



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 5: EJERCICIOS SQL - SUBCONSULTAS

ALUMNA: LIZA AREMY SANTANA CONTRERAS

NO. CONTROL: 16070005

20 DE OCTUBRE DE 2020

JEREZ DE GARCIA SALINAS

DREAMHOME - MYSQL

1. Mostrar un listado con los empleados que ganen más del promedio salarial.



```
liza@liza-PC: ~
Database changed
mysql> SHOW DATABASES;
+-----+
| Database |
+-----+
| information_schema |
| DreamHome |
| Empresa |
| Escuela |
| Universidad |
| mysql |
| performance_schema |
| test |
+-----+
8 rows in set (0,01 sec)

mysql> SELECT * FROM Staff WHERE salary > (SELECT AVG(salary) FROM Staff);
+-----+-----+-----+-----+-----+-----+-----+
| staffNo | fName | lName | position | sex | DOB      | salary | branchNo |
+-----+-----+-----+-----+-----+-----+-----+
| SG14   | David | Ford  | Supervisor | M   | 24-Mar-58 | 18000  | 8003
| SG5    | Susan | Brand  | Manager   | F   | 3-Jun-40  | 24000  | 8003
| SL21   | John  | White  | Manager   | M   | 1-Oct-45  | 30000  | 8005
+-----+-----+-----+-----+-----+-----+-----+
3 rows in set (0,00 sec)

mysql>
```

2. Generar un listado de todos los empleados cuyo salario sea superior al salario promedio, indicando cuál es la diferencia en cada caso con respecto al salario promedio.



```
mysql> SELECT staffNo, salary FROM Staff AS SalarioSuperior WHERE salary > (SELECT AVG(salary) FROM Staff);
+-----+-----+
| staffNo | salary |
+-----+-----+
| SG14   | 18000 |
| SG5    | 24000 |
| SL21   | 30000 |
+-----+-----+
3 rows in set (0,00 sec)

mysql>
```

3. Mostrar una lista de los propietarios que tengan más de dos propiedades



```
mysql> SELECT ownerNo, COUNT(ownerNo) FROM PropertyForRent GROUP BY ownerNo HAVING (COUNT(ownerNo)>2);
+-----+-----+
| ownerNo | COUNT(ownerNo) |
+-----+-----+
| C087   | 2 |
| C093   | 2 |
+-----+-----+
2 rows in set (0,00 sec)

mysql>
```

4. Mostrar una lista de las propiedades de Glasgow cuya renta sea mayor al promedio.



```
mysql> SELECT * FROM PropertyForRent WHERE rent > (SELECT AVG(rent) FROM PropertyForRent);
+-----+-----+-----+-----+-----+-----+-----+
| propertyNo | street | city | postcode | type | rooms | rent |
+-----+-----+-----+-----+-----+-----+-----+
| PA14       | 16 Holthead | Aberdeen | AB7 5SU | House | 6 | 650 |
| PG21       | SA9          | B007     |          |       |      |       |
|          46   | 18 Dale Rd   | Glasgow  | G12      | House | 5 | 600 |
|          87   | SG37         | B003     |          |       |      |       |
+-----+-----+-----+-----+-----+-----+-----+
2 rows in set (0,00 sec)

mysql>
```

5. Generar un listado con los inmuebles gestionados por los empleados que trabajan en la sucursal situada en '22 Deer Rd'



```
mysql> SELECT * FROM PropertyForRent WHERE staffNo IN (SELECT staffNo FROM Staff WHERE branchNo=(SELECT branchNo FROM Branch WHERE street='22 Deer Rd'));
+-----+-----+-----+-----+-----+-----+-----+
| propertyNo | street | city | postcode | type | rooms | rent |
+-----+-----+-----+-----+-----+-----+-----+
| PL94       | 6 Argyll St | London | NW2      | Flat  | 4 | 400 |
| SL41       | B005         |          |          |       |      |       |
+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0,00 sec)

mysql>
```

