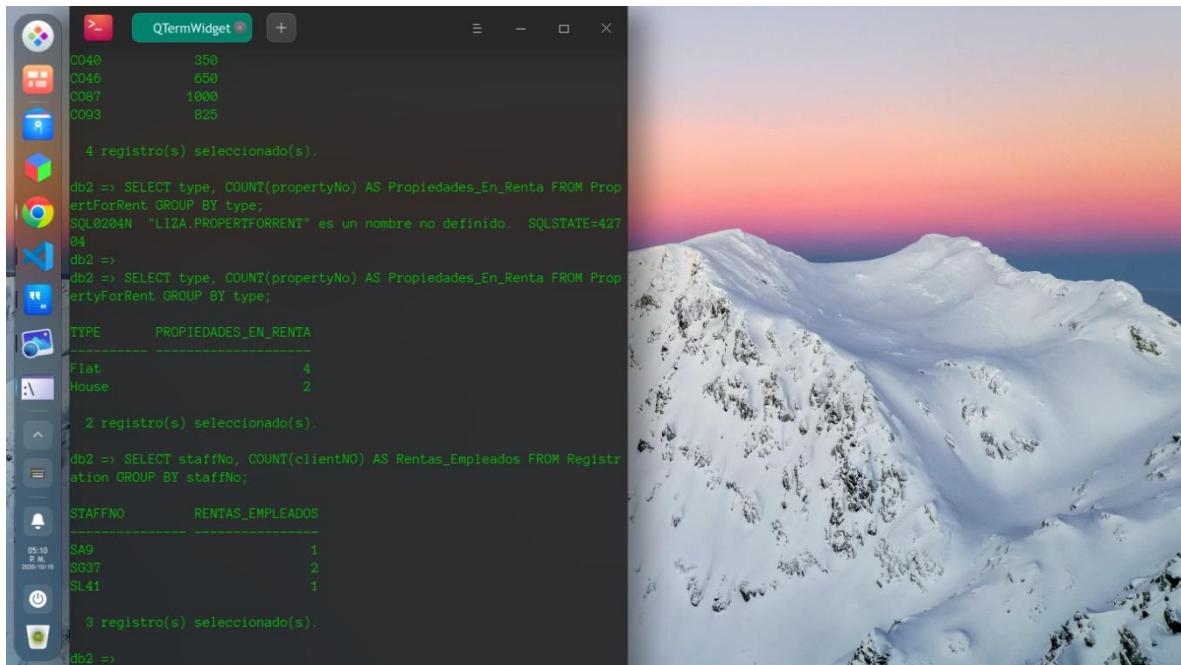
db2 => SELECT type, COUNT(propertyNo) AS Propiedades_En_Renta FROM PropertyForRent GROUP BY type;
SQL0204N "LIZA.PROPERTFORRENT" es un nombre no definido. SQLSTATE=42704
db2 =>
db2 => SELECT type, COUNT(propertyNo) AS Propiedades_En_Renta FROM PropertyForRent GROUP BY type;

TYPE      PROPIEDADES_EN_RENTA
----- -----
Flat            4
House           2

 2 registro(s) seleccionado(s).

db2 =>
```

4. Crear un listado que muestre cuantos registros de rentas ha realizado cada empleado



```
CO40        350
CO46        650
CO87       1000
CO93        825

 4 registro(s) seleccionado(s).

db2 => SELECT type, COUNT(propertyNo) AS Propiedades_En_Renta FROM PropertyForRent GROUP BY type;
SQL0204N "LIZA.PROPERTFORRENT" es un nombre no definido. SQLSTATE=42704
db2 =>
db2 => SELECT type, COUNT(propertyNo) AS Propiedades_En_Renta FROM PropertyForRent GROUP BY type;

TYPE      PROPIEDADES_EN_RENTA
----- -----
Flat            4
House           2

 2 registro(s) seleccionado(s).

