# **SQL Data Analysis for Pizza Sales**

Created By: Loaone Seleka Created Date: 21/02/2023 Query description: Return all records in the pizza table \*/ **SELECT \* FROM** pizza; Query Query History 1 Created By: Loaone Seleka 2 Created Date: 21/02/2023 4 Query description: Return all records in the pizza table 5 \*/ 6 SELECT \* 7 FROM 8 pizza; 0 Notifications Data output Messages ~ **=**+ pizza\_price pizza\_id pizza\_type\_id pizza\_size character varying (250) character varying (10) [PK] character varying (100) bbq\_ckn\_s bbq\_ckn 12.75 2 bbq\_ckn\_m 16.75 bbq\_ckn М 3 bbq\_ckn\_l bbq\_ckn L 20.75 4 cali\_ckn\_s cali\_ckn S 12.75 5 cali\_ckn\_m cali\_ckn М 16.75 cali\_ckn\_l cali\_ckn 20.75 6 L 7 ckn\_alfredo\_s ckn\_alfredo S 12.75 ckn\_alfredo\_m ckn\_alfredo М 16.75 9 ckn\_alfredo\_l ckn\_alfredo 20.75 L S 12.75 10 ckn\_pesto\_s ckn\_pesto

16.75

20.75

12.75

Total rows: 96 of 96 Ouerv complete 00:00:00.196

ckn\_pesto

ckn\_pesto

southw\_ckn

Μ

L S

11

12

13

ckn\_pesto\_m

ckn\_pesto\_l

southw\_ckn\_s

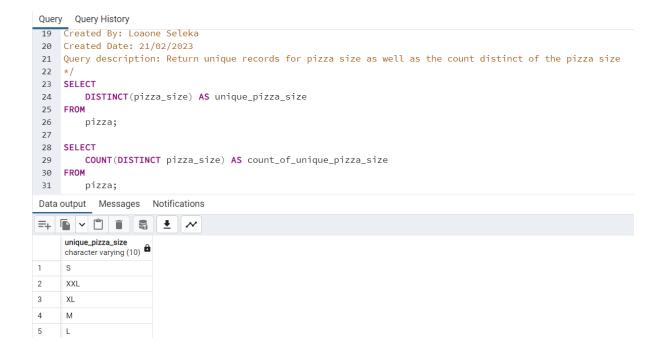
```
<mark>/*</mark>
Created By: Loaone Seleka
Created Date: 21/02/2023
Query description: Return the number of records in the pizza table
*/
SELECT
       COUNT(*) as count_of_pizza
FROM
       pizza;
  Query Query History
      Created Date: 21/02/2023
  11
      Query description: Return the number of records in the pizza table
  12
  13
      */
  14
      SELECT
           COUNT(*) as count_of_pizza
  15
  16
      FROM
  17
           pizza;
  18
  10 Crostod Rv. Losono Soloka
  Data output Messages Notifications
 =+
       count_of_pizza
       bigint
 1
                  96
Created By: Loaone Seleka
Created Date: 21/02/2023
Query description: Return unique records for pizza size as well as the count distinct of the pizza size
*/
SELECT
```

DISTINCT(pizza\_size) AS unique\_pizza\_size

C2 General

**FROM** 

pizza;



#### **SELECT**

### COUNT(DISTINCT pizza\_size) AS count\_of\_unique\_pizza\_size

#### **FROM**

#### pizza;



```
<mark>/*</mark>
```

Created Date: 21/02/2023

Query description: Return unique records for pizza size

```
*/
```

**SELECT** 

pizza\_size,

COUNT(pizza\_size) as number\_of\_pizza\_size

**FROM** 

pizza

**GROUP BY** 

pizza\_size

**ORDER BY** 

number\_of\_pizza\_size DESC;

```
Query
       Query History
ЗI
         pīzza;
32
33 Created By: Loaone Seleka
34 Created Date: 21/02/2023
35 Query description: Return unique records for pizza size
36
    */
    SELECT
37
38
         pizza_size,
39
         COUNT(pizza_size) as number_of_pizza_size
    FROM
40
41
         pizza
42
    GROUP BY
         pizza_size
43
44
    ORDER BY
45
         number_of_pizza_size DESC;
16
Data output Messages Notifications
=+
                       number_of_pizza_size
     pizza_size
     character varying (10) bigint
1
                                      32
```