6. Mostrar quien gana más de los asistentes



```
mysql> SELECT * FROM Staff WHERE salary=(SELECT MAX(salary) FROM Staff WHERE position='Assistant');
+-----+-----+-----+-----+-----+-----+-----+
| staffNo | fName | lName | position | sex | DOB      | salary | branchNo |
+-----+-----+-----+-----+-----+-----+-----+
| SG37    | Ann   | Beech  | Assistant | F   | 10-Nov-60 | 12000  | B003
|          |        |          |           |     |          |          |           |
+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0,00 sec)

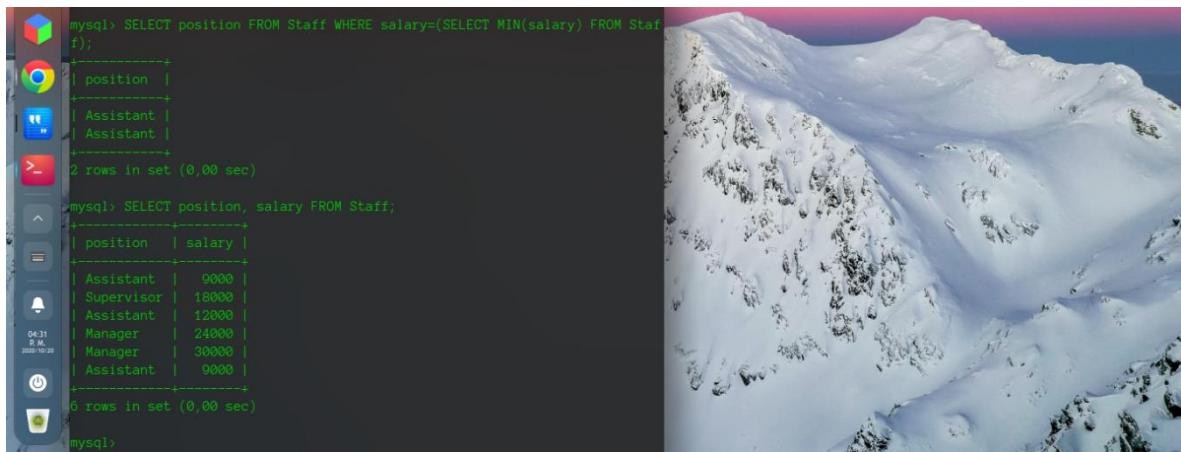
mysql>
```

7. Mostrar que puesto gana más.



```
liza@liza-PC: ~
mysql> SELECT position FROM Staff WHERE salary=(SELECT MAX(salary) FROM Staff);
+-----+
| position |
+-----+
| Manager  |
+-----+
1 row in set (0,00 sec)
```

8. Mostrar que puesto gana menos.



The terminal window displays two MySQL queries:

