



TECNOLÓGICO NACIONAL DE MÉXICO

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

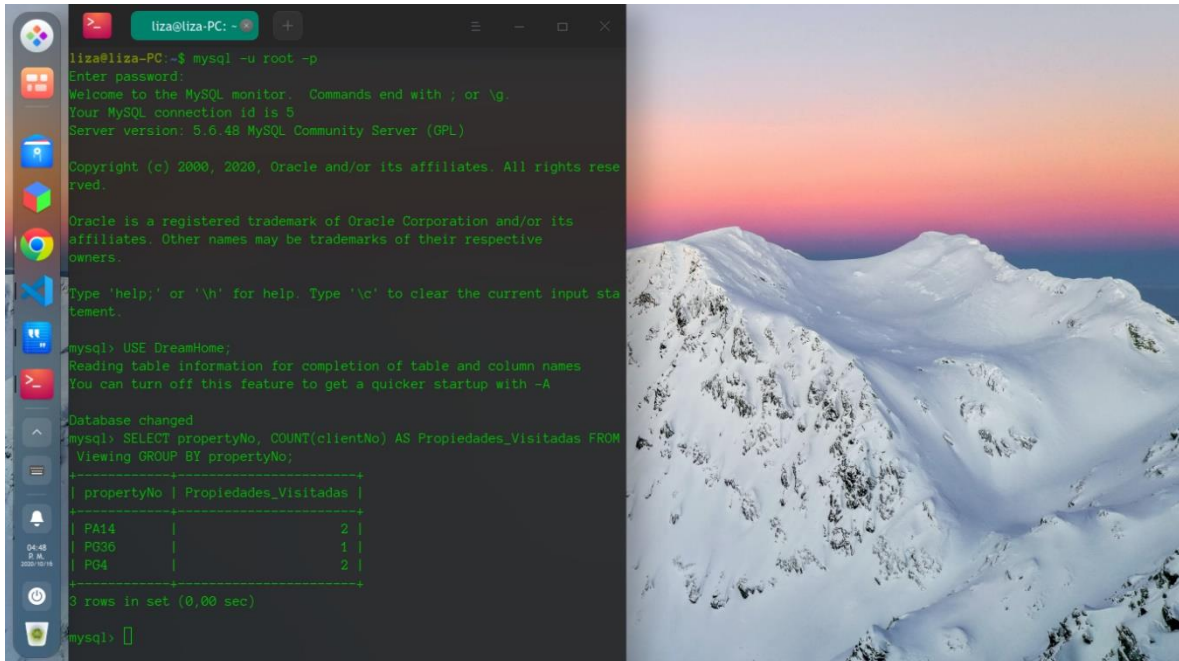
NO. CONTROL: 16070005

16 DE OCTUBRE DE 2020

JEREZ DE GARCIA SALINAS

DREAMHOME - MySQL

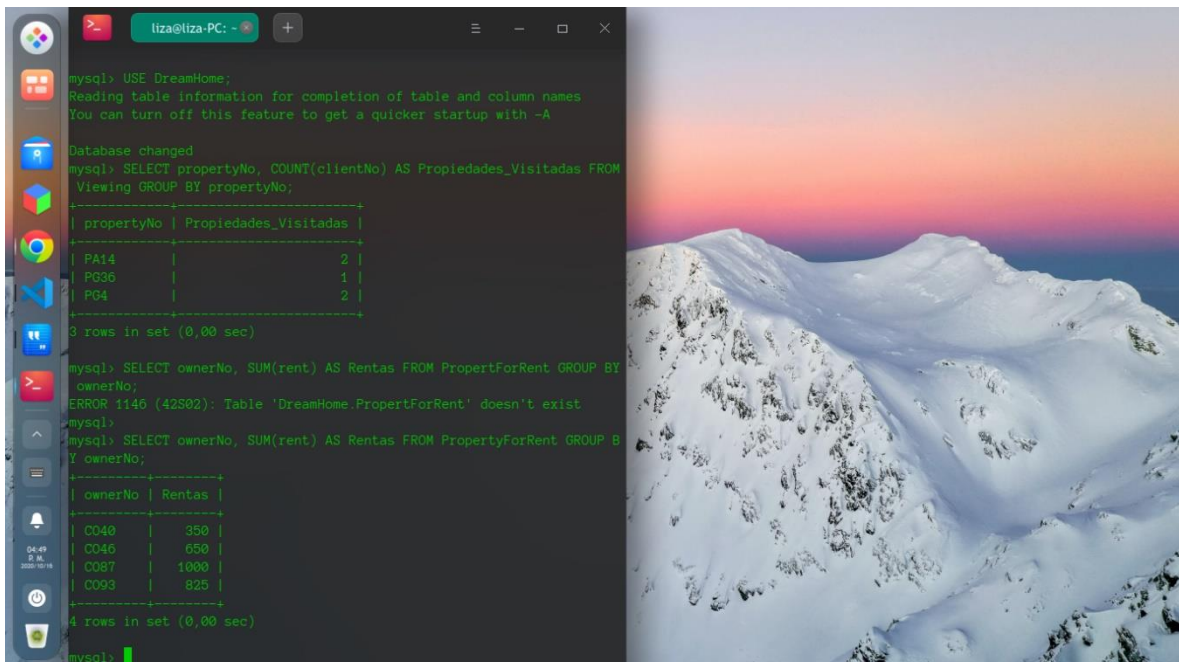
1. Crear una consulta que muestre para cada propiedad cuantas personas la han visto