31

31

1

1

2

4

5

M L

XXL

XL



Created Date: 21/02/2023

Query description: Return the aggregation pf pizza price for each pizza size



#### **SELECT**

```
pizza_size,
```

SUM(pizza\_price) AS total\_pizza\_rpice,

ROUND(AVG(pizza\_price),2) AS average\_pizza\_price,

MIN(pizza\_price) AS minimum\_pizza\_price,

MAX(pizza\_price) AS maximum\_pizza\_price,

COUNT(pizza\_price) AS count\_of\_pizza\_price

#### **FROM**

pizza

#### **GROUP BY**

pizza\_size

#### **ORDER BY**

pizza\_size ASC;

```
Query Query History
  46
  47 Created By: Loaone Seleka
  48
              Created Date: 21/02/2023
                 Query description: Return the aggregation pf pizza price for each pizza size
   50
  51
  52
                                 pizza_size,
                                 SUM(pizza_price) AS total_pizza_rpice,
  53
                                 {\tt ROUND}({\tt AVG}({\tt pizza\_price}), {\tt 2}) \ {\tt AS} \ {\tt average\_pizza\_price},
  54
  55
                                 MIN(pizza_price) AS minimum_pizza_price,
   56
                                 MAX(pizza_price) AS maximum_pizza_price,
   57
                                 COUNT(pizza_price) AS count_of_pizza_price
   58
   59
                               pizza
                 GROUP BY
  60
                               pizza_size
  61
                 ORDER BY
  62
  63
                                 pizza_size ASC;
 Data output Messages
                                                                                Notifications
=+
               <u>*</u> ~
                   pizza_size
                                                                                   total_pizza_rpice numeric a average_pizza_price numeric a minimum_pizza_price numeric a numeric average_pizza_price numeric a minimum_pizza_price numeric a numeric average_pizza_price numeric a numeric average_pizza_price numeric average_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_pizza_
                   character varying (10)
                                                                                                                  620.70
                                                                                                                                                                                  20.02
                                                                                                                                                                                                                                                   15.25
                                                                                                                                                                                                                                                                                                                             21
                                                                                                                                                                                                                                                                                                                                                                                            31
                    М
                                                                                                                  495.75
                                                                                                                                                                                  15.99
                                                                                                                                                                                                                                                     12.5
                                                                                                                                                                                                                                                                                                                      16.75
                                                                                                                                                                                                                                                                                                                                                                                            31
                    S
                                                                                                                  400.40
                                                                                                                                                                                  12.51
                                                                                                                                                                                                                                                     9.75
                                                                                                                                                                                                                                                                                                                     23.65
                                                                                                                                                                                                                                                                                                                                                                                            32
4
                    XL
                                                                                                                       25.5
                                                                                                                                                                                 25.50
                                                                                                                                                                                                                                                     25.5
                                                                                                                                                                                                                                                                                                                       25.5
                    XXL
                                                                                                                    35.95
                                                                                                                                                                                 35.95
                                                                                                                                                                                                                                                   35.95
                                                                                                                                                                                                                                                                                                                     35.95
                                                                                                                                                                                                                                                                                                                                                                                               1
```



Created Date: 21/02/2023

Query description: Return the pizza name and ingredients where ingredeients does not include tomatoes and category is chicken



```
SELECT
```

```
pizza_name,
pizza_ingredients,
COUNT(pizza_category) AS number_of_pizza_category
```

FROM pizza\_type

WHERE

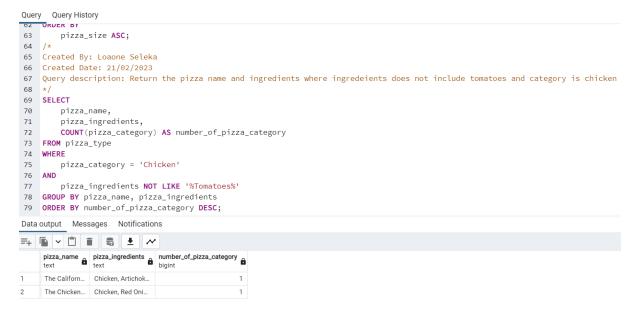
```
pizza_category = 'Chicken'
```

AND

pizza\_ingredients NOT LIKE '%Tomatoes%'

GROUP BY pizza\_name, pizza\_ingredients

ORDER BY number\_of\_pizza\_category DESC;





Created Date: 21/02/2023

Query description: Combining the date and time columns to be one column in the orders table