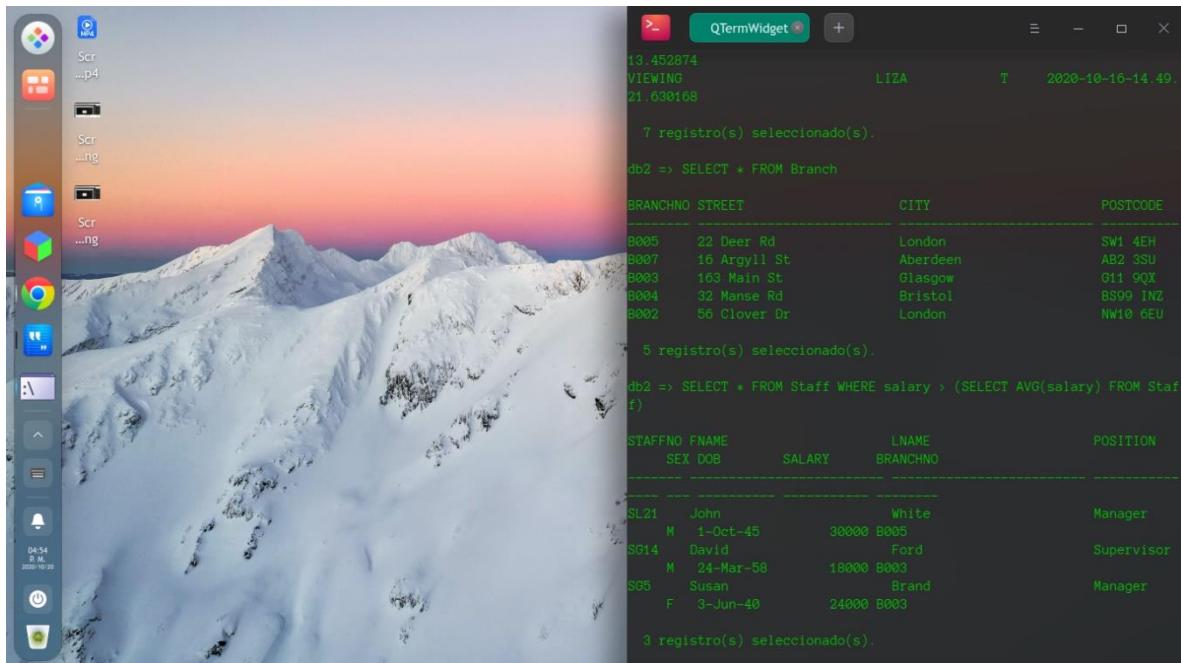
```
mysql> SELECT position FROM Staff WHERE salary=(SELECT MIN(salary) FROM Staff);
+-----+
| position |
+-----+
| Assistant |
| Assistant |
+-----+
2 rows in set (0,00 sec)

mysql> SELECT position, salary FROM Staff;
+-----+-----+
| position | salary |
+-----+-----+
| Assistant |    9000 |
| Supervisor |  18000 |
| Assistant |  12000 |
| Manager |  24000 |
| Manager |  30000 |
| Assistant |    9000 |
+-----+-----+
6 rows in set (0,00 sec)

mysql>
```

DREAMHOME – DB2

1. Mostrar un listado con los empleados que ganen más del promedio salarial.



The terminal window shows the following DB2 queries and their results:

```
13.452874
VIEWING          LIZA      T   2020-10-16-14.49.
21.630168

7 registro(s) seleccionado(s).

db2 => SELECT * FROM Branch
BRANCHNO STREET          CITY          POSTCODE
-----+-----+-----+-----+
B005   22 Deer Rd        London        SW1 4EH
B007   16 Argyll St       Aberdeen     AB2 3SU
B003   163 Main St        Glasgow      G11 9OX
B004   32 Manse Rd        Bristol      BS99 1NZ
B002   56 Clover Dr       London        NW10 6EU

5 registro(s) seleccionado(s).

db2 => SELECT * FROM Staff WHERE salary > (SELECT AVG(salary) FROM Staff)
STAFFNO FNAME          LNAME          POSITION
SEX   DOB            SALARY        BRANCHNO
-----+-----+-----+-----+
SL21   John           White         Manager
M     1-Oct-45       30000  B005
SG14   David          Ford          Supervisor
M     24-Mar-58       18000  B003
SG05   Susan          Brand         Manager
F     3-Jun-40       24000  B003

3 registro(s) seleccionado(s).
```

2. Generar un listado de todos los empleados cuyo salario sea superior al salario promedio, indicando cuál es la diferencia en cada caso con respecto al salario promedio.



```
db2 => SELECT staffNo, salary FROM Staff AS SalarioSuperior WHERE salary > (SELECT AVG(salary) FROM Staff)

STAFFNO SALARY
-----
SL21      30000
SG14      18000
SG5       24000

3 registro(s) seleccionado(s).
```