The screenshot shows a terminal window with a Linux desktop background. The user has logged into MySQL as root. The database 'DreamHome' is selected. The query executed is: `mysql> SELECT propertyNo, COUNT(clientNo) AS Propiedades_Visitadas FROM Viewing GROUP BY propertyNo;`. The results show three rows: PA14 with 2 visits, PG36 with 1 visit, and PG4 with 2 visits.

```
liza@liza-PC: ~  
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)  
  
Copyright (c) 2000, 2020, Oracle and/or its affiliates. All rights reserved.  
  
Oracle is a registered trademark of Oracle Corporation and/or its  
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 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>
```

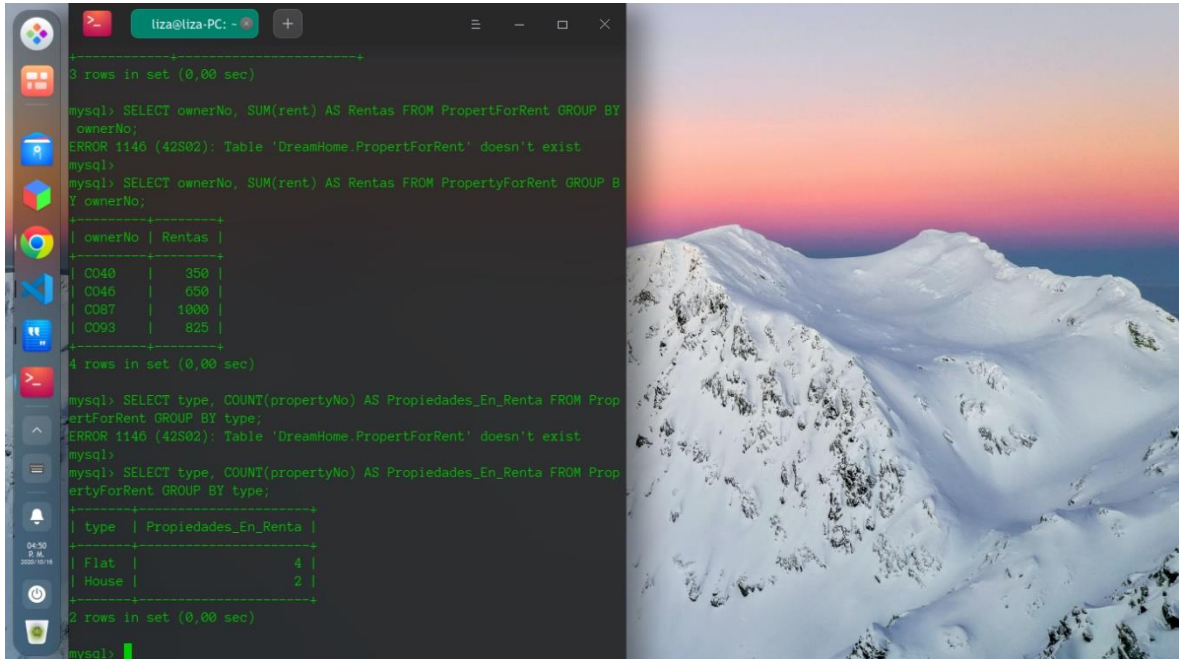
2. Para cada Propietario, muestre cuanto gana por concepto de rentas



The screenshot shows a terminal window with a Linux desktop background. The user has logged into MySQL as root. The database 'DreamHome' is selected. The query executed is: `mysql> SELECT ownerNo, SUM(rent) AS Rentas FROM PropertyForRent GROUP BY ownerNo;`. The results show four rows: CO40 with 350, CO46 with 650, CO87 with 1000, and CO93 with 825.