### **SELECT**

```
order_id,
order_date,
order_time,
```

9 2015-01-01

10 2015-01-01

12:52:01

13:00:15

CONCAT(order\_date,' ',order\_time) AS order\_date\_time

FROM orders

#### LIMIT 10;

Query Query History					
ŖΤ	Created by: Loadne Seteka				
82	Created Date: 21/02/2023				
83	Query description: Combining the date and time columns to be one column in the orders table				
84	*/				
85	SELECT				
86	order_id,				
87	order_date,				
88	order_time,				
89	CONCAT(order_date,' ',order_time) AS order_date_time				
90	FROM orders				
91	1 LIMIT 10;				
Data output M: Loading fications					
	order_id [PK] integer	order_date date	order_time time without time zone	order_date_time text	
1	1	2015-01-01	11:38:36	2015-01-01 11:38:	
2	2	2015-01-01	11:57:40	2015-01-01 11:57:	
3	3	2015-01-01	12:12:28	2015-01-01 12:12:	
4	4	2015-01-01	12:16:31	2015-01-01 12:16:	
5	5	2015-01-01	12:21:30	2015-01-01 12:21:	
6	6	2015-01-01	12:29:36	2015-01-01 12:29:	
7	7	2015-01-01	12:50:37	2015-01-01 12:50:	
8	8	2015-01-01	12:51:37	2015-01-01 12:51:	

2015-01-01 12:52:...

2015-01-01 13:00:...



Created Date: 21/02/2023

Query description: Return the pizza name. size and price of pizza ordering them by the highest pizza



```
SELECT
```

```
pt.pizza_name,
pi.pizza_size,
pi.pizza_price
```

#### **FROM**

pizza pi

LEFT JOIN pizza\_type pt

ON pt.pizza\_type\_id = pi.pizza\_type\_id

#### **ORDER BY**

pi.pizza\_price DESC;

```
Query Query History
 93 /*
 94 Created By: Loaone Seleka
 95 Created Date: 21/02/2023
 96 Query description: Return the pizza name. size and price of pizza ordering them by the highest pizza
 97 */
 98 SELECT
 99
                pt.pizza_name,
100
                   pi.pizza_size,
101
                  pi.pizza_price
102 FROM
103
                  pizza pi
104 LEFT JOIN pizza_type pt
105 ON pt.pizza_type_id = pi.pizza_type_id
106 ORDER BY
107
                   pi.pizza_price DESC;
Data output Messages Notifications

    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □
    □</
           pizza_name
                                                                                    pizza_size character varying (10) pizza_price numeric
                                                                             â
            text
           The Greek Pizza
                                                                                     XXL
                                                                                                                                        35.95
                                                                                     XL
                                                                                     S
                                                                                                                                        23.65
            The Brie Carre Pizza
           The Italian Vegetables Pizza
                                                                                                                                             21
            The Spicy Italian Pizza
                                                                                                                                         20.75
            The Chicken Alfredo Pizza
                                                                                                                                        20.75
                                                                                     L
            The Soppressata Pizza
                                                                                     L
                                                                                                                                        20.75
            The Chicken Pesto Pizza
                                                                                                                                         20 75
```

## <mark>/\*</mark>

Created By: Loaone Seleka

Created Date: 21/02/2023

Query description: Checking if we have duplicate orders in the order table



**SELECT** 

order\_id,

COUNT(order\_id) AS count\_orders

**FROM orders** 

GROUP BY order\_id

**HAVING** 

COUNT(order\_id) > 1;

```
Query Query History
109 /*
110 Created By: Loaone Seleka
111 Created Date: 21/02/2023
112 Query description: Checking if we have duplicate orders in the order table
113 */
114 SELECT
115
         order_id,
116
         COUNT(order_id) AS count_orders
117 FROM orders
118 GROUP BY order_id
119 HAVING
         COUNT(order_id) > 1;
120
Data output Messages Notifications
    =+ |
                count_orders
     order_id
     [PK] integer 🖍
               bigint
```