3. Mostrar una lista de los propietarios que tengan más de dos propiedades.



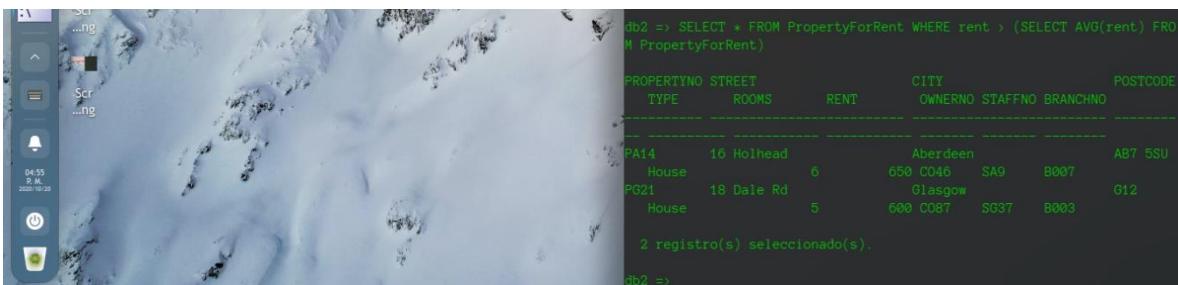
```
db2 => SELECT ownerNo, COUNT(ownerNo) FROM PropertyForRent GROUP BY ownerNo HAVING (COUNT(ownerNo)>2)

OWNERNO 2
-----
C087      2
C093      2

2 registro(s) seleccionado(s).

db2 => []
```

4. Mostrar una lista de las propiedades de Glasgow cuya renta sea mayor al promedio.



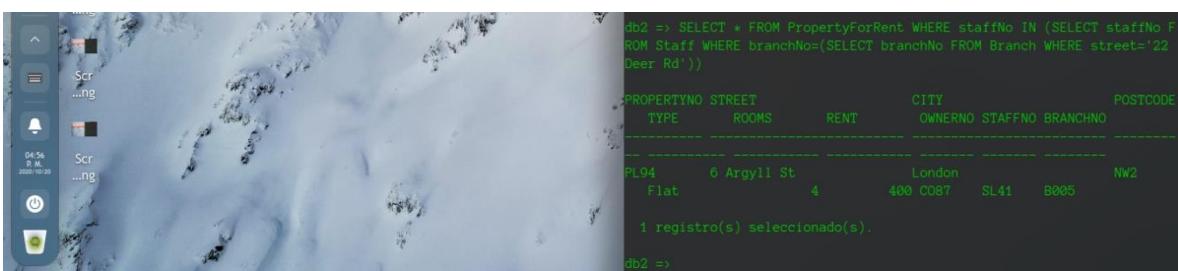
```
db2 => SELECT * FROM PropertyForRent WHERE rent > (SELECT AVG(rent) FROM PropertyForRent)

PROPERTYNO STREET          CITY          POSTCODE
TYPE    ROOMS     RENT   OWNERNO  STAFFNO  BRANCHNO
-----  -----  -----
PA14    16 Holhead        Aberdeen      AB7 5SU
House           6      650 C046    SA9     B007
PG21    18 Dale Rd        Glasgow      G12
House           5      600 C087    SG37    B003

2 registro(s) seleccionado(s).

db2 => []
```

5. Generar un listado con los inmuebles gestionados por los empleados que trabajan en la sucursal situada en '22 Deer Rd'.



```
db2 => SELECT * FROM PropertyForRent WHERE staffNo IN (SELECT staffNo FROM Staff WHERE branchNo=(SELECT branchNo FROM Branch WHERE street='22 Deer Rd'))

PROPERTYNO STREET          CITY          POSTCODE
TYPE    ROOMS     RENT   OWNERNO  STAFFNO  BRANCHNO
-----  -----  -----
PL94    6 Argyll St       London      NW2
Flat           4      400 C087    SL41    B005

1 registro(s) seleccionado(s).

db2 => []
```

