

EXAMEN BASE DE DATOS (SQL)

1. select pl.productLine,count(p.productName) from productlines pl inner join products p on p.productLine=pl.productLine group by pl.productLine;

```
mysql> select pl.productLine,count(p.productName) from productlines pl inner join products p on p.productLine=pl.productLine group by pl.productLine;
```

productLine	count(p.productName)
Classic Cars	38
Motorcycles	13
Planes	12
Ships	9
Trains	3
Trucks and Buses	11
Vintage Cars	24

7 rows in set (0.00 sec)

2. select o.officeCode, o.city from offices o inner join employees e on o.officeCode=e.officeCode where(select count(e.firstName) from employees e) group by o.city order by o.officeCode desc limit 1;

```
mysql> select o.officeCode, o.city from offices o inner join employees e on o.officeCode=e.officeCode where(select count(e.firstName) from employees e) group by o.city order by o.officeCode desc limit 1;
```

officeCode	city
7	London

1 row in set (0.00 sec)

3. select c.customerName,p.amount from customers c inner join payments p on c.customerNumber=p.customerNumber where p.amount>100000;

```
mysql> select c.customerName,p.amount from customers c inner join payments p on c.customerNumber=p.customerNumber where p.amount>100000;
```

customerName	amount
Mini Gifts Distributors Ltd.	101244.59
Mini Gifts Distributors Ltd.	111654.40
Euro+ Shopping Channel	116208.40
Euro+ Shopping Channel	120166.58
Dragon Souvenirs, Ltd.	105743.00

5 rows in set (0.00 sec)

4. select o.priceEach,p.productName,(p.buyPrice-o.priceEach) as 'Diferencia' from orderdetails o inner join products p on o.productCode=p.productCode order by o.priceEach asc limit 1;

```
mysql> select o.priceEach,p.productName,(p.buyPrice-o.priceEach) as 'Diferencia' from orderdetails o inner join products p on o.productCode=p.productCode order by o.priceEach asc limit 1;
```

priceEach	productName	Diferencia
26.55	1939 Chevrolet Deluxe Coupe	-3.98

1 row in set (0.02 sec)

5. select c.customerName,e.firstName from customers c inner join employees e on c.salesRepEmployeeNumber=e.employeeNumber;

```
mysql> select c.customerName,e.firstName from customers c inner join employees e on c.salesRepEmployeeNumber=e.employeeNumber;
```

Enrico Distributors	Martin
Vida Sport, Ltd	Martin
CAF Imports	Martin
Precious Collectables	Martin
Corrida Auto Replicas, Ltd	Martin
Iberia Gift Imports, Corp.	Martin

100 rows in set (0.00 sec)

```
mysql> select c.customerName,e.firstName from customers c inner join employees e on c.salesRepEmployeeNumber=e.employeeNumber;
```

6. select * from orders o inner join customers c on o.customerNumber=c.customerNumber inner join employees e on c.salesRepEmployeeNumber=e.employeeNumber inner join offices ofi on

```
mysql> select * from orders o inner join customers c on o.customerNumber=c.customerNumber inner join employees e on c.salesRepEmployeeNumber=e.employeeNumber inner join offices ofl on e.officeCode=ofl.officeCode where ofl.city='San Francisco';
```

- ```

4703.40 |
3575.04 |
+-----+
1052 rows in set (0.04 sec)

mysql> select (od.priceEach*od.quantityOrdered) as 'Total' from orderdetails od inner join orders o on od.orderNumber=o.orderNumber where YEAR(o.orderDate)=2003;
```

- ```
mysql> select (sum(o.orderNumber)) as 'Total_Pedidos',MONTHNAME(o.orderDate) from orders o where YEAR(o.orderDate) between 2003 and 2005 and MONTHNAME(o.orderDate)in ('September','October','November','December') group by MONTHNAME(o.orderDate) order by MONTHNAME(o.orderDate);
```
- | Total_Pedidos | MONTHNAME(o.orderDate) |
|---------------|------------------------|
| 226442 | December |
| 646461 | November |
| 317335 | October |
| 204718 | September |
- 4 rows in set (0.00 sec)

- ```
mysql> select e.lastName,sum(o.orderNumber) from employees e inner join customers c on e.employeeNumber=c.salesRepEmployeeNumber inner join orders o on c.customerNumber=o.customerNumber;
```
- | lastName | sum(o.orderNumber) |
|----------|--------------------|
| Jennings | 3345575            |
- 1 row in set (0.00 sec)

- ```
mysql> select (max(p.buyPrice)-min(p.buyPrice))*1000 as 'Diferencia' from products p;
+-----+
| Diferencia |
+-----+
| 87510.00 |
+-----+
1 row in set (0.00 sec)
```

- ```
mysql> select e.firstName,e1.firstName from employees e inner join employees e1 on e.employeeNumber=e1.reportsTo;
```
- | firstName | firstName |
|-----------|-----------|
| Diane     | Mary      |
| Diane     | Jeff      |
| Mary      | William   |
| Mary      | Gerard    |
| Mary      | Anthony   |
| Anthony   | Leslie    |
| Anthony   | Leslie    |
| Anthony   | Julie     |
| Anthony   | Steve     |
| Anthony   | Foon Yue  |
| Anthony   | George    |
| Gerard    | Loui      |
| Gerard    | Gerard    |
| Gerard    | Pamela    |
| Gerard    | Larry     |
| Gerard    | Barry     |
| William   | Andy      |
| William   | Peter     |
| William   | Tom       |
| Mary      | Mami      |
| Mami      | Yoshimi   |
| Gerard    | Martin    |
- 22 rows in set (0.00 sec)

- ```
12. alter table employees add column hiredate date;
```

update employees set hiredate='2020-01-01' where hiredate is null;

```
mysql> select hiredate from employees;
```

hiredate
2020-01-01
2020-01-01
2020-01-01
2020-01-01
2020-01-01
2020-01-01
2020-01-01
2020-01-01
2020-01-01
2020-01-01
2020-01-01
2020-01-01
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2020-01-01
2020-01-01
2020-01-01

23 rows in set (0.00 sec)