Created By: Loaone Seleka

Created Date: 21/02/2023

Query description: Returning no null values from the pizza ingredients field

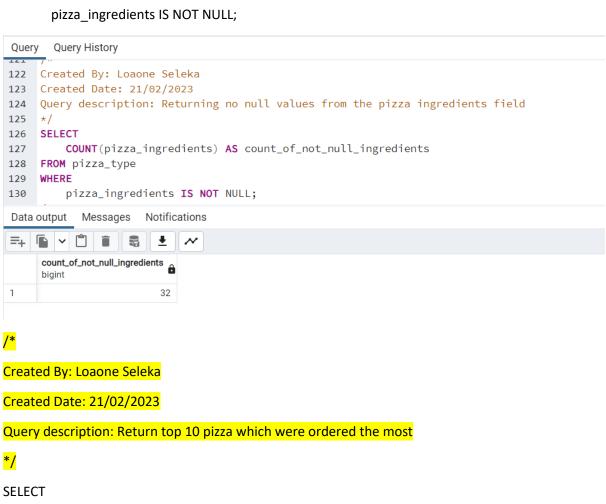


```
SELECT
```

COUNT(pizza\_ingredients) AS count\_of\_not\_null\_ingredients

FROM pizza\_type

WHERE



pt.pizza\_name, pi.pizza\_size, COUNT(od.quantity) AS number\_of\_orders

**FROM** 

pizza pi

INNER JOIN pizza\_type pt

ON pt.pizza\_type\_id = pi.pizza\_type\_id

INNER JOIN order\_details od

ON od.pizza\_id = pi.pizza\_id

**GROUP BY** 

```
pt.pizza_name,pi.pizza_size
```

#### **ORDER BY**

number\_of\_orders DESC

#### LIMIT 10;

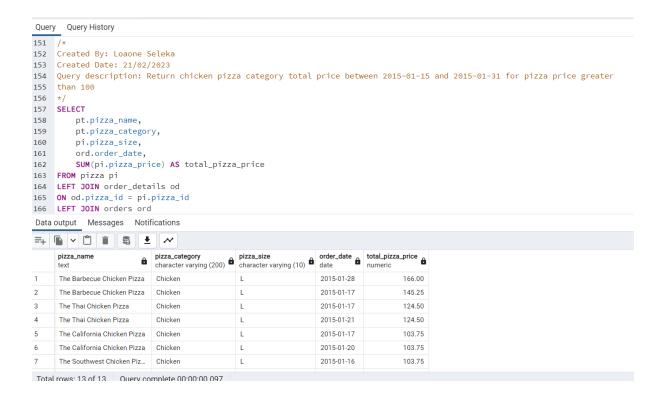
```
Query Query History
132 Created by: Loaone Seteka
133 Created Date: 21/02/2023
134 Query description: Return top 10 pizza which were ordered the most
135 */
136 SELECT
137
          pt.pizza_name,
138
          pi.pizza_size,
139
          COUNT(od.quantity) AS number_of_orders
140 FROM
141
          pizza pi
142 INNER JOIN pizza_type pt
143 ON pt.pizza_type_id = pi.pizza_type_id
144 INNER JOIN order_details od
145 ON od.pizza_id = pi.pizza_id
146 GROUP BY
147
          pt.pizza_name,pi.pizza_size
140 ADDED DV
Data output Messages Notifications
=+ |
                                                            number_of_orders
      pizza_name
                                         pizza_size
                                         character varying (10)
                                      â
                                                            bigint
1
      The Big Meat Pizza
                                          S
                                                                       1811
2
      The Thai Chicken Pizza
                                          L
                                                                       1365
      The Five Cheese Pizza
                                          L
                                                                       1359
4
      The Four Cheese Pizza
                                          L
                                                                       1273
      The Classic Deluxe Pizza
                                          Μ
                                                                       1159
      The Spicy Italian Pizza
                                                                       1088
6
                                          L
7
                                          S
      The Hawaiian Pizza
                                                                       1001
```

```
<mark>/*</mark>
```

Created By: Loaone Seleka Created Date: 21/02/2023 Query description: Return chicken pizza category total price between 2015-01-15 and 2015-01-31 for pizza price greater than 100 \*/ **SELECT** pt.pizza\_name, pt.pizza\_category, pi.pizza\_size, ord.order\_date, SUM(pi.pizza\_price) AS total\_pizza\_price FROM pizza pi LEFT JOIN order\_details od ON od.pizza\_id = pi.pizza\_id LEFT JOIN orders ord ON ord.order\_id = od.order\_id LEFT JOIN pizza\_type pt ON pt.pizza\_type\_id = pi.pizza\_type\_id WHERE pt.pizza\_category = 'Chicken' AND (ord.order\_date BETWEEN '2015-01-15' AND '2015-01-31') GROUP BY pt.pizza\_name,pt.pizza\_category,pi.pizza\_size,ord.order\_date

HAVING SUM(pi.pizza\_price) >= 100

ORDER BY total\_pizza\_price DESC;





Created Date: 21/02/2023

Query description: Categorizing quantity by Low, Medium and High based on the orders