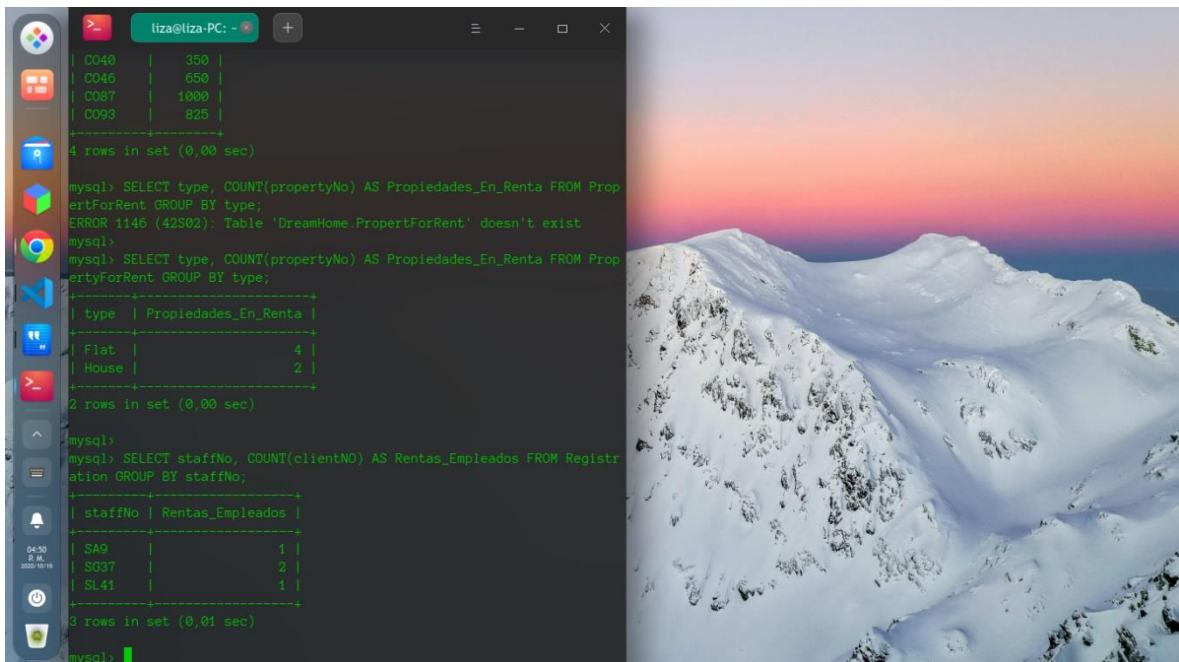
```
mysql> USE DreamHome;  
Reading table information for completion of table and column names  
You can turn off this feature to get a quicker startup with -A  
  
Database changed  
mysql> SELECT propertyNo, COUNT(clientNo) AS Propiedades_Visitadas FROM  
Viewing GROUP BY propertyNo;  
  
+-----+-----+  
| 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>  
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>
```