6. Mostrar quien gana más de los asistentes.



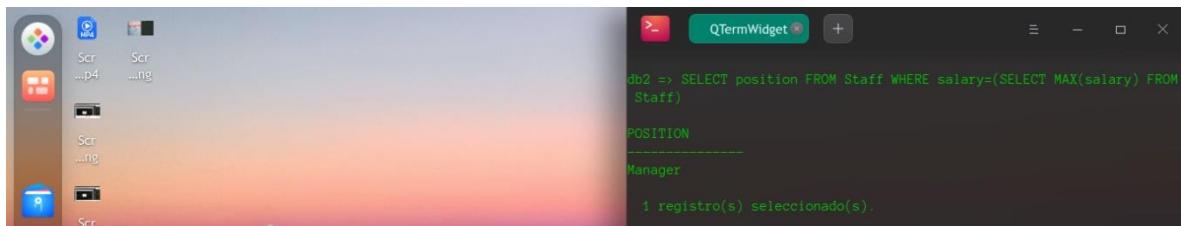
db2 => SELECT * FROM Staff WHERE salary=(SELECT MAX(salary) FROM Staff WHERE position='Assistant')

STAFFNO	FNAME	SEX	DOB	SALARY	LNAME	BRANCHNO	POSITION
SG37	Ann	F	10-Nov-60	12000	Beech	8003	Assistant

1 registro(s) seleccionado(s).

db2 =>

7. Mostrar que puesto gana más.

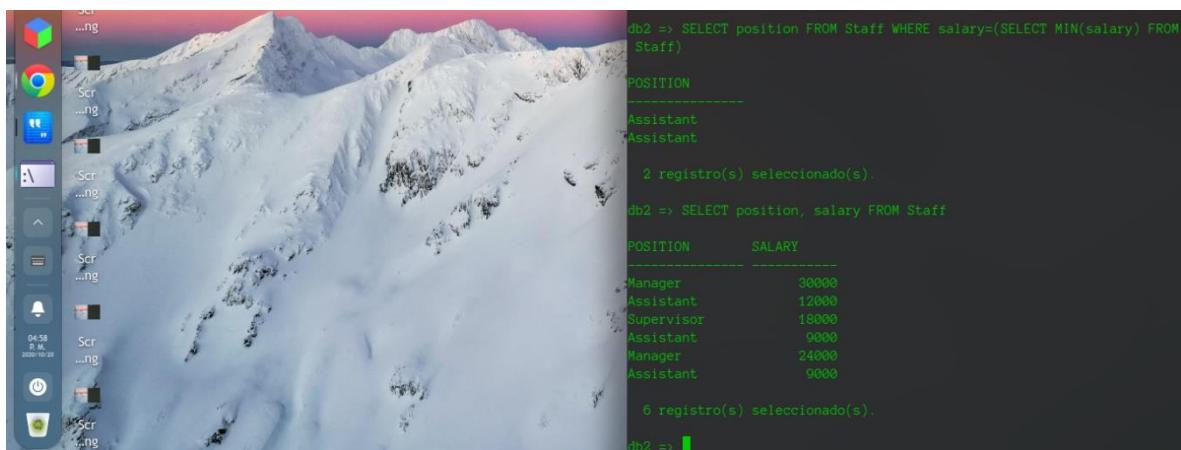


db2 => SELECT position FROM Staff WHERE salary=(SELECT MAX(salary) FROM Staff)

POSITION
Manager

1 registro(s) seleccionado(s).

8. Mostrar que puesto gana menos.



db2 => SELECT position FROM Staff WHERE salary=(SELECT MIN(salary) FROM Staff)

POSITION
Assistant
Assistant

2 registro(s) seleccionado(s).

db2 => SELECT position, salary FROM Staff

POSITION	SALARY
Manager	30000
Assistant	12000
Supervisor	18000
Assistant	9000
Manager	24000
Assistant	9000

6 registro(s) seleccionado(s).

db2 =>