# PARALLEL AND DISTRIBUTED SYSTEMS DELIVERY 2 – MYSQL LAB EXERCISE

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# 1. Get the first 5 products of category "meat" sorted by description.

#### **Answer:**

select \* from products where category='meat' order by(description) limit 5;

# 2. Which products contain Beers?

#### **Answer:**

select \* from products where description like "%beer%";

```
+----+
| id | category | description |
+----+
| 29 | spirits | Beer - Moosehead |
| 33 | spirit | Beer - Blue Light |
+----+

2 rows in set (0.00 sec)
```

# 3. Get all products details of all items in the catalog.

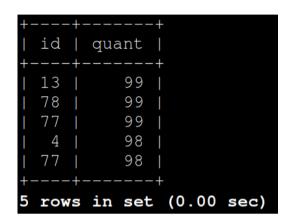
#### **Answer:**

select \* from products limit 5;

# 4. . Get the 5 customers that have purchased more products in stock.

#### Answer:

select customers.id, orders.quant from customers, orders, products, stock where stock.id=products.id and products.id=orders.prodId and customers.id=orders.custId order by orders.quant desc limit 5;



# 5. Get the providers for the customers of the last query.

#### **Answer:**

select customers.id as CUSTOMER\_ID, orders.quant, orders.provId as PROVIDER\_ID from customers,orders,products,stock,providers where orders.prodId=products.id and products.id=stock.id and customers.id=orders.custId and orders.provId=providers.id order by quant desc limit 5;

```
CUSTOMER_ID | quant |
                        PROVIDER ID
          13 I
                   99
                                   89
          78
                   99
                                    1
          77
                   99
                                   60
                   98
                                   35
          77
                   98
                                   91
rows in set (0.01 sec)
```

## 6. How many providers have products in stock?

#### Answer:

select count(distinct providers.id) from orders,providers,products,stock where providers.id=orders.provId and orders.prodId=products.id and products.id=stock.id;

# 7. Which is the average purchased quantity of products in stock?

#### **Answer:**

select avg(stock.quantity) from stock, orders where stock.id=orders.prodId;

```
+-----+
| avg(stock.quantity) |
+-----+
| 51.4781 |
+-----+
1 row in set (0.00 sec)
```

#### 8. Is there any city in common between providers and customers?

#### **Answer:**

select providers.id, providers.city, customers.id, customers.city from customers, providers where customers.city=providers.city;

```
id
      city
                id
                      city
28
      Krakow
                  5
                      Krakow
36
      Krakow
                 5
                      Krakow
      Krakow
                 5
                      Krakow
46
                      Krakow
      Krakow
                 5
78
                 5
82
      Krakow
                      Krakow
rows in set (0.01 sec)
```

# 9. . Is there any product with the double of quantity in different orders?

#### **Answer:**

select o1.id as o1\_id, o1.prodId, o1.quant as o1\_quant, o2.id as o2\_id, o2.quant as o2\_quant from orders o1, orders o2 where o1.quant = 2\*o2.quant and o1.prodId=o2.prodId;

+-	+	+		+		+	+
	o1_id	prodId	o1_quant		o2_id		o2_quant
+-	+	+		+		+	+
	123	47	16	Ī	57	I	8
	247	28	16		105		8
	6	65	12		174		6
	263	27	34		245		17
+-	+	+		+		+	+
4	rows in	set (0.0	1 sec)				

# 10. .Can you find the total number of customers for each city?

## **Answer:**

select count(id), city from customers group by(city);

++	+
count(id)	city
++	+
1	?abbar
1	A? ?urrah
1	Akim Swedru
1	Atsipópoulon
1	Avaré
1	Avignon
1	Banjar Penyalin
1	Banjaranyar
1	Barrio San Luis
1	Beixin
1	Bellavista
1	Benevides
1	Boluo
1	Butiá
1	Charleston