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



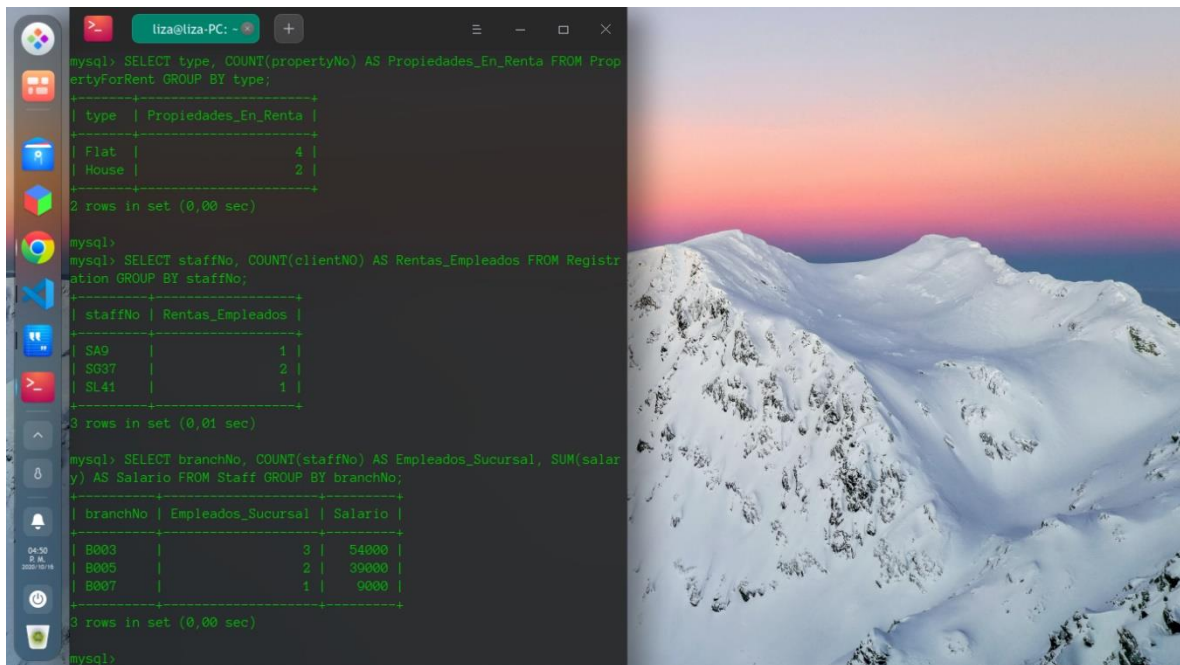
```
liza@liza-PC: ~  
mysql> SELECT ownerNo, SUM(rent) AS Rentas FROM PropertyForRent GROUP BY ownerNo;  
ERROR 1146 (42S02): Table 'DreamHome.PropertyForRent' doesn't exist  
mysql> SELECT ownerNo, SUM(rent) AS Rentas FROM PropertyForRent GROUP BY ownerNo;  
+-----+  
| ownerNo | Rentas |  
+-----+  
| 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