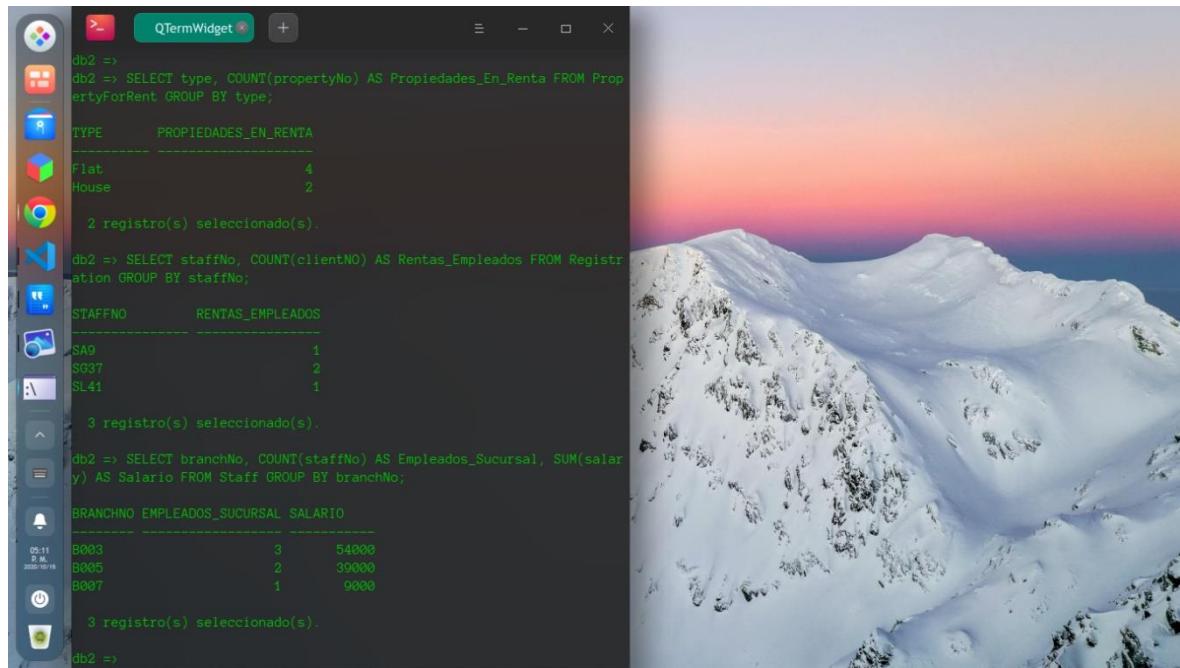
db2 => SELECT staffNo, COUNT(clientNo) AS Rentas_Empleados FROM Registration GROUP BY staffNo;

STAFFNO      RENTAS_EMPLEADOS
----- -----
SA9                  1
SG37                 2
SL41                 1

 3 registro(s) seleccionado(s).

db2 =>
```

5. Para cada sucursal, muestre el numero de empleados que laboran en ella y el total de salarios que se pagan



```
db2 =>
db2 => SELECT type, COUNT(propertyNo) AS Propiedades_En_Renta FROM PropertyForRent GROUP BY type;
          TYPE      PROPIEDADES_EN_RENTA
          -----
          Flat           4
          House          2
          2 registro(s) seleccionado(s).

db2 => SELECT staffNo, COUNT(clientNo) AS Rentas_Empleados FROM Registration GROUP BY staffNo;
          STAFFNO      RENTAS_EMPLEADOS
          -----
          SA0            1
          SG37           2
          SL41           1
          3 registro(s) seleccionado(s).

db2 => SELECT branchNo, COUNT(staffNo) AS Empleados_Sucursal, SUM(salary) AS Salario FROM Staff GROUP BY branchNo;
          BRANCHNO  EMPLEADOS_SUCURSAL  SALARIO
          -----
          B003             3      54000
          B005             2      39000
          B007             1      9000
          3 registro(s) seleccionado(s).

db2 =>
```