#### than 100



#### **SELECT**

order\_id,

quantity,

#### **CASE**

WHEN quantity = 1 THEN 'Low'

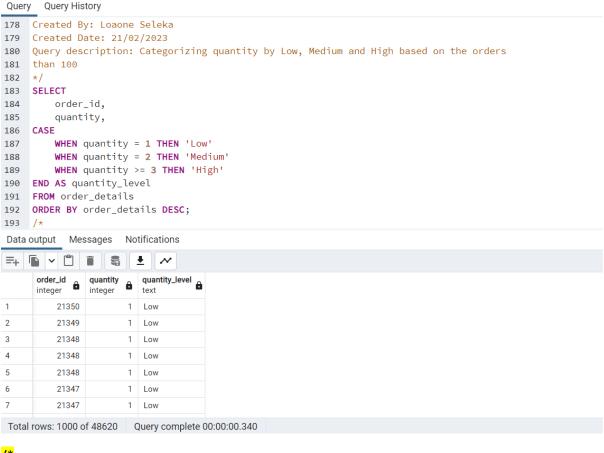
WHEN quantity = 2 THEN 'Medium'

WHEN quantity >= 3 THEN 'High'

END AS quantity\_level

FROM order\_details

ORDER BY order\_details DESC;



<u>/</u>\*

Created By: Loaone Seleka

Created Date: 21/02/2023

Query description: Return the average price of pizza size less than the actual pizza price

than 100



**SELECT** 

pizza\_id,
pizza\_size,
pizza\_price

FROM pizza

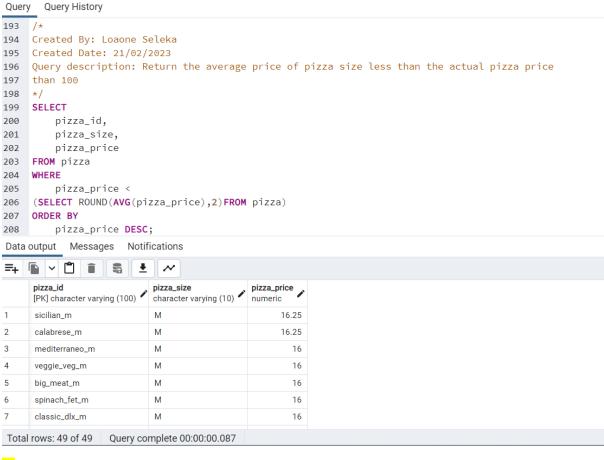
WHERE

pizza\_price <

(SELECT ROUND(AVG(pizza\_price),2)FROM pizza)

**ORDER BY** 

pizza\_price DESC;





Created Date: 21/02/2023

Query description: Return the average price of pizza size less than the actual pizza price



#### **SELECT**

pizza\_size,

AVG(pizza\_price) AS average\_pizza\_price,

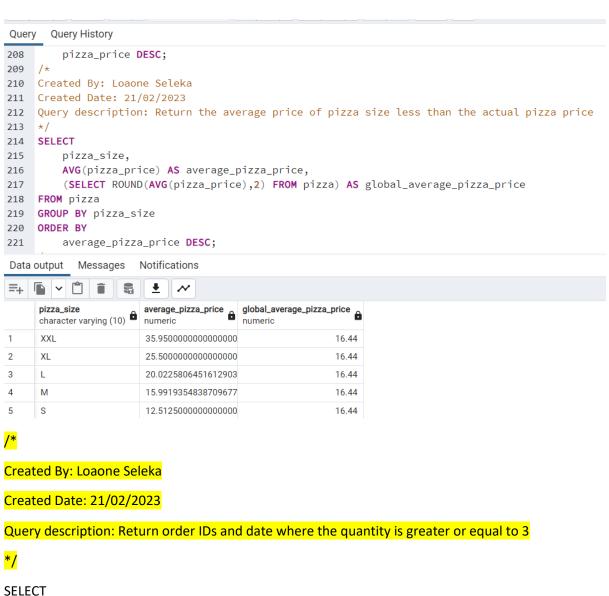
(SELECT ROUND(AVG(pizza\_price),2) FROM pizza) AS global\_average\_pizza\_price

FROM pizza

GROUP BY pizza\_size

**ORDER BY** 

average\_pizza\_price DESC;



order\_id,

order\_date

**FROM orders** 

WHERE

order\_id IN

(SELECT order\_id FROM order\_details WHERE quantity >= 3)

**ORDER BY** 

order\_date DESC;