```
liza@liza-PC: ~  
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> SELECT staffNo, COUNT(clientNo) AS Rentas_Empleados FROM Registracion GROUP BY staffNo;  
+-----+  
| staffNo | Rentas_Empleados |  
+-----+  
| SA9     | 1 |  
| S037    | 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



```
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)

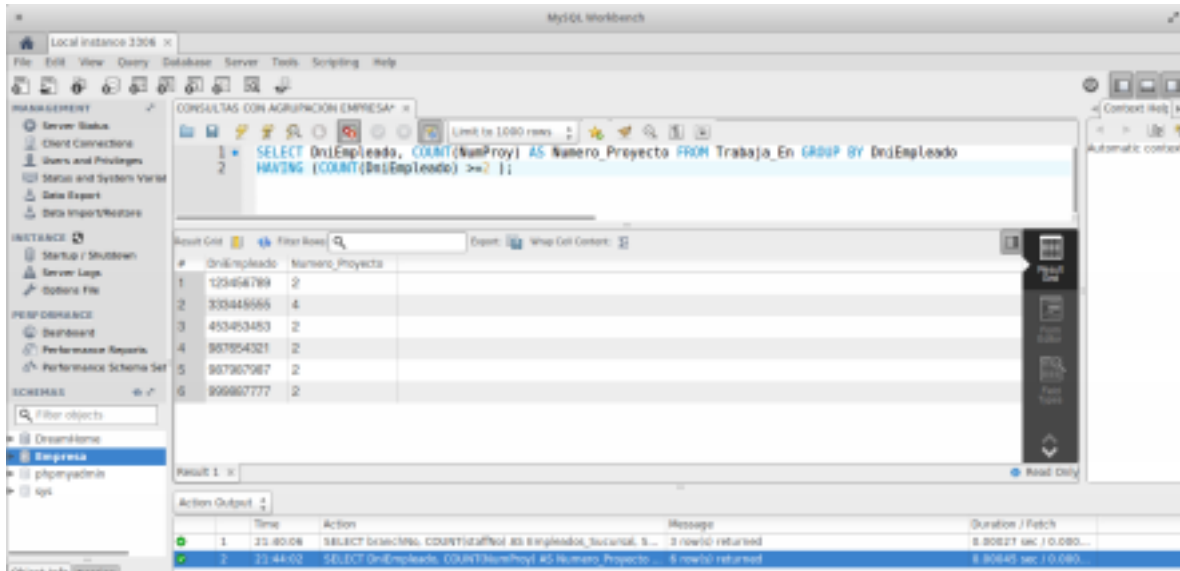
mysql>
mysql> SELECT staffNo, COUNT(clientNo) AS Rentas_Empleados FROM Registration GROUP BY staffNo;
+-----+-----+
| staffNo | Rentas_Empleados |
+-----+-----+
| SA9 | 1 |
| SG37 | 2 |
| SL41 | 1 |
+-----+-----+
3 rows in set (0,01 sec)

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. The query editor contains the following SQL query:

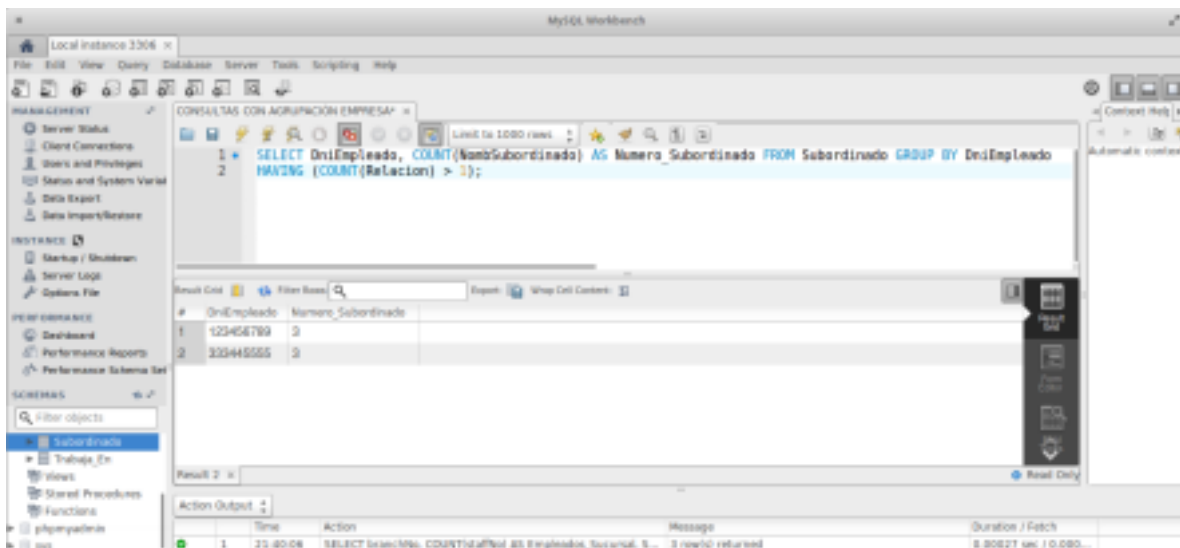
```
1 * SELECT DniEmpleado, COUNT(NomProy) AS Numero_Proyecto FROM Trabajo_En GROUP BY DniEmpleado
2 HAVING (COUNT(DniEmpleado) >= 2);
```

The Results grid displays the following data:

#	DniEmpleado	Numero_Proyecto
1	123456789	2
2	333445555	4
3	453453453	2
4	567894321	2
5	907807987	2
6	999807777	2

The Action Output pane shows the execution details of the query.

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. The query editor contains the following SQL query:

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

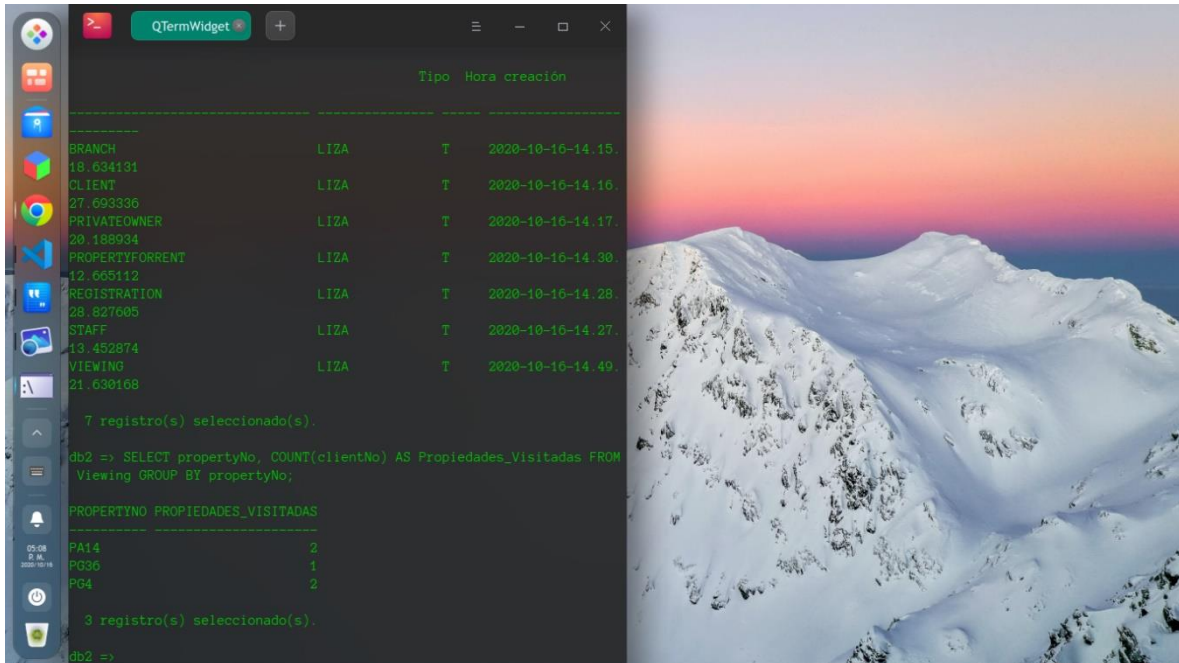
The Results grid displays the following data:

#	DniEmpleado	Numero_Subordinado
1	123456789	3
2	333445555	2

The Action Output pane shows the execution details of the query.

DREAMHOME – DB2

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



