



PIZZA SALES ANALYSIS



USING SQL QUERIES

BY VISHWAJEET SARKAR

CREATING TABLE 1

Query

Query History

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----- Creating Tables -----

CREATE TABLE pizza (

pizza_id VARCHAR(50),

pizza_type_id VARCHAR(50),

size VARCHAR(50),

price NUMERIC(10,2)

);

SELECT * FROM pizza;

Data Output

Messages

Notifications

SQL

	pizza_id character varying (50)	pizza_type_id character varying (50)	size character varying (50)	price numeric (10,2)
1	bbq_ckn_s	bbq_ckn	S	12.75
2	bbq_ckn_m	bbq_ckn	M	16.75
3	bbq_ckn_l	bbq_ckn	L	20.75
4	cali_ckn_s	cali_ckn	S	12.75
5	cali_ckn_m	cali_ckn	M	16.75
6	cali_ckn_l	cali_ckn	L	20.75
7	ckn_alfredo_s	ckn_alfredo	S	12.75
8	ckn_alfredo_m	ckn_alfredo	M	16.75
9	ckn_alfredo_l	ckn_alfredo	L	20.75
10	ckn_pesto_s	ckn_pesto	S	12.75
11	ckn_pesto_m	ckn_pesto	M	16.75
12	ckn_pesto_l	ckn_pesto	L	20.75
13	southw_ckn_s	southw_ckn	S	12.75
14	southw_ckn_m	southw_ckn	M	16.75
15	southw_ckn_l	southw_ckn	L	20.75
16	thai_ckn_s	thai_ckn	S	12.75
17	thai_ckn_m	thai_ckn	M	16.75

CREATING TABLE 2










Query Query History

```
11
12 CREATE TABLE pizza_types(
13     pizza_type_id VARCHAR(50),
14     name VARCHAR(50),
15     category VARCHAR(50),
16     ingredients VARCHAR(100)
17 );
18 SELECT * FROM pizza_types;
19
20
```

Data Output Messages Notifications

<div><div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><d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--	--	--	--	--

CREATING TABLE 3

Query		Query History	
21	▼	<pre>CREATE TABLE orders(order_id INTEGER PRIMARY KEY, order_date DATE NOT NULL, order_time TIME NOT NULL) SELECT * FROM orders;</pre>	
22			
23			
24			
25			
26			
27			
Data Output		Messages	Notifications
<div></div>			
	order_id [PK] integer	order_date date	order_time time without time zone
1	1	2015-01-01	11:38:36
2	2	2015-01-01	11:57:40
3	3	2015-01-01	12:12:28
4	4	2015-01-01	12:16:31
5	5	2015-01-01	12:21:30
6	6	2015-01-01	12:29:36
7	7	2015-01-01	12:50:37
8	8	2015-01-01	12:51:37
9	9	2015-01-01	12:52:01
10	10	2015-01-01	13:00:15
11	11	2015-01-01	13:02:59
12	12	2015-01-01	13:04:41
13	13	2015-01-01	13:11:55
14	14	2015-01-01	13:14:19
15	15	2015-01-01	13:33:00
16	16	2015-01-01	13:34:07
17	17	2015-01-01	13:53:00

CREATING TABLE 4

Query

Query History

29

▼

CREATE TABLE order_details(
order_details_id INTEGER,
order_id INTEGER,
pizza_id VARCHAR(50),
quantity INTEGER
)
SELECT * FROM order_details;

Data Output

Messages

Notifications

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SQL

	order_details_id integer	order_id integer	pizza_id character varying (50)	quantity integer
1	1	1	hawaiian_m	1
2	2	2	classic_dlx_m	1
3	3	2	five_cheese_l	1
4	4	2	ital_supr_l	1
5	5	2	mexicana_m	1
6	6	2	thai_ckn_l	1
7	7	3	ital_supr_m	1
8	8	3	prsc_argla_l	1
9	9	4	ital_supr_m	1
10	10	5	ital_supr_m	1
11	11	6	bbq_ckn_s	1
12	12	6	the_greek_s	1
13	13	7	spinach_supr_s	1
14	14	8	spinach_supr_s	1
15	15	9	classic_dlx_s	1
16	16	9	green_garden_s	1
17	17	9	ital_cpcllo_l	1
18	18	9	ital_supr_l	1
19	19	9	ital_supr_s	1

QUERY 1

Query

Query History

40

41

42

43

44










-- Retrieve the total number of orders placed.