```
QTermWidget + - [X]
Tipo Hora creación
-----
BRANCH LIZA T 2020-10-16-14.15.
18.634131
CLIENT LIZA T 2020-10-16-14.16.
27.693336
PRIVATEOWNER LIZA T 2020-10-16-14.17.
20.188934
PROPERTYFORRENT LIZA T 2020-10-16-14.30.
12.665112
REGISTRATION LIZA T 2020-10-16-14.28.
28.827005
STAFF LIZA T 2020-10-16-14.27.
13.452874
VIEWING LIZA T 2020-10-16-14.49.
21.630168

7 registro(s) seleccionado(s).

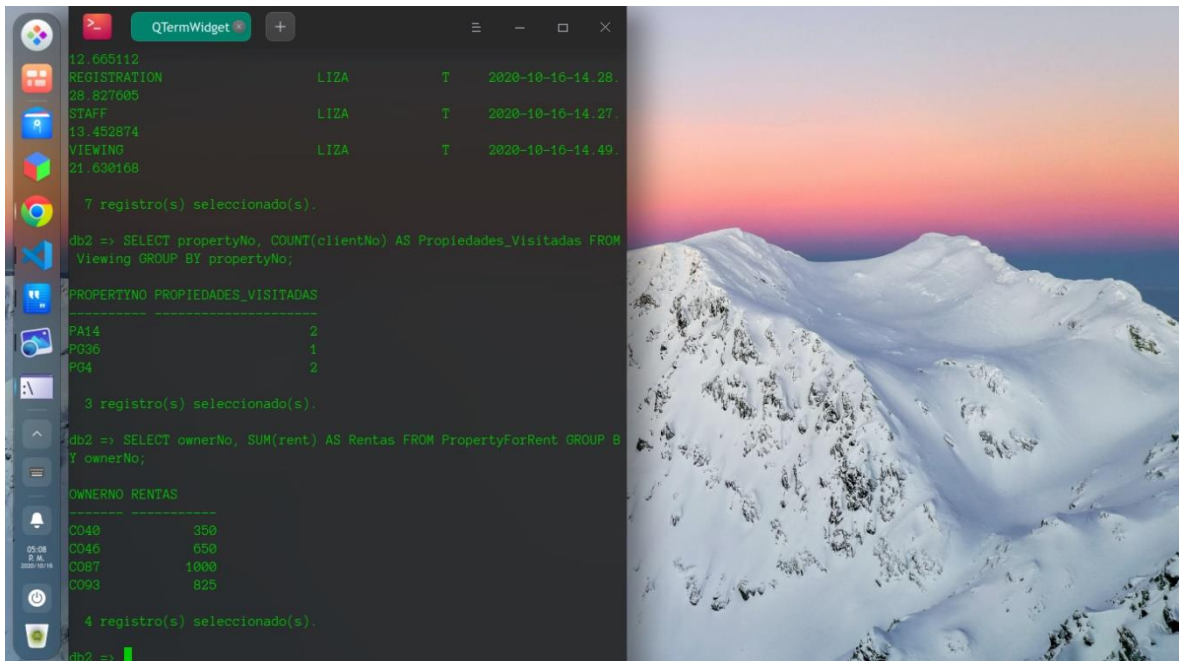
db2 => SELECT propertyNo, COUNT(clientNo) AS Propiedades_Visitadas FROM
Viewing GROUP BY propertyNo;

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 + - [X]
12.665112
REGISTRATION LIZA T 2020-10-16-14.28.
28.827005
STAFF LIZA T 2020-10-16-14.27.
13.452874
VIEWING LIZA T 2020-10-16-14.49.
21.630168

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).