SELECT **COUNT**(order_id) **AS** Total_Orders **FROM** orders;


Data Output

Messages

Notifications



SQL

	total_orders bigint 
1	21350

QUERY 2

Query Query History

```
45 -- Calclate the total revenue generated from pizza table
46
47 ✓ SELECT
48 ROUND(SUM(order_details.quantity * pizza.price),2) AS total_sales
49 FROM order_details join pizza
50 ON pizza.pizza_id = order_details.pizza_id;
51
```

Data Output Messages Notifications



total_sales
numeric

1	817860.05
---	-----------

QUERY 3

Query Query History

```
52 -- Identify Highest priced Pizza
53
54 ✓ SELECT pizza_types.name, pizza.price
55 FROM pizza_types JOIN pizza
56 ON pizza_types.pizza_type_id = pizza.pizza_type_id
57 ORder BY pizza.price DESC LIMIT 1;
58
```

Data Output Messages Notifications



	name character varying (50) 🔒	price numeric (10,2) 🔒
1	The Greek Pizza	35.95

QUERY 4

Query Query History

```
58
59
60 -- Identify the most common pizza size ordered.
61
62 ✓ SELECT pizza.size, count(order_details.order_details_id) as order_count
63    FROM pizza Join order_details
64   ON pizza.pizza_id = order_details.pizza_id
65   Group by pizza.size order by order_count DESC;
66
67
```

Data Output Messages Notifications



	size character varying (50) 🔒	order_count bigint 🔒
1	L	18526
2	M	15385
3	S	14137
4	XL	544
5	XXL	28

QUERY 5

Query Query History

```
68 -- List the top 5 most ordered pizza types along with their quantities.
69
70 ✓ SELECT pizza_types.name,
71      sum(order_details.quantity) as quantity
72 FROM pizza_types JOIN pizza
73 ON pizza_types.pizza_type_id = pizza.pizza_type_id
74 JOIN order_details on order_details.pizza_id = pizza.pizza_id
75 group by pizza_types.name order by quantity desc limit 5;
76
77
```

Data Output Messages Notifications

	name character varying (50) 🔒	quantity bigint 🔒
1	The Classic Deluxe Pizza	2453
2	The Barbecue Chicken Pizza	2432
3	The Hawaiian Pizza	2422
4	The Pepperoni Pizza	2418
5	The Thai Chicken Pizza	2371

QUERY 6

Query Query History

```
76
77
78 -- Join the necessary tables to find the total quantity of each pizza Category.
79
80 ▼ SELECT
81     PIZZA_TYPES.CATEGORY,
82     SUM(ORDER_DETAILS.QUANTITY) AS QUANTITY
83 FROM
84     PIZZA_TYPES
85     JOIN PIZZA ON PIZZA_TYPES.PIZZA_TYPE_ID = PIZZA.PIZZA_TYPE_ID
86     JOIN ORDER_DETAILS ON ORDER_DETAILS.PIZZA_ID = PIZZA.PIZZA_ID
87 GROUP BY
88     PIZZA_TYPES.CATEGORY
89 ORDER BY
90     QUANTITY DESC;
91
```

Data Output Messages Notifications



	category character varying (50) 🔒	quantity bigint 🔒
1	Classic	14888
2	Supreme	11987
3	Veggie	11649
4	Chicken	11050

QUERY 7

Query Query History

```
103 -- Join relevant tables to find the category wise distribution of pizza
104
105 v select category, count(name) from pizza_types
106    group by category;
107
108
```

Data Output Messages Notifications



	category character varying (50) 🔒	count bigint 🔒
1	Supreme	9
2	Chicken	6
3	Classic	8
4	Veggie	9