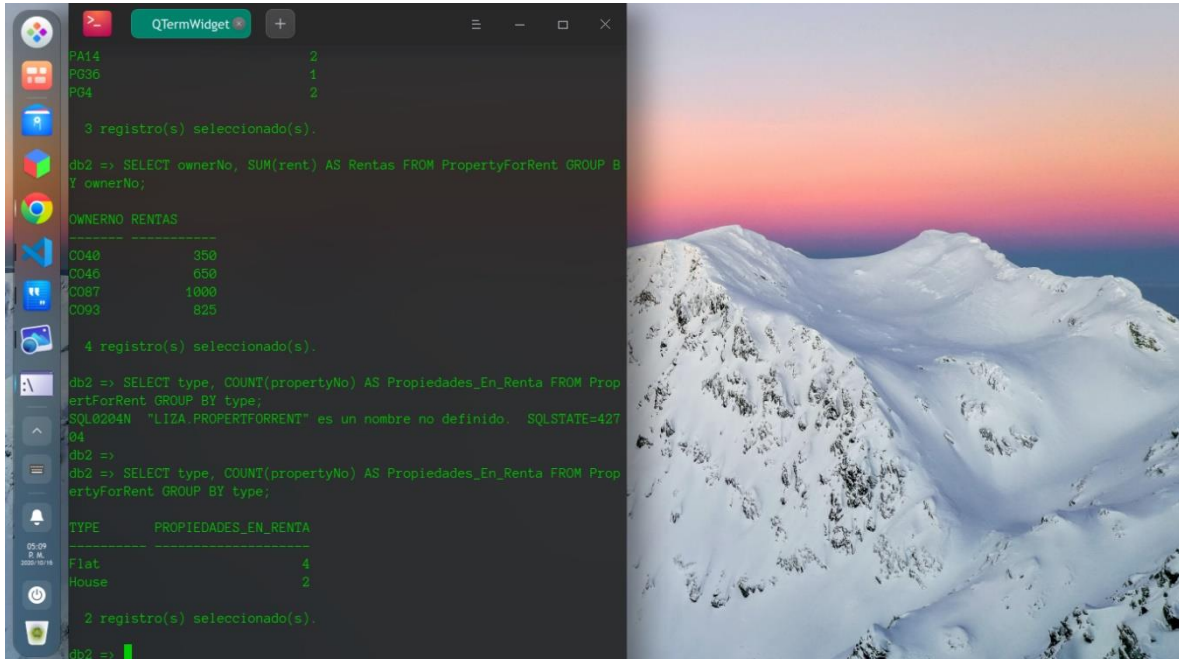
db2 => SELECT ownerNo, SUM(rent) AS Rentas FROM PropertyForRent GROUP B
Y ownerNo;

OWNERNO RENTAS
-----
CO40 350
CO46 650
CO87 1000
CO93 825

4 registro(s) seleccionado(s).

db2 =>
```

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



The screenshot shows a terminal window with the following content:

```
PA14      2
P036      1
P04       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

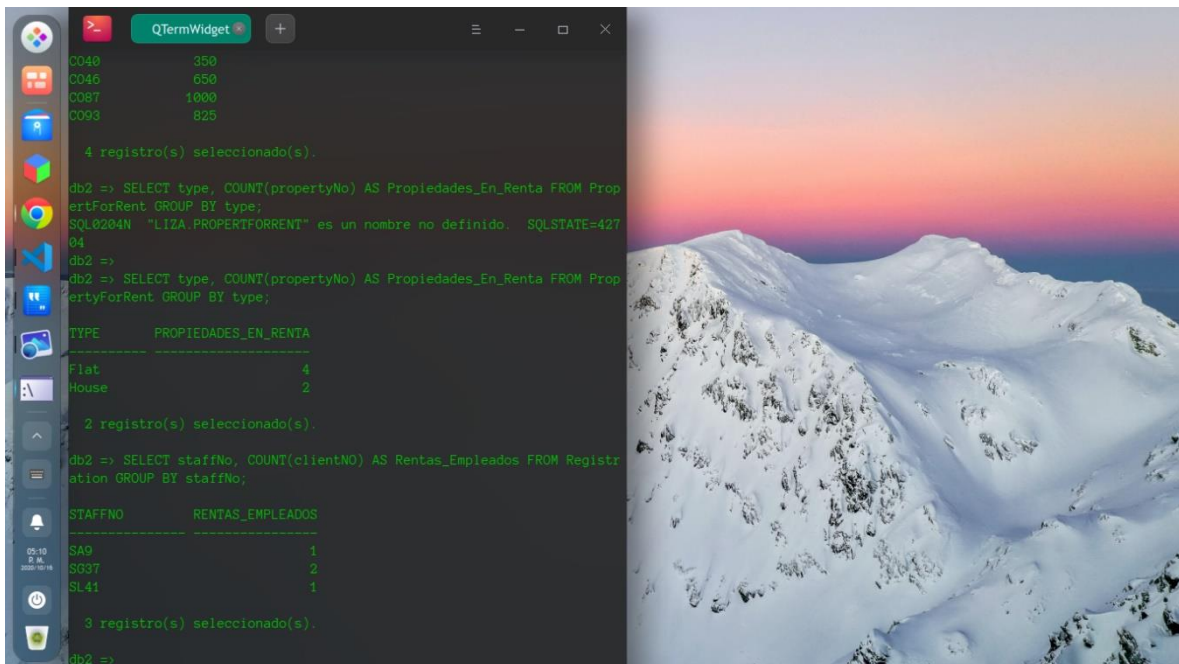
db2 =>
db2 => SELECT type, COUNT(propertyNo) AS Propiedades_En_Renta FROM PropertyForRent GROUP BY type;

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



The screenshot shows a terminal window with the following content:

```
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).

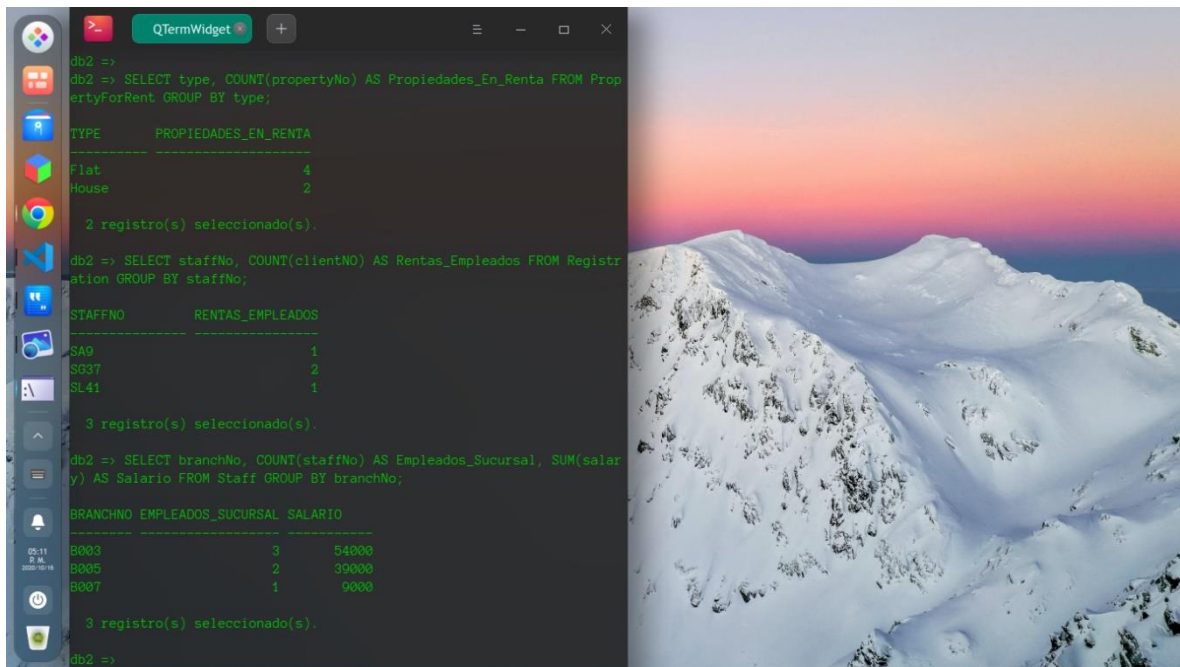
db2 => SELECT staffNo, COUNT(clientNo) AS Rentas_Empleados FROM Registration GROUP BY staffNo;

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
-----
SA9            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 =>
```