QUERY 8

Query Query History

```
108
109
110 -- Group the orders by date and calculate the average number of pizzas ordered per day.
111
112 ✓ select round(avg(quantity),0) as average_pizza_ordered_per_day from (
113     select orders.order_date, sum(order_details.quantity) as quantity
114     from orders join order_details
115     on orders.order_id = order_details.order_id
116     group by orders.order_date) as order_quantity;
117
```

Data Output Messages Notifications



	average_pizza_ordered_per_day
1	138

QUERY 9

Query Query History

```
118
119 -- Determine the top 3 most ordered pizza types based on revenue
120
121
122 ✓ select pizza_types.name, sum(order_details.quantity * pizza.price) as revenue
123    from pizza_types join pizza
124    on pizza.pizza_type_id = pizza_types.pizza_type_id
125    join order_details
126    on order_details.pizza_id = pizza.pizza_id
127    group by pizza_types.name order by revenue desc limit 3;
```

Data Output Messages Notifications



	name character varying (50)	revenue numeric
1	The Thai Chicken Pizza	43434.25
2	The Barbecue Chicken Pizza	42768.00
3	The California Chicken Pizza	41409.50

QUERY 10

Query Query History

```
128
129
130 -- Calculate the percentage contribution of each pizza type to total revenue.
131
132 select count(category) from pizza_types;
133 v select pizza_types.category,
134 round(sum(order_details.quantity * pizza.price)/(SELECT
135 ROUND(SUM(order_details.quantity * pizza.price),2) AS total_sales
136 FROM order_details join pizza
137 ON pizza.pizza_id = order_details.pizza_id)*100,2) as revenue
138 from pizza_types join pizza
139 on pizza_types.pizza_type_id = pizza.pizza_type_id
140 join order_details
141 on order_details.pizza_id = pizza.pizza_id
142 group by pizza_types.category order by revenue desc;
143
```

Data Output Messages Notifications



	category character varying (50) 🔒	revenue numeric 🔒
1	Classic	26.91
2	Supreme	25.46
3	Chicken	23.96
4	Veggie	23.68

QUERY 11

Query

Query History

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

-- Analyze the cumulative revenue generated over time

select order_date,
sum(revenue) over (order by order_date) as cum_revenue
from
(select orders.order_date,
sum(order_details.quantity * pizza.price) as revenue from
order_details join pizza
on order_details.pizza_id = pizza.pizza_id
join orders
on orders.order_id = order_details.order_id
group by orders.order_date order by orders.order_date ASC) as sales ;

Data Output

Messages

Notifications

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SQL

	order_date date	cum_revenue numeric
1	2015-01-01	2713.85
2	2015-01-02	5445.75
3	2015-01-03	8108.15
4	2015-01-04	9863.60
5	2015-01-05	11929.55
6	2015-01-06	14358.50
7	2015-01-07	16560.70
8	2015-01-08	19399.05

QUERY 12

Query Query History

```
159 -- Determine the top 3 most ordered pizza types based on revenue for each pizza category
160
161 v select name, revenue from
162 (select category, name, revenue,
163  rank() over(partition by category order by revenue desc) rn
164  from
165  (select pizza_types.category, pizza_types.name,
166   sum(order_details.quantity * pizza.price) as revenue
167   from pizza_types join pizza
168   on pizza_types.pizza_type_id = pizza.pizza_type_id
169   join order_details
170   on order_details.pizza_id = pizza.pizza_id
171   group by pizza_types.category, pizza_types.name) as a) as b
172 where rn <= 3;
173
```

Data Output Messages Notifications

SQL

	name character varying (50)	revenue numeric
1	The Thai Chicken Pizza	43434.25
2	The Barbecue Chicken Pizza	42768.00
3	The California Chicken Pizza	41409.50
4	The Classic Deluxe Pizza	38180.50
5	The Hawaiian Pizza	32273.25
6	The Pepperoni Pizza	30161.75
7	The Spicy Italian Pizza	34831.25
8	The Italian Supreme Pizza	33476.75



THANKYOU